

## BUDGET AND THE BUDGETARY CONTROL SYSTEM ON TERTIARY INSTITUTION'S FINANCIAL PERFORMANCE IN NIGERIA

Olaniyan Niyi Oladipo<sup>1\*</sup>  
Efuntade, Alani Olusegun

<sup>1,2</sup>Federal University, Oye Ekiti, Nigeria

\*corresponding author: niyi.olaniyan@fuoye.edu.ng

**Citation:** Olaniyan, N.O. & Efuntade, A.O. (2020). Budget and the budgetary control system in tertiary institution's financial performance in Nigeria. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 1(2), 281-302

### ABSTRACT

The study 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.

**Keywords:** Budget Planning, Monitoring and Control, Budget Participation, Budget Evaluation, Operating Cash Flow, Current Ratio, Debt Equity Ratio and Asset Turnover

### INTRODUCTION

Budgeting involves the establishment of predetermined goals, the reporting of actual performance results and evaluation of performance in terms of the predetermined goals. Budgetary control systems are universal and have been considered an essential tool for financial planning. The purpose of budgetary control is to provide a forecast

of revenues and expenditures this is achieved through constructing a model of how our business might perform financially speaking, if certain strategies, events and plans are carried out (Nyambura & E, 2016). Traditionally, budgeting has always been viewed as a way of limiting expenditure, hence a great part of management's time is devoted to the allocation of funding. However, empirical evidence in today's globalized world, suggest that budgeting goes beyond merely showing expected revenue and project expenditure. Rather, a budget protects and controls the way management reacts to proposals brought before it, while also examining the present and future cost as well as benefits associated with such a proposal. In achieving this though, it must not lose sight of the environment in which it operates.

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

Generally, several evidences have been carried out, the majority of the available empirical evidence was on the assessment of budget monitoring and practice, budgetary control and its challenges, the effect of budgetary control of organizational and financial performance of public, private and not for profit organizations. However, to the best of the researcher's knowledge, it appears that no researches have been conducted on the impact of budget and budgetary control on financial performance in Nigeria, particularly in the western part of the country specifically Southwest. In view of this, therefore, the objective of this study is to examine the impact of budget and the budgetary control system on financial performance in Nigeria.

---

## RELATED CONCEPTUAL REVIEW

### Conceptual Framework

#### The concept of Budget

Omolehinwa (2002) sees budget as a plan in an organization expressed in monetary

terms and subject to the constraints imposed by the participants and the environments, indicating how the available resources of the organization may be utilized in order to achieve whatever the objectives of the organization. According to Brown and Howard (2002), it is a predetermined statement of management policy during a given period which provides a standard for comparison with results actually achieved. Also, Buyers and Holmes (1984) defined budget as a financial and/or quantitative statement prepared and approved prior to be pursued during that period for the purpose of attaining a given objective. To Cope (1994), it is a comprehensive plan expressed in financial terms by which an operating programme is effective for a given period of time (usually one year) including estimates of the services, activities and projects comprising the programme, resultant expenditure requirement and the resources usable for their support.

### **Budgetary Control**

Budgetary control is defined by CIMA, (2005) as the establishment of budgets relating the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results, either to secure by individual action the objective of that policy, or to provide a basis for its revision. Budgetary control is a system of controlling costs and resources which includes comparing actual performance with the budgeted performance and subsequently acting upon the actual results to minimize variance and achieve maximum returns. In essence, budgetary control is purported to ensure that the activities carried out are providing the desired results. Budgetary control: refers to any management approach that involves setting some kind of targets, regularly measuring variances between the original targets and actual outcomes, and motivating people to reduce those variances.

### **Components of Budgetary Control System**

Budgetary control system is divided into four different components will enhance the control process flow

#### ***Budget Planning***

In other 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. A predetermined budget of possible costs that was incurred carrying out the activities planned in a project should be made. Realistic planning of finances is a key to the implementation of a project or programme (Joshi & Abdulla, 2013).

### ***Budget Monitoring and Controlling***

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).

A professional and transparent approach to budget planning will help convince investors, development banks and national or international donors to make financial resources available if the organization implements proper monitoring and control of budget process. This is achieved through ensuring that the estimated budget does not deviate from the actual outcome in order to take appropriate actions where necessary (Otley & Van der Stede, 2003).

### ***Monitoring***

According to Larry (2010) clearly, each action on your part is in response to you having monitored conditions and adopted an adjusting response. Likewise, business managers must rely on systematic monitoring tools to maintain awareness of where the business is headed. Managerial accounting provides these monitoring tools, and establishes a logical basis for making adjustments to business operations.

Budget monitoring and variance analysis should be made on regular bases in line with the monthly close of financial system to compare budget versus expenditure by budget holders and finance who are responsible for managing the projects budget and activities with clear justification and action points. So that managers are able to prevent over or under spends timely and take corrective actions (Yesuf A., 2016).

### *Control*

Drury, (2001) described Control as the continuous comparison of actual performance with budgets or standards. The comparison of actual results to budgets with enables the analyst to draw conclusions concerning the efficiency of operations, product probability and pinpoint problem areas. Control is the process of ensuring that a firm's activities conform to its plan and that its objectives are achieved. There can be no control without objectives and plans, since these predetermine and specify the desirable behavior and set out the procedures that should be followed by members of the organization to ensure that a firm is operated in a desired manner.

