

An Evaluation of the Application of Budgetary Control in The Nigerian Sub- National Public Sector

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Abstract:

The study aims to evaluate the application of budgetary control in the Nigerian sub-national public sector. The population of the study comprised the entire Katsina State of which a period of Ten (10) years was used from 2006-2015. The data generated from budget documents and annual reports of the state were analyzed by means of descriptive statistics, correlation and regression analysis using Eviews 8.0. The result of the analysis was tested at 0.05 (5%) level of significance. The findings of the study shows that a significant relationship exists between budgetary and management decision, public sector recurrent and capital expenditure. Therefore, the study recommends that, Top level principal budget officers should educate other level of budget officers on the importance of adhering strictly to the budget provisions and implementations in order to make an effective decision. Budgetary controls leads to efficiency and effectiveness of management productivity, the top level management should allow inputs from all levels of management in its budgeting decisions to ensure its decisive implementation and a bottom-up budgetary control should be put in place where all relevant officers will partake. Such measure will ensure that resulting budgets on recurrent expenditure are objective and realistic.

IJOBAS

Accepted 9 August 2019
Published 10 August 2019 DOI:
10.5281/zenodo.3365690



Keywords: Budgeting; Budgetary control; Budget evaluation; Budget Committee; Budget Officer,

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1. Introduction

Budgetary controls is generally recognized as the main instrument for allocating resources to specific recurrent and development activities, but many developing countries paid little attention to budgetary controls. It is nevertheless also recognized that a country can have a sound budget and financial system and still fail to achieve its intended targets because of lack or weakness budgetary control. Moreover, budgeting and budgetary Control occupy an important place among techniques used in planning and control functions of an organization (Perrin, R. F. 2012). In the business world today, organizations have developed a variety of processes and techniques designed to contribute to the planning and control functions. One of the most important and widely used of these processes is budgeting (Preetabh. 2010).

Practically, the application of budgetary control involves departmental or sectional or functional heads in the organization, receiving a copy of budget relating to his activities. Each month he will receive a copy of budget report showing visibly where he has over or under spent his budgeted expenditure. From this he will be able to decide on the corrective step to take. This is in tandem with the fact that variances are the responsibility of departmental or sectional heads and every one of them has to explain the variance and act in time to stop future occurrence of ad-verse variances. Professor Pogue underscores this practical aspect of budgetary control, when he states that if the actual sales as compared the budget always results in adverse variance, provided it is realistic and attainable, it is not advisable to revise the figure just because they were not attained. Therefore, it can be concluded that budgetary control on its own controls nothing but rather it is management acting on the information received by way of results that exercise control, in short, management holds the control yardstick (Pilkington & Crowther, 2007).

The application of budgetary control systems is universal and have been considered an essential tools 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.

Olurankinse (2012) Budgeting is a key policy instrument for public management and management of the firm; it is a familiar activity to many as it is practice in our private lives as well as in businesses, government and voluntary groups. The use of budgets in government circle long preceded its application in enterprises or the business sector. Also among the essential reasons for having a budget plan are to effectively allocate resources; coordinate, render and dimension activities of the country and also for efficient communication. Where components of a budget relate to the responsibilities of individual executives, then budgetary control may act as a means of securing adherence of those executives to corporate objectives. Budgeting involves the establishment of predetermined goals, the reporting of actual performance results and evaluation of performance in terms of the predetermined goals.

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 fund. However, empirical evidences 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. This same principle goes with the preparation of a budget, such that in preparing a budget, management of businesses must

realize that it is indeed a part of the economic system and as such, can influence as well as be influenced by activities within the economic system.

1.2 Statement of the Research Problem

In the Nigerian Public Sector today, there is a lack of performance oriented budgetary control, which promotes target setting as well as proper performance evaluation. Besides, there is a poor data and accounting culture, which allows for system leakage and corruption. This situation necessitates the need to develop models for effective application of budgetary control and performance evaluation criteria. Control and performance evaluation potential can be better understood by recognizing the importance of good governance and a sound public sector in the national economy.

An assessment of the budgetary control in the public sector leaves much to be desired. The practice today is that a certain percentage is added to previous period's budget to arrive at current budget figures without reference to the environmental inhibitions being encountered or the realities of present day situation. The budgets are centrally prepared and the result passed down the line for all and sundry to implement without questions.

Several studies have been conducted on the application of budgetary control in Nigerian. Hanninen, V., (2013) conducted a study on the application of budgetary control in registered savings and credit Cooperative Societies. The study found that budgetary control in credit Cooperative Societies aids both short and long term planning, communicate plans, and coordinate activities and also to evaluate performance. Serem (2013) examined the application of budgetary control in Non-Governmental Organizations and its effects on their performance. The study findings established that a weak positive effect of budgetary control on performance of NGO's. Friday E. and Friday I. (2012) conducted their research on budgetary control as a tool for enhanced performance in Nigeria organization. However none of the above researches was conducted in Nigerian sub-national public sector.

Based on the above studies, it can be seen that not much studies were conducted on the application of budgetary control in Nigerian sub-national public sector. This serve as a study gap and which this study aims to fill.

1.3 Objectives of the Study

The main objective of the study is to evaluate the application of budgetary control in Nigerian sub-national public sector

Specific objectives of the study: The specific objectives of the study include the following:

- i. To examine the impact of budgetary control on public sector recurrent expenditure.
- ii. To examine the impact of budgetary control on public sector performance.
- iii. To examine the impact of budgetary control on management decision.
- iv. To examine the impact of budgetary control on public sector capital expenditure.

1.4 Research Hypotheses of the Study

H₀: Budgetary control does not have significant impact on public sector recurrent expenditure.

H₀: Budgetary control does not have significant impact on management decision.

