Zero-based Budgeting System: Is Budgeting System the Determinant of Budget Implementation in Nigeria?

Abuh Adah  
Department of Accounting, Faculty of Management Sciences, Kogi State University, Anyigba, Nigeria

Abstract: Budget is a financial and non-financial framework in terms of cash flows that guides governments, private organizations and individuals in achieving their desired objectives in a particular period if it is properly, adequately and realistically prepared. The long standing and familiar incremental budget has been faulted by various stakeholders hence, the contemplation for an alternative system known as zero-based budgeting (ZBB). The first objective of this study is to find out whether or not the theoretical benefits accruable to ZBB can motivate the governments’ ministries, departments and agencies to adopt and implement the proposed new system? The second objective is to determine whether or not the budgeting system has any relationship with budget implementation. Questionnaire was used in collecting data from the budget stakeholders. Descriptive statistics and simple regression were adopted in analyzing the data. It is established that the theoretical benefits accruable to ZBB can influence the adoption and implementation of the proposed ZBB. It is also revealed that the proposed budgeting system has a strong relationship with implementation. The study recommends that, despite the support for the ZBB, the current incremental budgeting system would have to be reviewed for reference into adopting and implementing the ZBB since it will be the basis for the new system. It is also recommended that the coming into operation of the new system should be a gradual process in the form of test running it to address the acknowledged challenges in the proposed system before it can be fully implemented. In addition, there should be seriousness in the whole exercise.

Keywords: Budget; Implementation; Incremental budgeting; Zero-based budgeting.

1. Introduction

Budget is a financial and non-financial framework in terms of cash and non-cash flow that guides governments, private organizations and individual in achieving desired objectives in a particular period if it is properly, adequately and realistically prepared. The sole aim of a budget is to achieve the predetermined target in the period. The Chartered Institute of Management Accountants (CIMA) as cited by Dandago and Tijjani (2005) defines budget “as a plan quantified in monetary terms, prepared and approved prior to a defined period of time, usually showing planned incomes to be generated or expenditure to be incurred during that period, and the capital to be employed to attain a given objective. Accounting data collection will aid in the provision of useful economic information for decision making. The broad objective of budget preparation is to integrate the decision to achieve the plan”. From this elaborate definition, budget should be prepared by adopting the generally accepted guidelines taking into consideration known limiting and estimated unforeseen factors if the objectives are to be achieved.

One of the major traits of preparing a realistic and implementable budget is the reviewing, analysis and comparison of the previous budgets with their corresponding actual achievements for at least five years for adequate information and insight to the budget being prepared. At the end of each financial year of the governments and private organizations, financial statements are expected to be drawn up where the budgeted figures of each item of income/revenue and expenditure of all types and actual results of the budget are compared for variance analysis to guide subsequent budget preparation and amendments. The preparation of financial statements in most cases has not been in place over the years; we are not seeing these public documents from the federal, state and local governments but with few exception.

Another significant attribute of an efficient and implementable budget is prompt preparation and presentation for deliberation, amendment and approval. On the other hand, delay of budget itself is the preparation for budget failure because it is a document that should be prepared and approved prior to the period it will cover or when the implementation is expected to commence. This is to enable its performance to be properly and adequately assessed and measured in the budget period and also to provide sufficient information for subsequent budgeting. Other factors that require optimal attention include: lack of efficient monitoring and control, weak internal control, inefficient and
absence of variances report and implementation where necessary. The proxy of efficient budget that can transform it to sound implementation and performance appear not significant in our environment, rather it appears political.

Nigeria governments and their ministries, departments and agencies (MDAs) have long been blessed with a simple, understandable and less time consuming budgeting system often called “incremental” and usually known as “traditional”. The two terms shall be used interchangeably in this context. In this approach, before any budget is put together, a foundation of such budget must be established from where the process will commence. With the foundation, the common starting point for the preparation of the coming year’s budget is the current year’s budget incorporating the current level of operating activity and current budgeted allowances for current activities. These are then adjusted for expected changes that may likely occur during the next year. This method of budgeting is referred to as incremental or traditional budget. The justification is that the budget processes is concerned mainly with the increment and hardly decrease in operations or expenditure which would take place during the next budget year (Watoseniniy, 1999). (Abdullah, 2011) sees the incremental budgeting system as a budget prepared using a previous period’s budget or actual performance as a basis with incremental amounts added for the new budget period. This system is seen as purely habitual because it is simple all round.