Drucker (1964) distinguishes between controls and control. Controls are measurement and information, whereas control means direction. In other words, 'controls' are purely a means to an end; the end is control. Control is the function that makes sure that actual work is done to fulfill the original intention, and 'controls' are used to provide information to assist in determining the control action to be taken. Controls are indicating that costs exceed budget and that this may be because the purchase of inferior quality materials causes excessive wastage. 'Control' is the action that is taken to purchase the correct quality materials in the future to reduce excessive wastage.

Controls are encompassing all the methods and procedures that direct employees towards achieving the organization objectives. Many different control mechanisms are used in organizations and the management accounting control system represents only one aspect of the various control mechanisms that companies use to control their managers and employees. To fully understand the role that management accounting control systems play in the control process, it is necessary to be aware of how they relate to the entire array of control mechanisms used by organizations (Drucker, 1964).

### ***Budget Evaluation***

Evaluation is a key determinant for effectiveness, through an evaluation plan, the firm can clarify what direction the evaluation should take based on priorities, resources, time, and skills needed to accomplish the evaluation. To enhance effectiveness and transparency the management team should be actively involved in the process of monitoring and evaluation of budgetary control processes and procedures (Hancock, 2009).

Evaluations are systematic and objective assessment of an ongoing or completed project, program or policy, its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors. Evaluation also refers to the

process of determining the worth or significance of an activity, policy or program. Australian National Audit Office, (2008) indicated that Organizations monitor and evaluate actual results against approved budgets to guide current and future decision-making and hold manager's accountable for performance.

According to Hancock (2009) Evaluation is a key determinant for effectiveness, through an evaluation plan, the firm can clarify what direction the evaluation should take based on priorities, resources, time, and skills needed to accomplish the evaluation. To enhance effectiveness and transparency the management team should be actively involved in the process of monitoring and evaluation of budgetary control processes and procedures.

The process of developing an evaluation plan in cooperation with an evaluation workgroup of stakeholders will foster collaboration and a sense of shared purpose this highly contributes towards achieving an effective budgetary control (Simiyu, 2002).

### ***Budget Participation***

CIMA (2005) defines participative budgeting as „a budgeting system in which all budget holders are given the opportunity to participate in setting their own budgets“. This may also be referred to as „bottom-up budgeting“. It contrasts with imposed or top-down budgets where the ultimate budget holder does not have the opportunity to participate in the budgeting process. The advantages of participative budgeting are as follows:

- Improved quality of forecasts to use as the basis for the budget. Managers who are doing a job on a day-to-day basis are likely to have a better idea of what is achievable, what is likely to happen in the forthcoming period, local trading conditions, etc.
- Improved motivation. Budget holders are more likely to want to work to achieve a budget that they have been involved in setting themselves, rather than one that has been imposed on them from above. They will own the budget and accept responsibility for the achievement of the targets contained therein.

The full participatory budgetary process involves liaison and discussion between all levels of management. It is an important formal avenue of communication between top and lower level management regarding the organization's long-term objectives and the practical problems of implementing these objectives. When the master budget and supporting budgets are agreed and finalized, they provide the formal means of communicating agreed plans embodied in the budget to all personnel involved. By publishing a budget, management explicitly informs its subordinates as to what exactly they must be doing and what other parts of the organization will be

doing. Participation in the budget setting process can improve the budget holder's attitude to the budget system and make it more likely that he will accept the targets contained in the budget system. Participation is a process that can be used for planning and goal setting, for motivating subordinates and for coordinating interdependence. It is thus said to be an essential part of effective budgetary control (Matthew A., 2014).

### **Concept of Financial Performance**

The word 'Performance' is derived from the word 'parfourmen', which means 'to do', 'to carry out' or 'to render'. It refers to the act of performing; execution, accomplishment, fulfillment, etc. In border sense, performance refers to the accomplishment of a given task measured against preset standards of accuracy, completeness, cost, and speed. In other words, it refers to the degree to which an achievement is being or has been accomplished. In the words of Frich Kohlar "The performance is a general term applied to a part or to all the conducts of activities of an organization over a period of time often with reference to past or projected cost efficiency, management responsibility or accountability or the like. Thus, not just the presentation, but the quality of results achieved refers to the performance. Performance is used to indicate firm's success, conditions, and compliance.

Financial performance refers to the extent to which financial goals are accomplished. It is the process of ascertaining the actual operations outcome as compared to set financial goals of a corporate expressed in monetary terms. Moore and Petrin (2017) stated that financial performance also refers to the standard measurement of how a particular issue is handled or doing something successfully using knowledge, treated different from just possessing it. Financial performance is used to assess institutions' general financial strength for a certain period of time and also it's as well used to benchmark institutions in the same sector (Bourke, 2015). High financial performance reflects corporate effectiveness and efficiency necessitated by proper utilization of reflects corporate effectiveness and efficiency necessitated by proper utilization of corporate resources which in turn enhances country's economy Financial Performance measurement is a fundamental part of whatever change process is adopted by an organization. It gives information in response to the effectiveness of the financial plans and their execution (Holland & Ritvo, 2008).