H₀: Budgetary control does not have significant impact on public sector capital expenditure.

2. Literature Review

2.1 The Concept of Budget

In the business world today, organizations have developed a variety of processes and techniques designed to contribute to the planning and control functions. One of the most important and widely used of these processes is budgeting. 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 (Seal, W.B. and Amanda, B. 2011).

ICMA (2013) defined budget as a plan quantified in monetary terms, prepared and approved prior to a definite period of time, which usually show the planned income to be generated and or expenditure to be incurred during the period and the capital to be employed to attain a given objectives. To management account, budget is also an expression of management plans in quantitative and financial terms. Economist on their own idea defines budget as an official document showing the expected revenue and the expenditure for a given fiscal year.

Abdullah(2014) pointed out that budget is a device intended to provide greater effectiveness in achieving organizational efficiency, the budget sets for priorities as well as levels of spending, ways of financing and spending and a plan for managing the funds. Budget had been defined as accounting device used to plan and control resources of operational department of government and divisions, (Abdullahi& Angus, 2012).

Budgeting to an individual might not be a formal plan, but all his/her activities should be based on some degree of budgeting and reflect some level of planning if control is to be exercised. Business and other organizational activities of public sector must be well planned so that they operate effectively and efficiently, utilizing all their economic resources to achieve the desired results. Government at various levels must budget for the revenue to be generated and expenditure to be incurred using its scarce resources to cater for the general wellbeing of the masses. Budget indiscipline on the part of any of the three components of the economy would surely leads to a lot of problems.

Budget documents are the most important manifestation of public; they record the outcome of the political process: winners and losers of the political competitions. They delineate government total service effort. As political documents, budget allocates scarce resources among competing social and economic needs. As managerial documents, they specified the wants and means for providing for government services. By establishing the cost for various programmes they set up, the criteria by which government programmes are to be review and evaluated. Budget has become the main instrument by which government attempt to manage economic growth and development. Budget become accounting instruments by which officials are held accountable for what government does and does not manage to accomplish, (Yakubu 2011). Public Budget preparation is one of the tedious tasks of any country. The preparation process for the annual budget involved a great deal of energy, time and expense. Hence, it is important that a country must be able to follow accurately all the methods of preparing an annual budget. Budgeting is defined as a form of financial planning and source budget is utilized to impose the strategy of a country. Consequently, a budget is composing of different functional budget that could help a country for such development such as agriculture, technology, tourism, and other budget. The combination of each functional budget made up the capital budget, master budget and even the cash flow budget which consist income and balance sheets, (Sevilla, J.2005).

A budget defined by accountants as “a planned outcome to be generated and for the expenditure to ensure during that period and the capital to be employed to attain a given objective.

2.1.1 Types of Budget

Budget may take different forms, depending on the situation. For proper discussion on types of budget, some perspectives have to be borne in mind. As time period could be used to differentiate budgets, we can take Time perspective to classify budget into two: a short-term budget and long-term budget, and probably a medium-term budget. The activities involved could dictate the classification as we can differentiate budget into financial budgets and nonfinancial (operational) budgets. This categorization could be seen as Activity perspective. Another way of differentiating types of budget, which is more popular in the public sector, could be termed Quantitative perspective, as budgets are differentiated on the basis of monetary value involved. Thus, budget could be classified into surplus budget, deficit budget and balanced budget.

Short-Term Budget: Short-term budget relates to current conditions and it usually covers a period of one year. Even annual budget are in turn broken down into quarterly, monthly, fortnightly or weekly budgets for control purposes, as management may wish to take corrective actions before a situation gets out of hand. The period selected, for a short-term budgets preparation, will depend upon such factors as the stability of demand for the firm's products; the life cycle of the firm's products; the characteristics of the industry within which the firm operates; and the general economic climate.

A widely used variant of short-term annual budget is the rolling or continuous budget. The budget is formulated initially for a period of one year or more and is broken down into smaller periods. As each month, quarter or week passes, two actions take place. First, a budget for the corresponding period of the following year is prepared, ensuring that a short-term budget is always in existence for the immediate future of twelve months; and second, the budget is to be revised in the light of the results of the period which has elapsed, so ensuring that the budget is revised constantly and kept up-to-date.

Long-Term Budget: This type of budget relates to the development of the organization or its business over many years. It is usually drawn up in any general terms which cover the nature of the business, its position in the industry, the expected level of inflation and its impact on the business. A period of between three to ten years may be appropriate for the long-term budget. Matters such as capital assets purchase and long-term finance between debt and equity are considered in long-term budgeting decisions.

Medium-Term Budget: This could be formulated to relate to any financial or non-financial budgets that may cover the period of between one to five years, with a period of thirteen months as the floor and a period of fifty-nine months as the ceiling. The categorization is not popular, as long-term budget is readily serving its purposes.

Operating Budgets: These are budgets that reflect day-to-day activities or operations of an organization. This category deals with items of manufacturing, trading and profit and loss accounts like material purchases, labour cost, production and overheads, sales, purchases, ending inventory, opening inventory, etc. It also deals with revenue or incomes budgets and expenses or expenditure budgets. Operating budget is synonymous with recurrent expenditure budget of the government financial year.

Financial Budget: This relates to financing of assets and generally indicates cash flow and outflow. Capital budget is part of financial budget. This category is about the budget to be prepared on the funds to be generating through different sources for the financing of various

projects. The budget would indicate ownership of assets and insurance of liabilities and, so it will give the information which will enable a budgeted balance sheet to be prepared. Capital budgeting which is synonymous with capital expenditure budget of the government financial year.

Master Budget: This is the summary of all the operating and financial budgets and it consists of a budgeted profit and loss account, a budgeted balance sheet and statement of cashflow. The master budget is therefore, an overall budget.