The long standing and familiar incremental budget has been faulted hence, the proposal for an alternative method, which is believed to be better. The contemplated alternative system is referred to as zero-based budgeting (ZBB); which is viewed to correct all the observed defects in the incremental budgeting system. It is a method of budgeting where mainly all budgetable expenditure or project must justify its existence at the beginning of the budget period. On the other hand, each expected function or expenditure is assumed to be zero or starts with zero based. In this case, budget is developed around what is required for the next coming financial year or a period irrespective of the size of the budget in comparing with the previous years. It is prepared regardless of the previous years’ budgets and their corresponding actual results and variances. Hartman (2010) describes the ZBB as an approach of planning and decision making which reverses the working process of traditional budgeting.

The acclaimed and repeated benefits of the ZBB are i) efficient allocation of resources, as it is based on needs and benefits ii) drives managers to find cost effective ways to improve operations iii) detects inflated budgets iv) useful for services departments where the output is difficult to identify v) increases staff motivation by providing greater initiative and responsibility in decision making and vi) others. The system records four fundamental problems (Fluvanna County Leadership Development Class, 2010).

The ever known theoretical benefits of the ZBB are noted in the preceding paragraph. The question that follows is, should the expected benefits be the justification to motivate the Nigeria government at all levels and their MDAs to contemplate for alternative budgeting model? The other question is that, does the budget problem (usually implementation) in Nigeria, have any relationship with the budgeting system? These two questions became relevant because i) no matter the definition of expected benefits accruable to a government or organization, they may hardly be realized if the system and basis for the benefits are not realistic ii) the system itself cannot translate itself into any benefits if the budget itself is not realistic or implementable iii) if the personnel or the workforce are not committed, sincere and God fearing, and have no clear focus vi) no matter the efficiency of budgeting system, the objectives may not be achieved because of delay and partial release of funds or fund may not even be released and v) of unfavourable economic, political, social and unforeseen conditions.

The objectives of the study are i) to find out whether or not the benefits accruable to ZBB can actually motivate the governments to adopt and implement the proposed new budgeting system and ii) to determine whether the budgeting system has any relationship with budget implementation. It is believed that the governments, organizations and individuals will benefit from the outcome of this work in their various ways.

2. The Concept of Budget

Researchers and cost and management accounting authors have given various meanings and explanations on the term “budget”, yet the domain is common, that is strategic and logical planning with efficient methodology in order to achieve the planned objective in that particular period. These concepts are considered one after the other as necessary. According to Horngren (1978), budget is a plan that provides answers to three important questions in any organization, formal or informal: first, what is the desired goal or goals to be achieved? Second, when is the goal to be achieved and thirdly, how is it to be achieved? This is because in any organization without goals, any performance or production lacks directions, problems are unforeseen, and therefore result will be hard to interpret. The budget is therefore a formal expression of an organizational plan.

From government perspective, Abubakar (1986) sees budget as an aggregate policy instrument for organizing and articulating governmental goals and objectives often expressed in terms of programmes and projects usually accompanied by a financial plan and the instruments for not only attaining pre-determined goals but also for imposing checks and balances on the relationship between the government and the governed. In line with this detailed explanation, Abdullah (2007) describes government budget as a political and administrative instrument by which the executive and the legislative bodies endeavour to allocate scarce resources among the various organs of government either at state or federal level. This descriptions rather than definitions of budgets are comprehensive enough to bring out exactly what government budget is all about.

