# AN ASSESSMENT OF CAPACITY TO IMPLEMENT ZERO-BASED BUDGETING SYSTEM BY BORNO STATE GOVERNMENT

**Nasiru Abdusalam Ka'oje**     **Department of Accounting,**
                                **Usmanu Danfodiyo University Sokoto**

**Mustapha Ibrahim**            **Department of Accounting,**
                                **College of Business and Management Studies,**
                                **Konduga**

**Umar Makama**                 **Department of Accounting,**
                                **Ramat Polytechnic Maiduguri, Borno State**

**Fatie Ahmed Abdullahi**       **Department of Accounting,**
                                **Ramat Polytechnic Maiduguri, Borno State**

## Abstract

*The objective of the study is to assess the capacity of Borno State Government in adopting and implementing zero-based budgeting (ZBB) system in the State. To ensure this, the study considered the possibility of adopting ZBB depends on the capacity to implement. Data were collected from primary source with the administration of the structured questionnaires. The study employed a stratified sampling technique in order to arrive at the sample size of 103 which were drawn from the population of 139 using Yamane's model. A simple random sample was later applied for each stratum among the four categories of respondents by virtue of their expertise in the budgeting process. Binary logistic regression was employed to examine whether the predictor variable have significant influence or not on the dependent variable. The findings of the study reveal that the state government has the capacity to implement ZBB. Thus, suggesting that it is politically feasible and offers more appealing opportunities in minimizing costs and prioritizing government's needs while adding value to the operational efficiency in the budgeting system. The study therefore recommends the adoption of ZBB which ensure fiscal discipline and enhanced technical efficiency through transparency and accountability.*

**Keywords:** ZBB; Fiscal Constraints; Capacity, Transparency and Accountability
**JEL Classifications:**

## Introduction

The focus on a budget has assumed greater prominence in recent years with increasing democratization, civil society participation and the desire to respond to the gloomy scene of poverty in the society. Thus, a budget is a quantitative plan of action expressed in monetary terms with respect to income and expenditure over a given period of time. Karim (2009) opined that budget is not just a mere estimate of income and expenditure rather it has become a major instrument of economic control, especially in the public sector. Hence, budget in public sector perspective plays a significant role in facilitating and realizing the vision of the government in a given fiscal year and it is today rather known to be very strategic in nature and all-encompassing because it is the means through which government allocates its scarce resources to finance viable programs and projects.

The quality of decision resulting from the budgeting process and the level of its acceptance depend on the credibility and realism built in the budgeting process which largely depends on the characteristics and nature of the budget that is in use. In the same vein, the traditional budgeting system as conceived in most public sector organizations around the world is referred to as a line item budgets (incremental budgeting system). Drury (2009) avers that incremental budgeting approach assumes extrapolating past activities and cost as opposed to zero-based budgeting which is the forward-looking approach. Accordingly, Abdullahi (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. This entails that acquiesce with line item budgets provides no assurance that resources are used wisely, efficiently or effectively in financing the various activities in the public sector organizations.

The adoption of new budgetary technique such as ZBB has been initiated and popularized principally in the USA and later spread all over around the world. In developing countries, similar initiatives have commenced which is being pushed and encouraged by United Nations Developments Program (UNDP), World Bank, and International Monetary Fund (IMF). These international agencies have urged the developing countries to consider ways to recognize their budgeting systems to be compatible with the classification and measurement of efficiency, to manage their scarce economic resources and to link their public budget with their economic development (Shah 2006).

Zero-based budgeting entails formulating a budget without any reference to what has gone before, based on the underlying principle of reappraisal of purposes, methods, and resources. The distinctive and essential feature of zero-based budgeting is its focus on the total budget request. The current spending level is not regarded as an inviolate base, predisposed from detailed scrutiny. Existing activities are examined along with proposed new activities as a contrast to traditional incremental budgeting systems, signifying that each spending agency has to justify every item in its request for funding as opposed to incremental budgeting which effectively denies decision makers the option of trading off a requested increase in one action against a reduction in another and assumes past activities and their costs is inviolate (Forrester & Adams, 2002).