Surplus Budget: Surplus budget is arrived at when the total estimated revenue is greater than the total estimated expenditure. While some ministries of government are revenue centers, generating more revenue than the cost they incur, most government ministries are cost centers – incurring more cost than the revenue they generate. The total of the estimated revenues of the relevant ministries and the total of the estimated expenditures of all the ministries are aggregated and compared when the budgets are approved.

Deficit Budget: This is the reverse of surplus budget, that is, it is arrived at where the total anticipated expenditure is greater than the total anticipated revenue.

Balance Budget: Balance budget is arrived at where the total estimated expenditure is equal to the total estimated revenue or the difference between the two is insignificant.

2.2 Concept of Budgetary Control

Budgetary controls is generally recognized as the main instrument for allocating resources to specific recurrent and development activities, but many developing countries paid little attention to budgetary controls. It is nevertheless also recognized that a country can have a sound budget and financial system and still fail to achieve its intended targets because of lack or weakness budgetary control. Moreover, budgeting and budgetary Control occupy an important place among techniques used in planning and control functions of an organization (Kipkemboi, S.S., 2011).

Chartered Institute of Cost and Management Accountants (1975) defined budgetary control as the establishment of departmental budgets relating the responsibilities of the executives to the requirements of policy and continuously comparing 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 the process of establishment of budgets relating to various activities and comparing the budgeted figures with the actual performance. It is defined as a system which creates and utilizes budgets as a means of planning, controlling, monitoring and taking appropriate actions to achieve expected performance. Accordingly, there cannot be budgetary control without budgets, and budget and budgetary control system are the controlling tools of an institution's operations through establishment of standards and targets (Chi-Chi, O.A. and E. Appah, 2012).

Budgetary control is also a technique for the establishment of budget, relating the responsibilities of executives to the requirement of a policies, it is a management functions, which is essential if control is to be established over the different sections of the business. It uses planning and forecasting in order to achieve the objectives of the business and seeks to maintain effective performance by coordinating the various departments. Budgetary control is the process of developing a spending plan and periodically comparing actual expenditures against that plan to determine if it or the spending patterns need adjustment to stay on track. This process is necessary to control spending and meet various financial goals. Organizations rely heavily on budgetary control to manage their spending activities, and this technique is also used by the public and the private sector as well as private individuals, such as heads of household who want to make sure they live within their means (Kenneth, E.O. 2012).

Budgetary control is a system of management control in which the actual income and spending are compared with planned income and spending, so that the firm can make decisions if plans are being followed and if those plans need to be changed in order to make a profit. Budgetary control is the one of best technique of controlling, management and finance in which every department's budget is made with estimated data. Then, the management conducts a comparative study of the estimated data with original data and fixes the responsibility of employee if variance will not be favorable. Organizations can use budgetary control in forecasting techniques in order to make decision.

Tunji (2013) indicate that budgetary control is part of the overall system of responsibility accounting within an organization and being at the center of increasing organizational efficiency, as costs and revenues are analyzed and controlled in accordance with areas of personal responsibilities of the budget holders through permitting financial monitoring. As mentioned by (Kipkemboi, S.S., 2011).

Budget provides a detailed plan of action for an organization over a specified period of time. By planning, problems are anticipated and solutions thought. This helps to reduce on costs and achievement of goals is enhanced.

2.2.1 Benefits and Objectives of Budgetary Control

The benefits of budgetary controls are summarized by Adongo & Jagongo and Periasamy (2010) as follows: Budgetary control guides the management in planning and formulation of policies facilitates effective co-ordination of activities of the various departments and functions by setting their limits and goals, ensures maximization of profits through cost control and optimum utilization of resources, It facilitates reduction of cost and evaluates for the continuous review of performance of different budget centers. Budgetary control helps to the management efficient and economic production control, facilitates corrective actions whenever there are inefficiencies and weaknesses comparing actual performance with budget. It guides management in research and development, ensures economy in working and helps to adopt the principles of standard costing

A budgetary control aims at maximization of profits or an organization through, proper planning and co-ordination of different functions, proper control over various capital and revenue expenditures and putting resources into best use. Specific time aims; the plans, policies and goals are decided by the top management. All efforts are put together to reach the common goal of the organization. As a tool for measuring performance, budgetary controls provide comparisons between the budget targets and actual targets and deviation determined; performance of each department is reported to the top management which enables introduction of management by exception, reducing wastage of national resources and help in determination of organizational weaknesses.

Budgetary Control is planned to assist the management for policy formulation, planning, controlling and coordinating the general objectives of budgetary control and can be stated in the following ways:

Planning: A budget is a plan of action. Budgeting ensures a detailed plan of action for a business over a period of time.

Co-ordination: Budgetary control co-ordinates the various activities of the entity or organization and secure co-operation of all concerned towards the common goal. **Control:**

Control is necessary to ensure that plans and objectives are being achieved.

Control follows planning and co-ordination. No control performance is possible without predetermined standards. Thus, budgetary control makes control possible by continuous measures against predetermined targets (Jermias, J. & Setiawan, T. 2008).

2.2.2 Budgetary Control Process

Budgetary control is the establishment of a quantitative and financial statement, showing the effect of following a given policy objective during a specified period and then comparing the actual result with the previous estimates. Variances (deviations) are investigated and corrective actions taken. These may include the modification of plans and the changing of operational strategies.

The following processes are necessary for effective budgetary control.

Establishment of Objectives: There should be well established overall and divisional/departmental objectives. It is on the basis of these objectives, which could be short, medium or long-term, that budgets are prepared. Without these objectives, the preparation of budgets will lack directions.