Adeniji (2008) sees the budget as a future plan of action formulated by Management for the whole organization or section thereof, which is expressed, monetary in terms. Babalola (2008) and Lewis (2007) are of the belief that budget, either in the private or public sector is a pivotal means of translating the overall aims and objectives of an
organization into detailed packages of actions, and determining the sources and uses of the funds in order to allow performance evaluation of the people who are entrusted with the resources. Abdullah (2011) describes a budget in the following words: plans, forecasts, standards, or even predictions depending on the nature of the organization.

Abdullah (2011), Institute of Chartered Accountants of Nigeria (ICAN) (2006) and Dandago and Tijjani (2005) highlight some specific reasons for preparing budget as i) coordinating activities of various parts of organization ii) ensuring that the parts are in harmony with one another iii) aiding the planning of the period of operations iv) communicating plans to the various responsibilities v) controlling activities vi) evaluating the performance of officers vii) motivating officers and managers to strive to achieve the organizational goal. In a sentence, the sole aim of a budget is to articulate a realistic plan into action taking into consideration all the necessary variables (that may affect its success or failure) with the strong determination to achieve a specific goal.

Smith and Thomas (2004) as cited by Onaolapo and Oladipupo (2013) define a budget as a plan for the accomplishment of programs related to objectives and goals within a definite period of time including an estimate of the resources required together with an estimate of resources available usually compared with one or more past periods showing future requirements. In line with, this Ibanichuka and James (2014) see budget as a plan of financial operation embodying an estimate in proposed revenue and expenditure as well as the proposed means of financing them for a given period, usually a year. They believe that it is an instrument of economic and social policy which must ensure that policies are translated into concrete and feasible objectives.

3. Incremental and Zero-based Budgeting System

Increment means that there is always an increase (Abdullah, 2007). For instance, the allowance for budgeted expenditure may be based on the previous budgeted allowance plus an increase to cover any expected increase in prices. In the incremental budgeting system, the process for the preparation of the coming year budget is the current year’s budget, incorporating the current level of operating activity and current budgeted allowances for current activities, then adjustment for expected changes that may likely occur during the next year are made. This approach is referred to as incremental or traditional budgeting. Abdullah (2007) confirms that the incremental budgeting approach is used extensively in government parastatals because of its simplicity. However, he criticizes the system as having a problem of not being efficiency based and seems to transfer the problem of the previous financial year into the next because of the use of the same parameters on yearly basis.

In line with this problem, Abdullah (2011) also states that the approach fails to take into account changing circumstances, and encourages spending up to the budget to ensure a reasonable allocation in the next period. It could also lead to spend thrift or loose mentality. Dandago and Tijjani (2005) and Institute of Chartered Accountants of Nigeria (ICAN) (2006) also state that the budgeting system lacks budget expertise, no evaluation of alternatives, flexible budgeting is ignored and that future cost implication is equally ignored.

ZBB is a technique of planning and decision making which is said to reverse the defects that might be noted in the traditional budgeting system. However, in the traditional approach to budgeting, line or departmental officers only justify increases over the previous year’s budget and review what has already been spent for necessary adjustments to generate the current year budget. In most cases, this budget is prepared without making reference to the previous year’s level of expenditure mainly because it is not always available especially in the MDAs. In ZBB, every functional unit or cost center is reviewed in detail and all expected expenditure must be satisfied and approved instead of just increasing.

Ekanem (2010) points out that, the implication of ZBB is that, every line item of the budget must be approved unlike traditional incremental budgeting which is only affecting the changes (variances versus past years). He also believes that the ZBB seems to become outstanding as a management tool in the realization of the educational objectives devoid of delay crises in budget implementation. The ZBB necessitates the budget request be justified in complete detail by each divisional manager starting from the zero-base. The zero-base is indifferent to whether the total budget is increasing or decreasing (Fluvanna County Leadership Development Class, 2010). In addition, Idio (2011) states that, ZBB forces comparison and choice among programme and activities which are often difficult to compare adequately.