Considering the dwindling economy experience in Nigeria in recent time, as a result of the fall in oil price in the world market, state allocation (grant) from federation account has been adversely declined. Accordingly, the Borno state's 2016 appropriation Bill is aptly tagged "Budget of Reconstruction, Rehabilitation and Resettlement" which reflects the vision for the reconstruction of destroyed communities in the state. There is no better time than now to come up with a piece of legislation for the adoption of ZBB in the state so as to have a realistic budget estimate to ensure accurate prediction, cutting down or avoid unnecessary funding for non-essential services. It is against this backdrop that, this study intends to assess the capacity of Borno state government in the implementation of one budgetary system, viz zero-based budgeting.

The annual public sector budget in any given economy in the world is targeted towards the developmental process of the country. Thus, the budget could be view as an instrument of policy through which government allocates its scarce resources to finance viable projects and programs. The potentiality of the budget to influence development is enormous which largely depends on the credibility of the budgeting system being practiced. In spite of that, this is not the case in Nigeria, more especially at states government level as buttress by Chegwe (2010), who argued that the level of budget implementation at the federal and state government levels in Nigeria is being characterized by the absence of a clear linkage between policy, plan, and budget, with the legal framework for the authorization and compliance with fiscal responsibility Act expected of a budget to ensure fiscal discipline and transparence. Accordingly, the study further reveal that the policies and plans of government hardly have a clear expression in the budget, thus, suggesting room for flagrant fiscal indiscipline and mismanagement of resources.

Shayne (2012) confirms that government across the globe facing budget cuts and increased public scrutiny, government agencies have been using alternative budgeting methods such as zero-based budgeting instead of the line item and incremental budgeting. Similarly, Sawhill and Williamson (2001), assert that budgets can be viewed as an indicator of the performance of ruling government. As such, the traditional budgeting system (incremental budget) in Nigeria at both federal and states level failed to provide a yardstick for performance measurement, checkmate corruption, realigned resources allocations with strategic goals. Another drawback to incremental budgeting is that it failed to address citizens' perception, transparency, and accountability which leads to poor budget implementation as suggested in the work (Veiga, Mathew & Reza, 2015).

The budgeting process under the present circumstance has always been fraught with monumental abuses as claimed civil society organization such as centre for social justice. Their findings further reveal that the most visible bottlenecks associated with budget implementations even though there were several attempts to make it effective with the entire budget appropriated in the last decades in Nigeria, the growth rate of the GDP has been below the 7% bound suggested for breaking the shackles of poverty in any developed and less developed economy, Centre for Social Justice (CSJ, 2014). There is the substantial need for the states to structure its budgeting system ZBB in order to take its advantage. As such, this study intends to assess

the capacity of Borno state government in the implementation of zero-based budgeting system in order to finance its essentials services such as health, education, and agriculture.

This research, therefore, is contributing to the pioneering studies conducted across the globe about their experiences in the implementation of one budgetary approach, viz, Zero-Based Budgeting. Ibrahim, Ashigar, Bello and Mamuda (2017) study ZBB is a panacea to fiscal distress; do the perceived benefits significantly influence its adoption in Borno state? Mohamed, Evans and

**Literature Review**
ZBB is a method of budgeting that requires all costs to be specifically justified by the benefits expected. Hence, it is a cost-benefit approach which assumed that the cost allowance for an item is zero and remains so until the manager responsible justifies the existence of the cost item and the benefits the expenditure brings (Lucey, 2009). Accordingly, Uluum (2004) avers that ZBB is a budgeting system based on estimates of activity rather than things that have done in the past. Each activity will be evaluated separately through various programs developed in the fiscal year called the decision package. In this type of budgeting, technique managers avoid extrapolating line items that are forgone in the previous years in formulating a new budget for the current year.

ZBB's task is to aggregate and re-evaluate an organization's activities considering cost, levels of service, and alternative delivery methods within budgetary guidelines. The work is primarily grounded in analysis at the lowest levels of management, where front-line managers are asked to calculate all activity related costs and suggest more efficient ways accomplish the same activity goals, as well as to assess the implications of different funding levels for each activity (Shelby, 2013).