Budget Centers: Budgets are to be prepared by budget centers based on the set objectives to be achieved. Budget centers are the divisions, departments, sections or units within an organization. The centers are to use the budget manual or guidelines given to them by the budget committee to prepare their budgets.

Budget Co-ordination: The estimates made by various budget centers on cost of various projects and programs and the revenue to be generated are to be compiled by a responsible official (a budget officer) and be presented before a budget committee for consideration. The budget committee is to be made up of budget holders (departmental/divisional heads) and chaired by a high-ranking officer (may be an Executive Director or General Manager). The committee is to resolve differences and submit a final comprehensive budget for approval. Budget preparation should be "bottom-up" process.

Budgets Approval: After the committee's deliberations, adjustments and modifications on body/person (e.g. Board of Directors) in the organization. The body/person may need to make some adjustments on the submission of the committee, before giving the final approval. For companies, budgets are summarized into a master budget which consists of a cashflow statement, a budgeted income statement and a budgeted balance sheet. After the master budget has been approved, the budgets are then passed to the appropriate responsibility centre for implementation.

Measurement of Actual Performance: At the beginning of the budget period, budget centers would be directed to implement the approved budgets. The implementation is to be subjected to effective monitoring and supervision to make sure be measured for comparison against the initial plan. Since budgeted results are based on a number of assumptions, which might be falsified by events, actual result would hardly tally with the budgeted results and, so, variances are bound to arise. These variances should be investigated, as to their reasons or causes, before reaching a conclusion on whether they are favorable or adverse. The comparison of actual results with budgeted results is what is called Budget Review and its report should be sent to the appropriate budgetees so that it could have the maximum motivational impact.

Feedback Actions: After taking a decision on the favorable nature of a budget variance, appropriate actions (in the form of reward or punishment of different dimensions) are to be taken on the budget Centre or budget holder concerned. The actions would serve as feedback for future planning and control.

The budgetary control process discussed above shows that budgets are used to ensure effectiveness in planning of activities, controlling of activities and motivation of budget centers or holders. Motivation comes in because, as goals are achieved, rewards would be the

appropriate actions to be taken, while punishments would follow inability to achieve set goals.

2.2.3 Administration of Budgetary Control

The administration of budgetary control is the responsibility of the budget committee through the budget officer. It is also a common principle that the executive of the organization each have a responsibility for the budget of the particular activity which they control. The function of the budget officer being rather to interpret the guiding decisions of the budget committee and to advise the responsible executive with a view to securing a budget which is compatible with the other sections. It is important to ensure that the scheme budgetary control is properly explained to each person concerned with its operation in the manner more appropriate to defining what is required of that person. During the operation of the scheme, a full liaison should be maintained between the budget committee and the executive and persons responsible for the implementation of the departmental policies.

The budget committee must ensure that through its officer or liaison that periodic statement should be prepared, comparing the budget with the actual expenditure and showing the variances between them. Budget and actual compares statement are more effective when prepared frequently and promptly and the accounting statement should be organized with this in view.

The frequency of this statement as suggested with regard to the period of the budget should be largely determined by the requirement of the person exercising the control. Consideration should also be given to the point at which the cost of frequency of the statement becomes excessive. Normally it is a matter of routine to check that all items of expenditure charged against a person's budget results from the action taken by the person.

According to Gadade (2013); budgetary control is part of the overall system of responsibility accounting within an organization. It is a system of accounting in which cost and revenues are analyzed in accordance with areas of personal responsibilities so that the performance of the budget holders can be monitored in financial terms. Hence, budget plays an accountability role in governmental and organization and circle.

2.3 The Process of Budgeting in the Public Sector

Prior to the commencement of a financial year and at a time designated by the Finance Minister, Directors and Divisional/Head/General Managers submit budget proposals for the ensuing year. This takes place after appropriate consultation with Budget Holders. The budget proposals are prepared in detail and conform to a format issued by the Finance Minister. In the process of budget preparation within the public sector, coordination is very essential. Without coordination, certain activities and expenses may be duplicated, and there may also be uncomplimentary or disjointed activities being undertaken. Coordination means viewing the system as a whole and dovetailing all the various parts together. Without coordination, positive synergies in various departmental efforts may be lost. There should be coordination with respect to: Kick-starting the budget preparation, issuing guidelines for budget preparation, prescribed formats or specimen forms to be used for preparing budgets, issuing deadlines for the preparation and submission of budgets of units, departments, divisions, etc.

2.4 Empirical Review

Joshi and Abdulla (2014) examined some aspects of budgetary control and performance evaluation systems by utilizing data based on a questionnaire survey of 42 medium and large size companies located in the State of Bahrain. The study found that the conventional form of

budget controllability principle was practiced to a great extent. It was concluded that bonus is affected by budget performance along with new assignments, but not salary.

Callahan and Waymire (2007), according to government statistics, at the end of June 2006, there was over \$7 trillion of corporate, state, and local government, asset-backed structured finance bonds outstanding with much of it rated by only a (literal) handful of bond rating companies that establish creditworthiness of corporate entities and of governmental units. Linking bond ratings to performance is important particularly in a governmental setting where credit ratings remain a key feature of municipal debt management, and debt is the key source of capital. In this study, the researchers examined whether budgetary control and its relationship with performance, using a sample of large U.S. cities over the 2003-04 timeframe. The study found that the effective level of budgetary control was significantly and positively related to bond rating.

Ong'onge (2009) conducted a descriptive survey, using a population of 1,200 registered savings and credit Cooperative Societies (SACCOs) in Nairobi, a sample size of 40 SACCOs was selected using a simple random sampling method. Primary data was collected using a semi-structured questionnaire. Descriptive statistics especially percentages were used to establish the budgetary process used by the SACCOs. The study found that budgets in SACCOs serve to aid control, aid both short and long term planning, communicate plans, and coordinate activities and also to evaluate performance. Majority of SACCOs used a combination of both top-down and bottom-up approach when preparing budgets.