### **Operating Cash Flow**

Operating Cash flow is essentially the movement of money into and out of your business; it's the cycle of cash inflows and cash outflows that determine your business' solvency. Operating cash flow is the financial cycle of your business' cash inflows and outflows, with the purpose of maintaining an adequate cash flow in any establishment either public or private sector, and to provide the basis for cash flow management. it involves examining the components of your business that affect cash flow, such as accounts receivable, inventory, accounts payable, and credit terms. By performing a cash flow analysis on these separate components, you'll be able to

more easily identify cash flow problems and find ways to improve your cash flow (Alex, Marcus & Alan, 2005)

### ***Current Ratio***

Current ratio is one of the measurements of the financial performance which provide the best single indicator which the claims of short-term creditors are covered by assets that are expected to be converted to cash in a period roughly corresponding to the maturity of the claims. This is the most commonly used ratio in the analysis of financial statements. It gives the analyst a general picture of the adequacy of the working capital of company and of the company's ability to meet its day to day payment obligations. As current obligation and commitments are directly related to working capital, this ratio is aptly called working capital ratio Current ratio is not only the measure of the company's liquidity but also is a measure of the margin of safety that management maintains in order to allow for the inevitable unevenness in the flow of funds through the current asset and liability accounts (Anthony, 2010). The current ratio is the true indicator of liquidity since it considers the overall magnitude of each fund (Gitman, 2005). It is a relative measure of liquidity which can be used for the purpose of inter firm comparison. Thus, this ratio is generally recognized as the patriarch among ratios. The current ratio of a firm measures the short-term solvency. It indicates the rupee of current asst available for each rupee of current liability/obligation payable.

### ***Debt to Equity Ratio***

Debt to Equity Ratio is a ratio that describes the ratio of debt and equity in corporate funding and shows the ability of the institution's own capital to meet its obligations. The greater this ratio means the establishment's ability to pay interest is getting better, and the opportunity to get a loan is also higher (Sawir, 2014) it also used by institution to assess their equity from their debt. This ratio is the replacement between the total equity and the institution's total income.

This ratio is the ratio between the total capital itself and the total amount of debt. higher the value of Debt to Equity Ratio, meaning the smaller the number of assets financed by the institution and the greater the value of Debt to Equity Ratio, meaning the greater the number of assets financed by the owner of the company (Suntoyo, 2013).

### ***Asset Turnover***

Asset turnover measures the firm's ability to generate revenues from its assets while profit margin measures the firm's ability to control the costs incurred to generate the revenues. The level of asset turnover, reflecting the firm's asset utilization, and the profit margin, reflecting the firm's operating efficiency, are in part products of the firm's strategy. It is an index that measures how all assets owned by a company are operated in supporting company sales (Sitanggang, 2013).

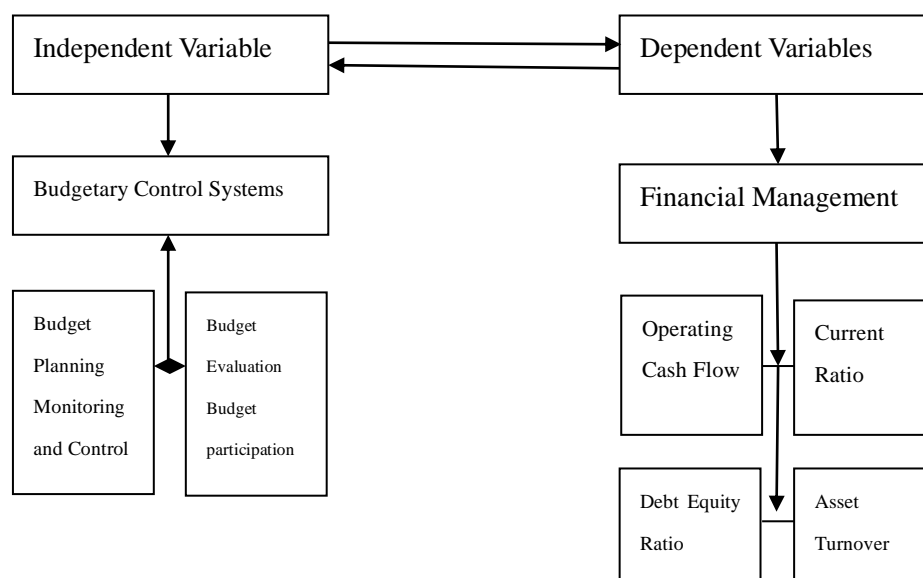


Asset Turnover a ratio that is classified as an activity ratio. Activity ratios, also known as efficiency ratios, which are used to measure the efficiency of a company in using its assets. The higher the asset turnover produced by the company, the more effective the level of use of these assets in generating net total sales (Harjito & Martono, 2014), it is broadly known as the ratio that shows total asset turnover measured by the volume of sales in other words how far the capabilities of all assets create sales. This ratio can explain how successful a company is in utilizing its assets to generate profits (Harahap, 2013).

### **Relationship between Budgeting and Budgetary Control and Financial Performance**

Budgetary control is a management tool used by public institutions to effectively manage public finances in order to efficiently meet their financial performance goals. Siegel and Allison (2011) stated that available literature on budgetary control suggests that budgets form an important basis for financial control and performance. Budgetary control in government entities entails financial planning, controlling, financial evaluation and performance of budgets in order to efficiently achieve the public finance management goal, on proper resource allocation as per proposed budgets (Jones et al., 2009). The rationale behind budgetary control is to present firm's estimations of revenue and expenditure through constructing a model to show its financial plans, indicating how certain strategies and events have been carried out, which in turn facilitates measurements of actual financial operation against the forecast.