Despite the benefits accruable to the ZBB, there are some difficulties in the understanding, compilation and implementation of the system in order to achieve these benefits. These difficulties are recognized as i) the definition of decision units and decision packages as it is time consuming and exhaustive. Ekanem (2010) also recognizes this problem ii) forced to justify every detail related to expenditure. The research and development department is threatened whereas the production departments benefits (Fluvanna County Leadership Development Class, 2010) iii) training requirement is another serious bottleneck. Who is to train who in a new system that is being contemplated? If the system must be adopted and put into use, it must be clearly understood by all the stakeholders for a success and iv) irrespective of the size of the organization, the amount of information backing up the budgeting process may be too much and compressing the information down might adversely affect the vital details.

4. Challenges in the Budget Formulation and Implementation

Budget implementation is a condition where a budget of an organization, whether private or government ministry, department and agency is put into use in accordance with the established guidelines with a view to achieving a target in a particular period, usually a year. Budget implementation is with a vision to realizing the
defined objective of an entity in a period. It therefore becomes the function of efficient budget, budget preparation and presentation, setting up committee to ensure compliance and amendment, monitoring and control the entire activities in the budget period. Measuring budget implementation and performance in the MDAs entails setting up of attainable standards, implementing and monitoring, comparing the actual achievements with predetermined objectives and controls for any variance that may occur for correction and guide.

Aliu, Sakam and Abdulkadir (nd) state that budget in public governance serves as instrument of accountability and control, economic policy prescription, financial planning, management, performance evaluation, means of communicating plans to various accounting officers and motivator for the achievement of goals. In agreement with this, Olomola (2009) as cited by Oniore (2014) believes that budget in an economy cannot be over-emphasized because it is an important economic instrument of national resource mobilization, allocation and economic management. He also emphasize that it is an important economic instrument for facilitating and realizing the vision of government in a given fiscal year, therefore a budget to have to be well-designed, effectively and efficiently implemented, adequately monitored and its performance well evaluated. Unless the budget attains these attributes, its implementation may not be achieved (Abdullah, 2007;2011; Adams, 2004; Bammeke, 2008). The reservation is that, adequate attention may not be given to the importance of budget implementation and the budgeting system. This is because the public sector’s budget is often described as an annual exercise and no more.

Omolehinwa (2001) believes that once a budget passes through the required process, the implementation will not be of much problem. In practice, whether it passes through the process or not, it may not be achieved as the problems may emanate from insufficient information and sincerity at each level of the process. For instance, all circulars and guidelines for the budget preparation may not cover some key areas that will provide for inputs from the unit or section that will eventually be responsible for the budget implementation. Inang (1997) is of the opinion that the problem of budget implementation is due to too many objectives and possibilities of policy conflicts.

Olomola (2009) puts it that, the budget process has always been fraught with monumental abuses and the most visible bottlenecks are associated with budget implementation. He cites instances of non-release, partial and delay in releasing approved funds for budgeted expenditure. Eze and Ani (1999) believe that budget is a great management tool but it cannot always be implemented because of certain drawbacks. They are of the view that some of the factors responsible for the non-implementation are i) when the budgeted fund is inadequate to finance projects ii) in the area of production when the right supply of labour is not in place iii) lack of adequate plans capacity as well as scarce resources to carry on the budget and iv) lack of specialization or skill on part of the budget officers who are saddled with the responsibility of implementing budget as emphasized by Oniore (2014), Onaolapo and Oladipupo (2013) & Ojo (2012).

Ojo (2012) highlights some constraints in budget implementation to include i) that most of the plans are over-ambitious and unattainable, considering the resources (human and natural) that abide in the country ii) weak database is a major hindrance, this should include improper and inaccurate financial records iii) a number of political constraints on public policy implementation such as political will-to-rule and plan iv) budget indiscipline is another factor and v) corruption which is an intentional dishonesty (Lodge, 1998) or “a method of exploitation by which a constituent part of the public sphere is exploited as if it were part of the market sphere” (Klaveren, 1970:38) is indeed pervasive in Nigeria as cited by Ojo (2012).