Badu (2011) conducted an investigation of budgeting and budgetary Control at Ernest Chemist Laurea. The aim of this study was to conduct research concerning the budgeting practice in Ernest Chemist, a pharmaceutical company based in Ghana, and identify the perception of the budgeting experts in the company and assess their views towards the current status of the company. This research was necessary in order to assess the possibility of solving any problem this organization may face in designing an effective budgeting and budgetary control system. A self-designed interview questionnaire was sent to a member of staff in the company to seek his views on the problems and concerns regarding budgeting and budgetary control in the organization. The results of the study indicated that the appropriate system of budgeting and budgetary control had been adopted and used to prepare the pharmacy's budgets but there were a few problems associated with ethical issues which were also revealed.

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.

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.

A study by Serem (2013) examined the budgetary control in Non-Governmental Organizations and its effects on their performance. The research target population consisted of 7,127 Non-Governmental Organizations as provided in the Non-Governmental Organization Board of Kenya. 30 NGO's were selected using convenience judgmental sampling technique for this study, both local and international organizations with headquarters in Nairobi and its environs. The study findings established that a weak positive effect of budgetary control on performance of NGO's in Kenya and suggested the need of sensitizing employees on budgetary controls so as to improve its consequent effect of performance.

A study conducted by Lawal B. A. (2014) on Budgeting and Budgetary Control in the Manufacturing Sector of Nigeria. Non-probability sampling was used to select manufacturing companies to participate in the study. The result of the study established the presence of a strong relationship between turnover as a variable and performance indicators.

Lambe I., Mary L. and Theresa O. (2015) carried out research on Systematic Review of Budgeting and Budgetary Control in Government Owned Organizations. The sampling technique adopted for the population of the study is the non-probability sampling to select top management and middle level management staff of the organization who are actively involved in budget preparation. The findings revealed that a necessary and sufficient condition for achieving effective budgeting and budgetary control is the involvement of all relevant stakeholders in the preparation of the budget, given the established processes in government circles, while emphasizing a deliberate and faithful implementation, by all responsible officers. This rests on the existence of a mental picture of the present state of affairs, vis-à-vis the future expected state of affairs, within the organization.

Olaoye F. O. and Ogunmakin A. A. (2014) conducted a study on Budgetary Control and Performance in Public Corporations in Osun State. Systematic random sampling was used to select five parastatals of Ogun State. Findings revealed that there existed strong and weak negative relationship in the revenues and expenditures of the establishments over the periods selected, viz: Agricultural Corporation -0.28 (weak), Broadcasting Corporation -0.58 (strong), College of Education -0.41 (weak), Property Development Corporation -0.64 (strong) and Water Corporation -0.33 (weak).

Bilal H., Abdulrahim R. and Namu E. (2015) carry out research Toward a Unifying Framework for Budgetary Control and Accountability in the Public Sector. Descriptive statistical technique such as total score, simple percentages and chi-square test was used. This study presents the relationships between budgetary control, planning, monitoring and controlling, auditing, and integrity with accountability in the public sector and their impact on accountability in the public sector is examined.

Olurankinse F., Yabugbe P.O. and Ibadin L. A (2008) conducted study on Budgeting as a Tool for Control and Performance Evaluation in the Public Sector. *The data collated were analyzed using the SPSS 7.5 package for Microsoft Windows and displaying tables, percentage frequencies, regression analysis and ANOVA. The finding of the research included that poor and ineffective budgeting processes adopted by the public service were the major factors responsible for failure of budgeting in serving as a mechanism of control and performance evaluating.*

3 Methodology

3.1 Research Design

The nature of problem and objective of any study usually determines the type of research design to be adopted by a researcher. Though, various types of research design exist which includes experimental design, historical design, survey design, case study design, time series

design, ex-post design, correlation design among others. This study utilized the ex-post factor research design as it attempts to utilize published documents and which in this case refers to the use of annual reports and accounts on the application of budgetary control in the Nigerian sub-national public sector.

3.2 Population of the Study

According to Nsini et al, (2000:20), in Ilorah Fabian; population is any theoretically specified aggregation of items, element or things with common characteristics or interest. With regard to this research work, the population of the study comprise of only Katsina State sub-national public sector.

3.3 Sample Size of the Study

The sample size covers the entire Katsina State and it also covers the period from 2006 – 2015 using the secondary data.

3.4 Sources and Method of Data Collection

The researcher used secondary source of data for the purpose of this study. Ten years annual reports, budget documents and accounts were obtained from Katsina State Ministry of Finance. This is because; the nature of information required for this work is basically from published annual reports and accounts of the Ministry.

3.5 Technique of Data Analysis

The researcher analyses the data extracted from financial report, budget documents and accounts of the Katsina state ministry of finance. The common techniques for analysis that are used in research includes descriptive statistics, analysis of variance, compliance index, chi-square, students' T-test, correlation coefficient multiple regression etc. However, for the purpose of this work, the researcher decides to make use of correlation and Descriptive statistics to test hypotheses and arrive at a logical conclusion.

The researcher employed correlation and regression analysis as a tools of analysis and one of the common statistical technique used in social sciences and it has been in consistent with Amala V. V.(2015) and Segun A. and Temitope o. F. (2012). Descriptive statistics is also used to analyze the data. Collins and Hussey (2003) noted that tabulation is the simplest way of summarizing data for individual variable so that specific values can be read.