### **Conceptual Framework of Budget and the Budgetary control system on tertiary institutions' financial performance in Nigeria.**



Source: Researcher (2020)

## Theoretical Review

Seven different theories reviewed to explain budget and budgetary controls: Walker's progressive theory, Musgrave and Rostow Theory of Public Expenditure, the Principal-agent model and budget theory, Punctuated equilibrium theory of budgeting, Theory of Budgeting, Budgetary Control Model, Accounting Theory in Budgetary Control and Accounting Theory in Budgetary Control

### **Walker's Progressive Theory**

This theory was propounded by Walker in (1930). The theory was concerned with the standard of living in cities and the ability to pay for it. A city's standard of living included both the number and quality of government services provided. Walker's progressive budget theory centered on the premise that the means to decide how to allocate between options was through the "utilitarian ideal" or indifference point in economic theory as applied to government budgets. The indifference point was a measure of current expenditures as an expression of balance between citizen demand and government service provision. A theory of expenditures based on economic ideas was preferable to reliance on abstract pleas to the claims of justice that were noneconomic and external to the government. In other words, despite some limitations, allocation based on economics provided facts to replace judgmental arguments.

### **Musgrave and Rostow Theory of Public Expenditure**

Theory of public expenditure was propounded by Musgrave in (1969) and popularized by Rostow (1973), this theory postulated the development model of government expenditure growth which emphasizes that government must increase budget for the provision of infrastructural facilities to increase people's standard of living. According to Musgrave (1969), public sector investment as a proportion of total investment of an economy is noted to be high due to the fact that, public capital formation is a great necessity at this stage. Public sector investment includes basic social infrastructure overheads like education, potable water, law and order, good roads and highways and good health systems. Governments after achieving the developmental stage seek assistance from private sectors in the economy.

### **Punctuated Equilibrium Theory of Budgeting**

This theory was propounded by Baumgartner and Jones (1993) established their concept of "punctuated equilibria" that addresses both incremental and large budget changes. It asserts that there is a state of equilibrium followed by a punctuated change followed again by equilibrium. The state of equilibrium is during quiet periods of incremental change. Punctuations are breaks from the equilibrium norm. Punctuated equilibrium theory involves environments of stability shifting into environments of instability (Jordan, 2002). Thus, in order to establish equilibrium in terms of budget changes, the budget and budgetary control measures put in place by

an entity becomes pivotal to the overall performance system of ensuring stability of environment. The relevance of this theory of budget control is the participative perspective when an institution set a target but the fund hire mark for this project couldn't complete the execution there will be need for the increment to enhance their financial performance

### **Budgetary Control Model**

This model was propounded by (Phyrr, 1970). Budgeting system is a tool used by the organization as a framework for their spending and revenue allocation. To ensure its resources are not wasted, the organization must be able to come out with an effective budgeting system. This is important as it ensure that the outputs produced and services delivered achieve the objectives. According to this theory, a good budgeting system must be able to addresses the effectiveness of the organization's expenditure. The organization has to put proper controls that ensure that the budget is properly maintained and allocated. This is achieved through cutting costs in order to increase the quality service offered by the organizations. However, if an organization has lesser revenue generation sources they might have to find a way to fund their estimated budget by borrowing and tax restructuring as cited by (Robinson & Last, 2009). This theory has been criticized by different researcher's base on their view from different direction.

### **Accounting Theory in Budgetary Control**

Accounting theory was propounded by Kaplan and Norton (1996), it is aimed towards provision of a coherent set of logical principles that form the general frame of reference for the evaluation and development of sound accounting practices and policy development (Kaplan & Norton 1996). Then Budget had been defined as accounting device used to plan and control resources of operational department of government and divisions (Abdullahi & Angus, 2012). According to (Otley & Pollanen, 2000) the purpose in developing a theory of accounting is to establish standard for judging the acceptability of accounting methods. Procedures that meet the standard should be employed in practice of accounting. (Horvath, 2009) argues that the accounting methods that fail to meet the standard should be rejected. Accounting theory helps in explaining and guiding management actions in identifying and locating information necessary to be used in budget preparation. The money measurement concept in accounting has contributed to a greater extent in providing yardstick for quantifying, conversion and translating various inputs in relation to materials, and machines required in the preparation of budget (Horvath & Seiter, 2009).

### **Empirical Review**

Geletaw (2018) conducted a research to investigate the determinants of budget control in the Benishangul Gumzu regional state public organizations using descriptive research design. The study found that the composite measure of information and communication, cost reduction, competent internal audit staff,

management support, budget monitoring and evaluation, organizational commitment and budget planning processes for 78% (Nagelkerke modified  $R^2 = 0.78$ ) variance for the budget control in the public sector offices.

Ifra Kerosi, and Ondabu, (2018) studied the effectiveness of budgetary control techniques on organizational performance at Dara salaam Bank to analyze the effectiveness of budgetary control techniques on organizational performance using descriptive and retrospective research. The study had proven that there was a positive relationship between Organization's responsibility accounting system and performance.