Studies by Abdullahi (2007), Lucey (2009), and Adesopo (2011) affirms that the incremental budgeting approach is used extensively in government paratatals because of its simplicity. However, they criticizes the system as having a problem of not being efficiency based and seems to transfer the problem of the previous fiscal year into the next because of the use of the same parameters on yearly basis. This concurred with Langfield, Thorne, and Hilton (2006) who argued that the use of the revised current year estimates of income and expenditure as a starting point for determining the budget for the next year is frequently claimed to be one of the fundamental weaknesses of the budgetary process. It is urged that such an approach fails to consider whether a particular

Tirimba (2015) studied how Zero-Based Budgeting affects organizational performance in Somali land while (Surianti&Dalimunthe, 2015) studied the impact of Zero-Based Budgeting on employee's commitment in Pakistan. Ekanem (2014) studied the application of Zero-Based Budgeting as a management tool for effective University budget implementation in the University of Calabar, Nigeria. Ahmad (2007) studies the possibility of enhancing budget effectiveness through the adoption of Zero-Based Budgeting on employee's commitment to Brunei public sector organization among others.

itemis still required or whether the amount currently incurred is reasonable.

Ibrahim *et al.* (2017) empirically examine zero-based budgeting as a panacea to fiscal distress, do the perceived benefits significantly influenced its adoption in Borno state, Nigeria. The study adopted a survey research design and is basically cross-sectional method which means that it was conducted once a time. The aim of the study was to ascertain whether the perceived benefits of ZBB would significantly influence its adoption in Borno State. Stratified sampling technique was used to arrive at a sample size of 103 drawn from the total population of 139 which comprised of 28 state legislatures, 24 permanent secretaries, 61 and 21 staffs of the ministry of finance, budget and economic planning unit respectively. Binary logistic regression was employed to predict whether the predictor variable namely, perceived benefits have significant influence or not on the dependent variable, that is, the adoption of ZBB. It was found that it is possible to adopt ZBB in Borno state given that it is politically feasible and offers more appealing opportunities in minimizing costs and prioritizing the needs of government while adding value to the operational efficiency of the budgeting system.

Haxholli (2015) examines Zero-Based Budgeting for Kosovo Correctional Services the study focuses on Kosovo correctional services and will expand through its comparison with other local and central budgeting organization within Kosovo and therein other countries of EU and USA. The study uses descriptive research method. The study used a sample size of 142 through an online survey and was further analysis using simple percentage, ANOVA, pie chart, and histogram. The findings reveal that ZBB will organize budget proposals on ranking by reducing unnecessary ones, feasibility for capital projects, cost benefits analysis as well as easier to control by the internal and external audit as it allows single audit report. Given that the state of Idaho has a larger budget, larger number of prisoners and implement ZBB, gives a strong

argument that ZBB can be applied in Kosovo correctional service which has a smaller budget, smaller number of prisoners and possesses sufficient time and space for administrative officials and implementation, monitoring, and reporting.

Mohamed *et al*. (2015), in their work Analysis of the Effectiveness of Budgetary Control Techniques on Organizational Performance at Dara-salaam Bank Headquarters in Hargeisa Somali land the study utilized descriptive and retrospective research design. The study is a combination of library and empirical survey, both primary and secondary data were collected from the published materials. The sample size of 70 was used for the study. Statistical Package for Social Sciences (SPSS) versions 21.0 software was used to analyze data by the aid of percentages. The finding of the study concludes that it was able to establish that ZBB was credible and rewarding to the banks budget implementation. The application of ZBB for the banks budget implementation was effective and also significantly dependent on the organization's senior staff.

Ekanem (2014) opines in his work title Zero-Based Budgeting as a Management Tool for Effective University Budget Implementation in University of Calabar, Nigeria a study from Nigeria, the study adopted a descriptive survey research design. Stratified random sampling techniques were employed consisting of 250 staff both from academic and non-academic. Data were statistically analyzed using mean and independent T-test statistics. The instrument was face-validated by an expert to ascertain its reliability using the test-retest reliability method. The findings reveal that the application of ZBB for university budget implementation was effective. The researcher concludes that ZBB was credible and rewarding to the university budget implementation in the University of Calabar.