4. Data Analysis and Findings

Table 4.1 Descriptive Statistic

	TRE	ACE	ARE	BTE	BCE	BRE
Mean	5.69E+10	2.93E+10	2.77E+10	8.83E+10	5.95E+10	2.88E+10
Median	5.78E+10	3.03E+10	2.84E+10	9.17E+10	6.65E+10	3.21E+10
Maximum	7.61E+10	4.36E+10	3.68E+10	1.14E+11	8.16E+10	4.93E+10
Minimum	3.51E+10	1.46E+10	1.13E+10	4.13E+10	3.05E+10	1.08E+10
Std. Dev.	1.07E+10	7.77E+09	7.16E+09	2.36E+10	1.91E+10	1.08E+10
Skewness	-0.347919	-0.081216	-1.057470	-0.657722	-0.384860	0.135417
Kurtosis	3.497123	3.120167	3.834875	2.529411	1.628056	2.746562
Jarque-Bera	0.304717	0.017010	2.154160	0.813269	1.031125	0.057326
Probability	0.858680	0.991531	0.340589	0.665888	0.597165	0.971744
Sum	5.69E+11	2.93E+11	2.77E+11	8.83E+11	5.95E+11	2.88E+11
Sum Sq. Dev.	1.03E+21	5.43E+20	4.61E+20	5.00E+21	3.28E+21	1.05E+21
Observations	1 0	1 0	1 0	1 0	1 0	1 0

Source: Generated by the researcher from annual reports and budgeted documents 2006-2015 using Eview version 8.0

Table 4.1 shows that TAE has a minimum value of 3.51 and 7.61 as the maximum value with 5.78 as the median value. The mean value of the TAE is 5.69 with standard deviation of 1.07, signifying that the data deviate from the mean value from both sides by 1.07. This implies that there is no wide dispersion of the data from the mean because the standard deviation is little far to the mean. Similarly, the value of kurtosis 3.50 supports that most of the values are lower than mean, thus the data does not meet a Gaussian distribution (which suggest zero kurtosis). However, the coefficient of Skewness -0.35 implies that the data is negatively skewed, that is, the mean is less than the mode, and thus, the data does not meet the symmetrical distribution requirement, which suggests a value of '0' for Skewness.

Moreover, table 4.1 also indicates that ACE has a minimum value of 1.46 and 4.36 as the maximum value with 3.03 as the median value. The mean value of the ACE is 2.93 with standard deviation of 7.77. This implies that there is wide dispersion of the data from the mean. Similarly, the value of kurtosis 3.12 supports that most of the values are higher than mean, thus the data does not meet a Gaussian distribution (which suggest zero kurtosis). However, the coefficient of Skewness -0.08 implies that the data is negatively skewed, that is, the mean is less than the mode, and thus, the data does not meet the symmetrical distribution requirement, which suggests a value of '0' for Skewness.

Likewise, table 4.1 indicates that ARE has a minimum value of 1.13 and 3.68 as the maximum value with 2.84 as the median value. The mean value of the ARE is 2.77 with standard deviation of 7.16. This implies that there is wide dispersion of the data from the mean. Similarly, the value of kurtosis 3.83 supports that most of the values are higher than mean, thus the data does not meet a Gaussian distribution (which suggest zero kurtosis). However, the coefficient of Skewness -1.06 implies that the data is negatively skewed, that is, the mean is less than the mode, and thus, the data does not meet the symmetrical distribution requirement, which suggests a value of '0' for Skewness.

Furthermore, table 4.1 shows that BTE has a minimum value of 4.13 and 1.14 as the maximum value with 9.17 as the median value. The mean value of the BTE is 8.83 with standard deviation of 2.36, signifying that the data deviate from the mean value from both sides by 2.36. This implies that there is no wide dispersion of the data from the mean because the standard deviation is little far to the mean. Similarly, the value of kurtosis 2.53 supports that most of the values are lower than mean, thus the data does not meet a Gaussian distribution (which suggest zero kurtosis). However, the coefficient of Skewness of -0.66 implies that the data is negatively skewed, that is, the mean is less than the mode, and thus, the data does not meet the symmetrical distribution requirement, which suggests a value of '0' for Skewness.

Similarly, table 4.1 indicates that BCE has a minimum value of 3.05 and 8.16 as the maximum value with 6.65 as the median value. The mean value of the BCE is 5.95 with standard deviation of 1.91. This implies that there is wide dispersion of the data from the mean. Similarly, the value of kurtosis 1.62 supports that most of the values are lower than mean, thus the data does not meet a Gaussian distribution (which suggest zero kurtosis). However, the coefficient of Skewness of -0.38 implies that the data is negatively skewed, that is, the mean is less than the mode, and thus, the data does not meet the symmetrical distribution requirement, which suggests a value of '0' for Skewness.

Finally, table 4.1 shows that BRE has a minimum value of 1.08 and 4.93 as the maximum value with 3.21 as the median value. The mean value of the BRE is 2.88 with standard deviation of 1.08, signifying that the data deviate from the mean value from both sides by 1.08. This implies that there is wide dispersion of the data from the mean because the

standard deviation is close to the mean. Similarly, the value of kurtosis 2.75 supports that most of the values are lower than mean, thus the data does not meet a Gaussian distribution (which suggest zero kurtosis). However, the coefficient of Skewness 0.14 implies that the data is positively skewed, thus, the data does not meet the symmetrical distribution requirement, which suggests a value of '0' for Skewness.