Fadi, (2013) conducted an investigation of the effect of tight budgetary control on management behavior at Swedish public sector emphasizing on motivation, commitment, satisfaction, and stress using a survey questionnaire with the objective of determining the effect of using TBC on managerial behavior. The result of the study found that first; the study suggests that the majority of managers working in the public sector actually experience TBC.

Edvine, (2018) conducted a study to examine the role of budgetary control in enhancing financial management in Local Government Authorities at Kinondoni Municipal Council (KMC). The study employed a case study using a sample of 50 respondents who were purposively selected in which questionnaire and interview were the data collection instruments and data were analyzed by using MS Excel computer program. The study found that information sharing, budget participation; organizational commitment, role ambiguity and job performance as the characteristic features of budgeting, budgeting and Planning and Analyzing & Feedback are not being effectively practiced at KMC and that there was little impact of budgetary control principles on financial management at KMC.

In their study, Nickson and Mears (2012) examined the relationship between budgetary control and performance of state ministries in Boston Massachusetts, a sample of five ministries were examined to test the relationship between budgetary control and performance of state ministries, secondary data was used and a review of 10 years was used, a regression model was used for data analysis and a statistical positive relationship was found between budgetary control and performance of state ministries. The results of the regression analysis concluded that proper budgetary control measures led to performance of state ministries.

Marcormick and Hardcastle (2011) carried out a study on budgetary control and organizational performance in government parastatals in Europe. A sample of 40 government parastatals were used for establishing the relationship between budgetary control and organizational performance, secondary data was used and a period of ten years was reviewed. A regression model was used for data analysis and the results of data analysis revealed a positive relationship between budgetary control and organizational performance of government parastatals.

Nicoleta (2017) conducted a study on public Budgeting on Republic of Moldova as a case study by reviewing both theoretical and practical analysis done by World Bank with the objectives of illustrating if public Budget is efficient or not and impact of applications of practice. The study found that the general trend concerning the Budget method and procedures is directed to the achievement of results, performance indicators and performance information.

Carolyn and Tammy, 2017) conducted a study on title „an examination of the effects of Budgeting control on performance: evidence from cities „and the result of their study shows that effective budgetary control has a positive effect on organizational performance.

## METHODOLOGY

The data for this study was obtained mainly from secondary sources. In order to examine the relationship between budget and budgetary control system and financial performance in Nigeria. The study made use of descriptive survey study research design which will aim at examining the nexus between the dependent and independent variables.

In the light of the research objectives, it is undoubted that this approach with all its inherent benefits is best suited. As the researcher tries to throw more light by making comparisons, exploring budgeting and budgetary control system and financial performance of tertiary institution in Nigeria.

## Model Specification

The following mathematical model was developed to analyze the relationship between budgeting and budgetary control system and financial performance in Nigeria, which covers a period of 15 years (2004 -2019) using budgeting and budgetary control system as the independent variables and regressed against the dependent variables Financial Performance, the variables to measure both are Budget Planning (BPL), Monitoring and Control (MAC), Budget Participation (BPA), Operating Cash Flow (OCF), Current Ratio (CRT), Debt to Equity Ratio (DER) and Asset Turnover (ATR)

## Statistical Test:

In order to examine the effect of budget and the budgetary control system on tertiary institution 'financial performance in Nigeria, the following linear regression equation is adopted:

This study employed this model which is specified below.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$
$$Y_{it} = \alpha_{it} + \beta_1 BPL_{it} + \beta_2 MAC_{it} + \beta_3 BPA_{it} + \beta_4 OCF_{it} + \beta_5 CRT_{it} + \beta_6 DER_{it} + \beta_7 ATR_{it} + \varepsilon_{it}$$

$\epsilon_{it}$ .....3.1

Where Y Represent dependent variables (Financial Management) and  $X_1$  will be the independent variable (budgeting and budgetary control)

$\alpha$ = the constant term

BPL=Budget Planning

MAC= Monitoring and Control

BPA= Budget Participation

OCF = Operating Cash Flow

CRT = Current Ratio

Debt to Equity Ratio=DER

Asset Turnover =ATR

B = the coefficient of the function

e = error term.

Budget and Budgetary Control is the independent variable in this study, the model will be modified as follows:

$$FM_{it} = f(BPL_{it}, MAC_{it}, BPA_{it}, OCF_{it}, CRT_{it}, DER_{it}) \dots \dots \dots 3.2$$

$$FM_{it} = \alpha_{it} + \beta_1 BPL_{it} + \beta_2 MAC_{it} + \beta_3 BPA_{it} + \beta_4 OCF_{it} + \beta_5 CRT_{it} + \beta_6 DER_{it} + \beta_7 ATR_{it} + \epsilon_{it} \dots \dots \dots 3.3$$

## RESULTS

### Unit Root Test

This test is performed to determine the presence of the unit root, i.e stationarity of the variables. The stationarity of the variables provides information on their order of integration. The order of integration of variables is necessary for cointegration test. The test is conducted using the Augmented Dickey-Fuller (ADF) unit root test. It is also used to ascertain the regression technique to adopt for analysis and testing of hypotheses The Test Hypotheses is that the variable contains unit root. Table 1 presents the result of the ADF unit root test.