Bin Dost &Shafi (2011) in their work "The Impact of ZBB on Employee Commitment". The study based on data collected using questionnaire from two big cities of Pakistan (Islamabad and Lahore), where the survey design was used in the study with a sample size of 342 consisting of the public and private organization, employees relating to Human Resources, Information Technology, Audit, and Accountancy and Technical Department. The simple random technique was utilized in selecting the sample size and questionnaires were entered using SPSS software. The following tools were used for the analysis; Pearson correlation, ANOVA, Coefficients, and Coefficients correlation. The findings of the study indicate that ZBB has a moderate effect on employee commitment in an organization.

Meliano (2011) explains in her work titled management perception on the usefulness of ZBB evidence from NGOs in Kenya. The study adopted a descriptive survey design and data were collected using questionnaires. Stratified random sampling techniques were used with a sample size of 300 and it was further analyzed using SPSS. The following tools were used for the analysis; percentage, mean, and standard deviation. The research findings revealed that ZBB is flexible, communicate corporate goals, minimize cost and enhance knowledge sharing.

Ahmad (2007) in his work Employee Perceptions and Attitude in Brunei Public Sector Organizations the research investigates the perceptions and attitude of employees in some selected public sector organizations in Brunei Darussalam towards the adoption of ZBB. Both primary and secondary data were collected on face to face basis, through structured questionnaires containing open and closed structured questions was administered and collected from the financial units of seven ministries. The sample consists of 31 heads of section, 7 financials officers, 12 assistant financial and 7 accountants and further analyzed using ANOVA. The findings of the study indicate that ZBB is a better approach for allocating resources or public money. According to the respondents, ZBB provides an opportunity for government organizations to review and re-evaluate their functions annually produce better management information and assist public managers to make decisions based on improved reporting system.

In view of the above arguments and assertions, we can deduce that zero-based budgeting can be viewed as a budgeting system or technique which attempt to overcome the perceived deficiency that existed in the traditional budgeting system by drafting an estimates from the scratch or zero-sum so as to avoid extrapolating funding programs and activities that has been done in the past without reasonable reappraisal of purpose. In this type of budgeting system, present activities are being fund based on their priorities and must be justified by the usability and organizational needs as well as the availability of resources on the ground. The essence of this budgeting system is to mitigate unnecessary spending and enhance costs benefits approach.

There is no single study to the best of our knowledge that empirically tested from the combinations of the variable such as capacity to implement as predictor variable in predicting the possibility of adopting zero-based budgeting in the study area with sample size drawn from the population of the state legislatures, permanent

secretaries, officials of the ministry of finance, budget and economic planning units in the study area, hence, this constitute a significant

contribution to the literature on zero-based budgeting.

## Methodology
The survey research design was adapted, data were collected from a primary source. A closed-ended questionnaire was designed on a 5-Point Likert-scale and administered on four categories of respondents. Stratified sampling technique was used to arrive at a sample size of 103 drawn from the total population of 139 which comprised of 28 state legislatures, 24 permanent secretaries, 61 and 21 staff of the ministry of finance, budget and economic planning unit respectively. The sample

size was drawn statistically by using Yamane (1967) model at a 5% significant level as shown below. Binary logistic regression was employed to predict whether the predictor variable namely, capacity to implement has significant influence or not on the dependent variable, that is, the adoption of ZBB. Logistic regression is a nonparametric tool that can analyze data measured with ordinal, nominal, interval and ratio scales (Nancy, Karen & George, 2005).

$$n = \frac{N}{1 + N(e^2)}$$

Where: n = Sample size
N = Population size
e = Level of significance=5%=0.05

$$n = \frac{139}{1 + 139(0.05)^2} \qquad n = \frac{139}{1 + 139(0.0025)}$$

$$n = \frac{1470}{1 + 0.3475} \qquad n = \frac{140}{1.3475}$$

n = 103   the sample size of 103.