Omolehinwa (2001) suggests some guidelines for effective budget implementation in Nigeria as i) it should be prepared on timely basis and approved before the beginning of the financial year ii) the President must learn how to avoid pressure from various stakeholders especially the legislators iii) in order to assess the right amount of fund, budget must be prepared on timely basis to enable the project procurement document to meet the requirements iv) planning documentation and works specifications should be readily available for the purpose of assessing capital project performance and v) the government should review its basis for recording financial transactions to assist in evaluation, control and further realistic budget.

Interested groups, the concerned individuals and researchers have been offering suggestions and recommendations on how to achieve appreciable budget implementation over the years; may be only little might have been achieved. Projects, dissertations, thesis and other academic and professional works on budget, budgeting and implementations have been undertaken at tertiary institutions and conferences. It seems that governments are still silent on adopting the findings and recommendations for study and possibly implement them for a way forward.

5. Data Order and Analysis

The objectives of the study include i) to find out whether or not the benefits accruable under ZBB can actually motivate the governments to adopt and implement the proposed new budgeting system and ii) to determine whether the budgeting system has any relationship with budget implementation. These objectives call for primary source of data. The instrument used in collecting the primary data is questionnaire. The questionnaire is on a seven-point Likert scale to give the respondents wide choice to express their perceived opinions on each item. The mean of this 7-point scale is 4 meaning that average mean-score of less than 4 indicates disagreement. The enclosed questionnaire distributed contains fifteen items. The respondents are budget’s directors and preparers, reviewers, defense/committee members, budget analysts in the selected ministries, departments and agencies (MDAs) and accounting lecturers at various tertiary institutions in Nigeria.

Five hundred (500) questionnaires were distributed at random to the respondents. Two hundred and sixty three (263) numbers of the completed questionnaires, representing about 53 percent were retrieved. The retrieved non-
parametric data were analysed using descriptive statistics for the first objective and the simple regression (but after lots of statistical calculations through Transform-Compute Variable approach using SPSS) for the second objective as there is no corresponding statistics analysis to achieve the second objective using non-parametric data.

6. Results and Discussions

The non-parametric data used for this study were subjected to reliability test. This test or the test of internal consistency using Cronbach’s Alpha coefficient for the first six and seven to thirteen items in the questionnaire was satisfactory as recommended by Pallant (2007). The reliability test on the last three, that is, 13th to 15th items failed the test. However, it is reviewed and found that it was due to few items in the segment. This led to the conduct of the mean inter-item correlation test. The result of this second test was within the range of .2 and .4 to confirm the reliability of the data as recommended by Briggs and Check (1986).

6.1. Descriptive Statistics

The descriptive statistics using SPSS is presented below:

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>ZBB1</td>
</tr>
<tr>
<td>ZBB2</td>
</tr>
<tr>
<td>ZBB3</td>
</tr>
<tr>
<td>ZBB4</td>
</tr>
<tr>
<td>ZBB5</td>
</tr>
<tr>
<td>ZBB6</td>
</tr>
</tbody>
</table>

Valid N (listwise) 263

The descriptive statistics above discloses the nature of the data and revelation towards achieving the first objective of the study. The ZBB representing identification number (ID) of zero-based budgeting while 1 to 6 are the various items in the questionnaire. Information from 263 respondents was collected and the summarized interpretation of the statistics is as follows: The range for ZBB is from 1 to 7, and the all mean-score ranges from 2.71 to 4.08 with standard deviation of between .791 and 1.029. From the perceptions of the various respondents (Technocrats and Academicians), the responses appear to be alike as almost all the mean scores fell along the same line.

From items 1 – 5, the means of the responses were far below the average mean score of 4; only the last item 6 that records a little above 4 point. From the design of the items in the questionnaire, the average mean score of below 4 point indicates that the null hypothesis should not be accepted rather, it should be rejected. On the other hand, the perceptions of respondents reveal that the theoretical benefits of the ZBB can influence the adoption and implementation of the proposed budgeting system in the MDAs.