**Table 1: ADF Unit Root Test Results**

Variable	Level		First difference		Order of Integration	Remark
	Test statistic	p-value	Test statistic	p-value		
LnBPL	-1.580130	0.7761	-2.929170	0.0542***	I(1)	S
LnMAC	-4.271754	0.0023*	---	---	I(0)	S
LnPBA	-2.973205	0.0490**	---	---	I(0)	S
LnBE	-2.75874	0.0307	---	---	I(0)	S
LnOCF	-2.189022	0.4776	-4.312435	0.0099*	I(1)	S
LnCRT	-2.835416	0.0654***	---	---	I(0)	S
LnDER	-1.954575	0.5988	-6.258293	0.0001*	I(1)	S
LnATR	-3.445919	0.0648***	---	---	I(0)	S

Note: \*, \*\* and \*\*\* indicate rejection of null Hypotheses at 10%, 5% and 1% significance level respectively. Notes: S = Stationary

Table 1 shows that only InMAC, InBPA, and ATR are stationary at level while InOCF, InDER and InBPL become stationary after first differencing. The unit root test confirms that the variables are mix of I(0) and I(1) series. This implies that the test for long-run relationship (cointegration) can only be conducted by performing a bounds test as proposed by Pesaran, Shin and Smith (2001).

### Cointegration Test

The Autoregressive Distributed Lag (ARDL) bounds test is performed to test for the presence of cointegration due to the combination of I(0) and I(1) series in the model. The bounds test involves two asymptotic critical value bounds depending on whether the variables are I(0) or I(1) or a mix of I(0) and I(1). The two asymptotic critical value bounds are lower bound values and upper bound values. According to Pesaran, Shin and Smith (2001), the lower bound values assume that the forcing variables  $\{X_t\}$  are I(0) only, and the upper bound values assume that  $\{X_t\}$  are purely I(1). The null Hypotheses for the bounds test is stated as:

$$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0 \text{ (No co-integration)}$$

To reject the null Hypotheses, the F-statistic must exceed the upper bound critical value. On the other hand, null Hypotheses is accepted if F-statistic falls below the lower bound critical value. If the F-statistic falls between the lower and upper bounds critical values, the evidence of co-integration is inconclusive. The Schwarz information criterion is used to determine the optimal lag length for each variable in the ARDL model. Table 2 presents the result of the bounds test obtained from an ARDL (1,0,1,2,0,0,2) model.

**Table 2: Bounds Test Result**

F-statistic	Significance level	Critical value bounds	
		Lower bound	Upper bound
4.637465	1%	3.15	4.43
	5%	2.45	3.61
	10%	2.12	3.23

Source: Researcher's Compilation (2020)

### Decision Rule:

If the F-statistics is greater than the upper bound, reject the null and conclude that there is long run relationship.

If the F-statistics is less than the lower bound accept the null and conclude there is no long run relationship.

If the F-statistic falls in between the upper and lower bound, the result becomes

inconclusive.

### Decision:

Table 2 shows that the F-statistic is greater than the upper bound critical values at 1%, 5%, 10% significance level, thus indicating that the null Hypotheses can be rejected. This indicates that there is co-integration (long-run relationship) among the variables in the model. It is therefore concluded that there is long run relationship between the independent variables and the dependent variable.

### Long -run results

Table 3 presents the long-run coefficients obtained from the ARDL model selected based on the Schwarz information criterion.

**Table 3: Long-run relationship between budgeting and budgetary control system and financial performance in Nigeria**

Variable	Coefficient	p-value	Significant Level
Constant	-5.947146	0.9083	000
LnBPL	3.237662	1.3372***	1%
LnMAC	0.986219	0.1149***	1%
LnBPA	1.112798	0.0965	000
LnBE	0.078222	0.4549	000
LnOCF	0.815209	0.0033***	1%
LnCRT	0.459928	0.0885***	1%
LnDER	0.301745	0.9286	000
LnATR	0.321654	0.8722	000

Note: \*\*\* denotes statistically significant at 1% significance level respectively.

Source: Researcher's Compilation (2020) E.views 9.2

As shown in Table 3, in the long run, LnBPL, LnMAC, LnOCF and LnCRT are positive significantly related to LnFP while LnBPA and LnBE have no significant effect on LnFP. A 1% increase in debt to equity ratio and monitoring and control would increase financial performance by approximately 0.82%, and 0.46% respectively. However, an increase in asset turnover would decrease financial performance by approximately 1.11%. Table 3 also shows that LnBPL, LnMAC, and ATR are significantly related to LnFP

### Short Run Results

The short run results show the short run dynamics and the speed of adjustment. Table 4 presents the short run results.



**Table 4:** Short run relationship between budgeting and budgetary control system and financial performance in Nigeria

Variable	Coefficient	p-value	Significant Level
$\Delta(\ln BPL)$	0.528462	0.00355***	1%
$\Delta(\ln MAC)$	0.029846	0.01677**	5%
$\Delta(\ln MAC(-1))$	-0.057325	0.04311**	5%
$\Delta(\ln BPA)$	0.129202	0.00316*	10%
$\Delta(\ln BE)$	-0.012245	-0.534***	10%
$\Delta(\ln DER)$	0.027486	0.0235**	5%
$\Delta(\ln DER(-1))$	-0.047232	0.0525***	1%
$\Delta(\ln CRT)$	0.052574	0.01**	5%
$\Delta(\ln ATR)$	0.963360	0.0516***	1%
CointEq(-1)	-0.114309	0.0021*	10%

Note: \*, \*\*, and \*\*\* denote statistically significant at 10%, 5%, and 1% significance level respectively.