**Table 1: Sample Size**

| S/N | Office /Agency | Population | Sample Size |
|-----|----------------|------------|-------------|
| 1 | Borno State house of Assembly | 28 | 21 |
| 2 | Permanent Secretary | 24 | 18 |
| 3 | Staff of the Ministry of Finance in Borno State | 66 | 49 |
| 4 | Staff of the budget and Economic unit in Borno State | 21 | 15 |
| | **Total** | **139** | **103** |

**Source:** 2017 Field Survey

## Logistic Regression Model
The hypothesis was tested using Logistic Regression.

$$ZBB_i = \alpha_i + \beta_i CI + E_i \qquad\qquad \dots (1)$$

Where:   $ZBB_i$=adoption of ZBB, $CI_i$ = capacity to implement, $\alpha_i$ = Constant, $E_i$ = Error Term
$\beta_i$     = Coefficient of independent variable

Capacity to Implement ($CI_i$) was represented by proxies as follows;
      i.     Compliance mechanism
      ii.    Competency of the budget officials
      iii.   Adequate resources to train staff
      iv.   Formulation of implementation plan
      iv.   Sustainability of implementation plan

## Model Specification Viability (V)
The model used the adoption of Zero-Based Budgeting (ZBB) as the dependentvariable and Capacity to implement as the independent variable.

**The decision rule:** Reject the null hypothesis if $P < 0.05(5\%)$

## Validity and Reliability of the Instrument
The study used a questionnaire which was constructed by the researchers and later given to the experts in the field for assessment and appropriate suggestions were duly incorporated. A pilot study was also conducted to test the reliability as well as the internal consistency of the questionnaire (or survey) using a Cronbach's alpha reliability test via SPSS version 20.0 which gave a value of 0.79 as shown in table 4.4 below.

According to Gliem and Gliem (2003), the closer Cronbach's alpha is to 1.00, the more reliable the scale. Nunnally and Bernstein (1994) also stated that a value for Cronbach's alpha coefficient greater than 0.60 is considered acceptable.

## Normality Tests

Normality test was carried out using Anderson-Darling normality test, Known as the $A^2$ statistic via MINITAB software package version 16. Normality tests is a statistical analysis which is ought to have measure normally distribution before one can proceed to other statistical analysis. Thus, from this graphs (as shown in the graph below) it shows that the data is normally distributed as straight line slightly seems to fit the data reasonably well, as a result of the P-value which shows significant when compare to the alpha value as against the covariate and even the points are not far away from the curves this suggest its skewness. Furthermore, the null hypothesis of normality would be rejected if the residuals from the model are either significantly skewed or leptokurtic (Gujarati, 2004).

## Empirical Results and Discussion

Table 1 Shows respondents' perception as to whether it is possible to adopt ZBB in Borno state or not.

**Table 2: ZBB in Borno State**

| | | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | NO | 32 | 37.2 | 37.2 |
| | YES | 54 | 62.8 | 100 |
| | TOTAL | 86 | 100 | |

**Source:** Field Survey 2017

The table 2 above shows that 54 respondents agreed that it is possible to adopt ZBB in Borno state this represents 62.8% of the total respondents. This implies that it is possible to adopt ZBB in Borno State.

**Table 3: Variable in the Equation**

| Variable | B | S.E. | Wald | Df | Sig. | Exp(B) | 95% C.I. for EXP(B) | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Lower | Upper |
| Capacity | .136 | .092 | 4.727 | 1 | .00 | 1.230 | 1.019 | 1.639 |
| Constant | 1.297 | .246 | 2.666 | 1 | .99 | 0.256 | | |

**Source:** Field Survey, 2017

Since Table 3 above shows the covariate (independent variable), the P value is less than 0.05 (5% level of significance) we, therefore, reject the null hypothesis and accept the alternative hypothesis as follows; Since the P value is 0.00, which is less than 0.05(5%) level significance. This means that the null hypothesis is rejected while the alternative hypothesis which states that the adoption of ZBB in Borno state government is significantly influenced by its capacity to implement.