Table 4.2 Coefficient of Correlation

	T A E	A C E	A R E	B T E	B C E	B R E
TAE	1.000000					
ACE	0.742797	1.000000				
ARE	0.687153	0.024002	1.000000			
BTE	0.836758	0.492566	0.714936	1.000000		
BCE	0.731078	0.597786	0.442958	0.893217	1.000000	
BRE	0.534501	0.017916	0.778667	0.604194	0.181397	1.000000

Source: Generated by the researcher from annual report and budgeted documents 2006-2015 using Eview version 8.0

Table 4.2 reports the results of the correlation analysis of the dependent and independent variables. The analysis indicates that the correlation coefficient of BTE has strong relationship with ATE, ACE and ARE of 0.8368, 0.4926 and 0.7149, this shows that the relationship is insignificant because it is greater than (50%) level of significance. It also shows that the correlation of BCE has very strong, strong and weak positive relationship with TAE, ACE and ARE of 0.7311, 0.5978 and 0.4430, this shows that the relationship is insignificant because it is greater than (50%) level of significance. Similarly, BRE has strong, weak and very strong positive relationship with TAE, ACE and ARE of 0.5345, 0.0179 and 0.7787, this shows that the relationship with TAE and ARE is insignificant because it is greater than (50%) and the relationship with ACE is significant because it is less than (50%) level of significance.

4.2.3 Regression Results

Table 4.3

Dependent Variable: ARE				
Method: Least Squares				
Date: 10/14/17 Time: 17:47				
Sample: 1 1 0				
Included observations: 10				
Variable	Coefficient	Std. Error	t-Statistic	Prob .
B R E	0. 573787	0.192429	2.981813	0. 0176
VARIANCE	3.09E+10	1.68E+10	1.837965	0. 1034
R - squared	0. 944791	Mean dependent var		2.77E+10
Adjusted R-squared	0. 875390	S.D. dependent var		7.16E+09
S.E. of regression	5.66E+09	Akaike info criterion		47.92689

Sum squared resid	2.56E+20	Schwarz criterion	47.98741
Log likelihood	-237.6345	Hannan-Quinn criter.	47.86051
Durbin-Watson stat	1.542093		

Source: Generated by the researcher from annual report and budgeted documents 2006-2015 using Eview version 8.0

The above table shows that BRE has a positive relationship of 0.5738 with ARE and the p-value of BRE shows the perfect relationship of 0.0176 and the relationship is significance because the p-value is lower than 0.05(5%) level of significance.

Hypothesis I

H₀₁: Budgetary control does not have significant impact on public sector recurrent expenditure.

Based on the above analysis, there is significance positive relationship between budgeted recurrent expenditure and actual recurrent expenditure because the R-square and adjusted R-square are greater than 50% level of significance as shown in the above analysis which is 94%(0.94) and 88%(0.88), with positive p-value of 0.0176 which is less than 5% level of significance, so the null hypothesis is thereby rejected. It is therefore concluded that Budgetary control have significant impact on public sector recurrent expenditure. The findings of this study are supported by the previous findings of Lambe I, Mary L. and Theresa O. (2015).

Table 4.4

Dependent Variable: TAE				
Method: Least Squares				
Date: 10/14/17 Time: 11:38				
Sample: 1 10				
Included observations: 10				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
B	0.989178	0.130905	7.556474	0.0001
VARIANCE	-9.50E+10	3.41E+10	-2.790114	0.0236
R-squared	0.684080	Mean dependent var		5.69E+10
Adjusted R-squared	0.644590	S.D. dependent var		1.07E+10
S.E. of regression	6.37E+09	Akaike info criterion		48.16486
Sum squared resid	3.25E+20	Schwarz criterion		48.22538
Log likelihood	-238.8243	Hannan-Quinn criter.		48.09847
Durbin-Watson stat	1.495907			

Source: Generated by the researcher from annual report and budgeted documents 2006-2015 using Eview version 8.0

The above table 4.4 shows that BE has a positive relationship of 0.9892 with TAE and the p-value of BE shows the perfect relationship of 0.0001 and the relationship is significance because the p-value is lower than 0.05 (5%) level of significance.

Hypothesis II

H02: Budgetary control does not have significant impact on management decision. The above analysis also shows that there is significance positive relationship between budgeted expenditure and total actual expenditure because the R-square and adjusted R-square are greater than 50% level of significance as shown in the above analysis which is 64%(0.64) and 68%(0.68), with positive p-value of 0.0001 which is less than 5% level of significance, so the null hypothesis is thereby rejected. It is therefore concluded that Budgetary control have significant impact management decision. The findings of this study are supported by the previous findings of **Olurankinse F., Yabugbe P.O. and Ibadin L. A (2008)** and **Olaoye F. O.andOgunmakin A. A. (2014).**

Table 4.5

Dependent Variable: ACE				
Method: Least Squares				
Date: 10/14/17 Time: 17:39				
Sample (adjusted): 2 10				
Included observations:10				
Variable	Coefficient	Std. Error	t-Statistic	Prob .
B C E	0. 743484	0.142037	5.234420	0. 0012
VARIANCE	-0.509460	0.251785	-2.023394	0. 0827
R-squared	0. 850588	Mean dependent var	2.99E+10	
Adjusted R-squared	0. 872101	S.D. dependent var	7.98E+09	
S.E. of regression	6.33E+09	Akaike info criterion	48.16708	
Sum squared resid	2.80E+20	Schwarz criterion	48.21091	
Log likelihood	-214.7518	Hannan-Quinn criter.	48.07250	
Durbin-Watson stat	1. 383389			

Source: Generated by the researcher from annual report and budgeted documents 2006-2015 using Eviewversion8.0

The above table 4.5 shows that BCE has a positive relationship of 0.7435 with ACE and the p-value of BCE shows the perfect relationship of 0.0012 and the relationship is significance because the p-value is lower than 0.05(5%) level of significance.