Source: Researcher's Compilation (2020) using E-views 9.2

### Discussion on Short Run Result

Based on the ARDL model, the short-run results show that  $\ln BPL$  has a contemporaneous positive and significant relationship with  $\ln FP$ . Budget planning has a relationship with financial performance. The correlation between budgetary planning and financial performance is 0.0355, which means that one level increase of budgetary planning will lead to 0.00355 higher financial performances. The chance of this correlation coefficient to occur is 0.000. This coefficient shows that there is a significant statistical positive relationship between budgetary planning and financial performance ( $C=0.528462$  and  $pvalue\ 0.00355$ ).

Findings also in Table 4.5 on long run relationship show that, there is a moderate positive relationship between budgetary planning and financial performance. NMB has a clear prior identification of programs, realistic goals and attainable objectives as part of budgetary planning process.

$\ln MAC$  have a contemporaneous relationship with  $\ln FP$  with  $p-value\ 0.00167$  with an 1% increase will have more positive and significant impact on financial performance but its one-period lagged value has a negative and significant relationship with  $\ln FP$ . In this study it is clear that a continuous comparison of budgets and the actual results is well done. This may be due to a number of reasons like; deviations may occur at any time and need to be monitored. This could also be because of indifferences that exist between worker's ability (efficiency). Due to this fact there is a necessity for the institution to have a

continuous comparison of the budget and the actual results so as to control and ensure that there are little deviations or not at all from what is in the budget already. All this should be done to ensure smart results are established.

LnBPA has a contemporaneous significant relationship with lnFP. The study revealed that there is correlation between budgetary participation and financial performance because employees of the institutions are not involved in the budget process. Instead the top management and head of departments take the overall department needs and impose the budget figures. This result differs from that of Sizer (1989) who signified the importance of participatory budgeting through involving each member of the company in budgets preparation. Sizer stressed further that majority of the staff of the bursary departments are involved in budget process and the views of employees from various departments are considered. This is very important for the institution because it gives chance to all the stakeholders by considering their views.

lnMAC have a contemporaneous relationship with lnPF but lnBE has contemporaneous negative and significant relationship with lnPF. The lag error correction term CointEq(-1), which measures the speed of adjustment to restore long-run equilibrium in the dynamic model has the expected negative sign and statistically significant at 1% significance level. This further validates the long-run relationship among the variables. The low coefficient of the error correction term shows that disequilibrium from the past year slowly adjusts back to the long-run equilibrium in the present year at a speed of adjustment rate of 10%.

**Table 5: Impact of Budget Planning on Financial Performance of Tertiary Institutions**

Factor	Coefficient	T-Stat	P-value	Significant Level	Inference
Budget Planning	0.53	1.58	0.004***	1%	Accept $H_A$ , Reject $H_0$

#### Decision Rule:

Given the decision criteria to reject  $H_0$  if the probability value is  $< 0.01$  Table 4.9.1 shows a probability of  $0.00355*** < 0.01$ . We accept the alternative hypothesis. Therefore, the Hypotheses ( $H_0$ ) which states that there is no significant relationship between budget planning and tertiary institution financial performance in Nigeria is rejected.

#### DISCUSSION OF FINDINGS

This study examined impact of budgeting and budgetary control system on tertiary institution financial performance in Nigeria from 1988 to 2019, and also examined their relationship through their variables. The long-run results are relied upon for the discussion of findings. The results show that budget planning is positive and

significantly related to financial performance in Nigeria. Therefore, the Hypotheses that budget planning has no significant relationship with financial performance of Nigeria cannot be rejected.

Therefore, their null Hypotheses indicated that budget planning and others have no significant relationship with financial performance in Nigeria can be accepted. The positive signs of the coefficients of budget planning, monitoring and control, risk management, university efficiency expenditure and revenue generation conform to their a priori expectation, however the statistical insignificance offers evidence to invalidate their a priori expectation. These findings imply that increase or decrease in budget planning and monitoring and control determine financial performance in Nigeria. This is an indication of effective budget control system in Nigeria due to the consequential of effect of budget planning, monitoring and control, current ratio on financial performance in Nigeria.

## CONCLUSION

---

The study established a relationship between budgeting and budgetary control system and tertiary institution financial performance, depending on the variable of interest budgeting and budgetary control system have a consistent influence on financial performance in Nigeria, as there is no disparity between its influence on the asset turn over in the long run and short run, because based on the findings budget planning exerts significant influence of 3.628351 ( $p=1.3929 > 5\%$  level of significance) and 3.237662 ( $p=1.3372 > 5\%$  level of significance) on financial performance in the short run and the long run respectively. This is an indication of effective budgetary control system in Nigeria due to the consequential of effect of budget planning, monitoring and control on the financial performance of Nigeria. This is also the same with budget evaluation as it exerts a significant contribution to the tertiary institution financial performance both in the short and long run equations.