This result is somewhat in agreement with the study conducted by Government Finance Officers Association (2011) on ‘does ZBB work’? In this study, the responses from the survey respondents were as follows i) 47 % have not seriously considered ZBB as an option ii) 20 % use practical and are satisfied and iii) 33 % believe ZBB is not worth the effort required. The warning signal here is seriousness if the government is to adopt and implement the proposed ZBB system.

6.2. Model Summary

The model summary result from SPSS is given below:

<table>
<thead>
<tr>
<th>Model Summaryb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Zero Indep Var
b. Dependent Variable: Zero Depen Var

The R Square (R²), that is the coefficient of determination of .216 reveals that the independent variable of the study has accounted for a total variation in the dependant variable up to about 22 percent while the difference of about 78 percent is covered by other factors. This is a fairly satisfactory result when compared with some other results that are reported in the academic world. The R is the correlation coefficient which shows the measure of the strength of linear relationship between the variables. The figure of .465 above therefore indicates an acceptable relationship between the variables in this study. The Durbin-Watson of 1.582 falls within the acceptable region of 1.5 and 2.5. This figure of 1.582 indicates no serial correlation effect to the validity of statistical inferences that will be generated.
6.3. ANOVA Result

The analysis of variance (ANOVA)’s result from SPSS is as below:

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>26.695</td>
<td>71.891</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>261</td>
<td>.371</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>262</td>
<td>123.610</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Zero Depen Var
b. Predictors: (Constant), Zero Indep Var

The analysis of variance table above reveals that the model as a whole (which includes the blocks of variables) is significant indicating that the model is well fitted (F=71.891, p<.005). This ANOVA result supports the model summary statistics above.

6.4. Coefficients Result

The coefficient result from SPSS is presented below:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>3.220</td>
<td>.211</td>
<td></td>
<td>15.267</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Zero Indep Var</td>
<td>.489</td>
<td>.058</td>
<td>.465</td>
<td>8.479</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Zero Depen Var

The coefficient table above shows that, the independent variable has made a strong contribution to predicting the dependent variable for up to about 47 percent with t-statistics of 8.479. From the significant column, the predictor variable is statistically significant at less than .05. With these statistics results, the second hypothesis can no longer hold, it will be rejected in favour of alternate hypothesis.

This result is in line with the people’s enthusiasm and readiness to adopt and implement the ZBB and to ensure full implementation since their perceptions reveal that budgeting system has a relationship with budget implementation. This result also shows a considerable agreement with the work of Ekanem (2010) who studied the effectiveness of ZBB budget implementation in the university system. He obtained the perceptions of the budget’s stakeholders at the university through a 4-point questionnaire and he used t-test statistics in analyzing the data. It was found that the ZBB is credible and rewarding to the budget implementation.

7. Conclusion

The objective of this study is to find out whether or not the benefits accruable under ZBB can actually motivate the governments and their MDAs to adopt and implement the proposed new budgeting system. The second objective is to determine whether the budgeting system has any relationship with budget implementation. From the analysis of data above, it has been established that the theoretical benefits accruable to ZBB can influence the adoption and implementation of the proposed ZBB. It is also apparent from the statistical results that the success of any budget is dependent on budgeting system, meaning that the budgeting system has a strong relationship with implementation. It can be concluded that, despite the fundamental problems of ZBB, the stakeholders are of the opinion that it should be adopted and implemented and the expected result should be a success.

The study recommends that, despite the support for the ZBB, the current incremental budgeting system would have to be reviewed for reference into adopting and implementing the ZBB since it will be the basis for the new system. It is also recommended that the coming into operation of the new system should be a gradual process in the form of test running it in some ministries, departments and agencies in order to address the acknowledged challenges of the proposed system before it can be fully implemented in the MDAs. In addition, there should be seriousness in the whole exercise.

Reference


Fluvanna County Leadership Development Class (2010). Should the Fluvanna county school board adopt zero-based budgeting? Fluvanna County Leadership Development Class.