Hypothesis III

H03: Budgetary control does not have significant impact on public sector capital expenditure. Based on the above analysis, there is significance positive relationship between budgeted capital expenditure and actual capital expenditure because the R-square and adjusted R-square are greater than 50% level of significance as shown in the above analysis which is 85%(0.85) and 87%(0.87), with positive p-value of 0.0012 which is less than 5% level of significance, so the null hypothesis is thereby rejected. It is therefore concluded that Budgetary control have significant impact on public sector capital expenditure. The findings of this study are supported by the previous findings of **Renzio, P. & Masud, H. (2011).**



5.1 Conclusions

Having undertaken a systematic review of the application of budgetary control in the Nigerian sub-national public sector which is an indispensable tool to any organization. The following conclusions are drawn for the study in the light of the summary of the major findings:

- i. The study confirms that the application of budgetary control leads to the greater improvements on minimization of public sector recurrent expenditure which are incurred within government fiscal year. The findings of this study are supported by the previous findings of Lambe I., Mary L. and Theresa O. (2015).
- ii. The study also confirms that the application of budgetary control helps management to take some effective decisions for the improvement of their performance. The findings of this study are supported by the previous findings of **Olurankinse F., Yabugbe P.O. and Ibadin L. A (2008) and** Olaoye F. O. and Ogunmakin A. A. (2014).
- iii. Lastly, the study also confirms that the application of budgetary control leads to the greater improvements on minimization of public sector capital expenditure which are expected to have longtime life span. The findings of this study are supported by the previous findings of Renzio, P. & Masud, H. (2011).

5.2 Recommendations

The following recommendations are drawn based on the conclusions of the study.

- i. A bottom-up budgetary control should be put in place where all relevant officers will partake. Such measure will ensure that resulting budgets on recurrent expenditure are objective and realistic.
- ii. Top level principal budget officers should educate other level of budget officers on the importance of adhering strictly to the budget provisions and implementations in order to make an effective decision.
- iii. Budgetary controls leads to efficiency and effectiveness of management productivity, the top level management should allow inputs from all levels of management in its budgeting decisions to ensure its decisive implementation.

References

- Abdullahi, A.M & Angus, O.U. (2012). Budget in Nigeria Public Sector: Need for Balanced Scorecard Perspective. *International Journal of Finance and Accounting*, 1(2): 1-6
- Abdullahi, S, Kuwata, G., Abubakar, M, and Muhammad, T. (2015). The role of budget and budgetary control on organizational performance: a case study of Tahir Guest House, Kano state, Nigeria. *International Journal of Innovative Research in Information Security*, 2(4) 22-28.
- Abogun, S & Fagbemi, T.O. (2012). The Efficacy of Budgeting as a Control Measure in Developing Economics: A Study from Nigeria. *Asian Social Science Journal*, vol. 8, p176.
- Bilal H., Abdulrahim R. and Namu E. (2015). Toward a Unifying Framework for Budgetary Control and Accountability in the Public Sector. *International Journal of Administration and Governance* 1(4), 31-38.
- Chi-Chi, O.A. and E. Appah, (2012). Accountability and Public Sector Financial Management in Nigeria. *Arabian Journal of Business and Management Review (OMAN Chapter)*, 1(6).
- Friday E.I. and Friday I. O. (2012). Budget and Budgetary Control: A Tool for Enhanced Performance in Nigeria Organizations. *Knowledge Review* 26(3), 113-125.
- Gadade, S.T., A.D. Wagh, (2013). Evaluating budgeting and budgetary control process in colleges. *International Monthly Refereed Journal of Research in Management & Technology*, 4(3), 23-46.
- Lambe I., Mary L. and Theresa O. (2015). A Systematic Review of Budgeting and Budgetary Control in Government Owned Organizations. *Research Journal of Finance and Accounting* 6(6), 1-10.
- Lawal Babatunde (2014). Budgeting and Budgetary Control in the Manufacturing Sector of Nigeria. *International Journal of Social and Management Sciences* 4(6), 234-250.
- Mikesell, J.L. and Mullins, D.R. (2011). Reforms for Improved Efficiency in Public Budgeting and Finance: Improvements, Disappointments, and Work-in-Progress. Public Financial Publications, Inc. 4400
- Olurankinse, F. (2012). Due Process and Budget Implementation: An Evaluation of Nigerian Public Sector Auditing. *Asian Journal of Finance and Accounting*, 4(2), 56-767.
- Renzio, P. & Masud, H. (2011) "Measuring and Promoting Budget Transparency: The Open Budget Index as a Research and Advocacy Tool. *An International Journal of Policy, Administration, and Institutions*, vol. 24(3): 607-616.

Raghunandan, R., Ramgulam, N. and Raghunandan-Mohammed, K. (2012). Examining the Behavioural Aspects of Budgeting with Particular Emphasis on Public Sector/Service Budgets.*Int. J. Bus. Soc. Sci.* 3(14): 110-117.

Seal, W.B. and Amanda, B. (2011). Interpreting the Dynamics of Public Sector Budgeting: A Dialectic of Control Approach.*Finance. Accountability and Manage. J.* 27(4): 0267- 4424.

Sevilla, J., (2005). Accountability and Control of Public Spending in a Decentralized and Delegated Environment.*OECD Journal on Budgeting*, 5(2), 342-359.

Cite this article:

Author(s), Aliyu Abba (2019). “An Evaluation of the Application of Budgetary Control in The Nigerian Sub-National Public Sector”, Name of the Journal: *International Journal of Academic Research in Business, Arts and Science*, (IJARBAS.COM), N, 86- 105. **DOI:** 10.5281/zenodo.3365690, **Issue: 2, Vol.: 1, Article: 6, Month: August, Year: 2019.** Retrieved from <https://www.ijarbas.com/all-issues/current-articles/>

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