Budget participation and budget evaluation are positively and significantly related to financial performance, which implies that tertiary institution tends know the value of their asset as this prevent income leakages as this improve their financial performance. The rate of income leakages in the tertiary institution is on the high rate because of the high level of unbudgeted expenses over the years which gear up debt equity which have negatively impact on their financial performance as the study found out that in the long run, the economic current ratio and operation cash flow in the tertiary institution of Nigeria has been positively and significantly influenced by budgetary control system.

## REFERENCES

---

- Abdullahi, A. (2012). Budget in Nigeria Public Sector; Need for Balanced Scorecard Perspective. *International Journal of Finance and Accounting*, 1 (2): 1-6.

- Aduloju, S. (2012). Organizational Effectiveness. *Advances in Management and Applied Economics* (2) 4.
- American Public Human Services Association (2012). *Guidebook for Building Organizational Effectiveness Capacity*. Washington, DC.
- Brook, S. (2000). *Essential Managers, Managing Budgets. budget theory in the public sector*. London: Quorum Books.
- Chemweno Q.E,(2014). Systematic review of budgeting and budgetary control in government owned organizations. *Research Journal of Finance and Accounting*, 6(6), 1-10.
- CIMA Official Terminology (2005). *CIMA management accounting fundamentals publishing*. London, available online from [www.cimapublishing.com](http://www.cimapublishing.com).
- Cooper, K. & Schendlar (2003). *Business Research Methods (8th, Ed ed.)*. New York: k: McGraw- Hill/Irwin.
- Dunk, A., Hopwood, A., & Shields, M. (2001). Role of Budgeting and Budget process, *Journal of Management Accounting*, 1(2):1-8.
- Elizabeth, R. (2014). Does the Ethiopian Budget encourage participation? Fundamental of budget participation and ethics. *Journal of Business Management and Social Sciences Research*, 2(12),16
- Emine, Y. (2011). Effects of Procedural Justice Perception, Budgetary Control Effectiveness and Ethical Work Climate on Propensity to Create Budgetary Slack. *Business and Economics Research Journal*, 2 (4), 2011.
- Fadi, B. (2013). The Effects of Tight Budgetary Control on Managerial Behaviour in the Swedish Public Sector, Msc thesis.
- Federal Democratic Republic of Ethiopia (2001). Proclamation no. 256/2001, Federal Negarit Gazeta, 12 Oct. 2001, URL <http://www.ethiobar.net/>.
- Geletaw, D. (2018). Determinants OF Budget control in Public organizations, Case of Benishangul Gumuz Regional State.
- Joshi, J. & Abdulla, M. (2013). Budgetary Control and Performance Evaluation Systems in Corporations in Bahrain. *Asian Review of Accounting*, 4 (1) 2:125 – 144.
- Hair, W. (2006). *Multivariate data analysis (6th Edition ed.)*. New Jersey: Pearson

Education.

- Hirst, M. (1987). The Effects of Setting Budget Goals and Task Uncertainty on Performance, A Theoretical Analysis. *The Accounting Review*, 62(4), 774-784.
- Horngren, C. Forster, & Dater, D. (2005). *Cost Accounting, A managerial Emphasis*. San Francisco, Simon and Schuster co.
- Hopwood, G. (1976). *Accounting and Human Behavior*. Eaglewood Cliffs, New Jersey Prentice Hall.
- Kaplan, R. & Norton, D. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Boston, MA: Harvard Business School Press.
- Larry, M. (2010). *Introduction to Managerial Accounting, Management and Cost Accounting, First Edition*. Available on line. [www.mango.org.uk](http://www.mango.org.uk).
- Marcormick (2017). The Role of budgetary control on effectiveness of governmental organizations in Kenya
- Matthew, A. (2014). Participative Budgeting and Managerial Performance in the Nigerian Food Products Sector. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics (GJCRA)*.
- Nickson Q. (2017). Budget Target Setting and Effective Performance Measurement in Nigerian Hospitality Industry. *Journal of Finance & Economics Volume 1*
- Nicoleta, K. (2017). Determinants of effective budget implementation among local authorities in Kenya: a case study of City Council of Nairobi, Unpublished MBA Project, University of Nairobi
- Nyambura, E. (2016). The effect of budgetary control on effectiveness of nongovernmental organizations in Kenya.
- Otley, D., & Pollanen, R. (2000). Budgetary Criteria in Performance Evaluation: A Critical Appraisal Using New Evidence. *Accounting, Organization and Society*, 25(4/5), 483- 496.
- Rahim, R. (2004). A study of Budget Characteristics in the Annual Budgeting Process, the case of University Sains Malaysia.
- Robinson, M., & Last, D. (2009). Budgetary Control Model, the Process of Translation. *Accounting, Organization and Society*, 16(5/6), 547-570.

- Rufus, I. (2008). Budget and Budgetary Control for Improved Performance employed in Nigerian companies. *European Journal of Economics, Finance and Administrative*
- Sawhill, J., & Williamson, D. (2001). Mission Impossible Measuring Success in Non-profit Organizations. *Non-profit Management and Leadership*, 11(3)384-385.
- Scott, W. (2005). *Information Processing and Creating Organizations*. Englewood Cliffs, NJ Prentice Hall.
- Yesuf, A. (2015). *Budgeting and budget monitoring practice in NGOs operating in Ethiopia*. Addis Ababa University, Ethiopia.