**Table 4: Model Summary Table**

| | Model Summary | | |
|---|---|---|---|
| Step | -2 Log likelihood | Cox & Snell R Square | Nagelkerke R Square |
| 1 | .000[a] | .733 | 1.000 |

**Source:** Field Survey, 2017

Table 4 shows $R^2$ estimate (.733 and 1.00) which indicating that approximately 73% or 100% of the variance in whether it is possible or not to adopt ZBB in Borno state in terms of capacity to implement can be predicted from a linear relationship of the covariate (independent variable). Thus, prediction and grouping suggesting that (the adoption of ZBB in Borno state is influenced by its capacity to implement, P=0.000). Therefore, since the P value is less than 0.05 we, therefore, reject the null hypotheses and accept the alternative hypothesis.

**Table 5: Reliability Tests**

Reliability Test of Constructs

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .787 | .789 | 21 |

**Source:** Field Survey, 2017

Table 5 above shows the result of the constructs subjected to reliability test, Cronbach's alpha coefficient of 0.79. This suggests that the items in the questionnaire reliably measure the same constructs constituting 21 items which are acceptable for the study.
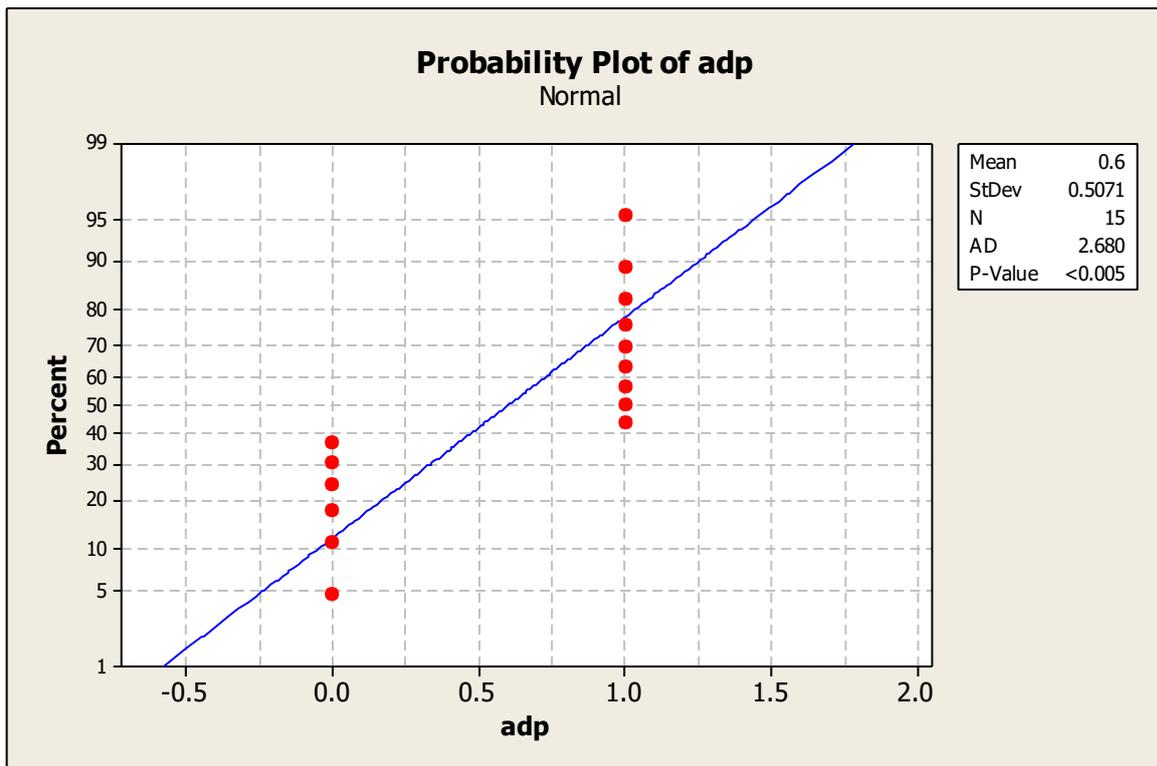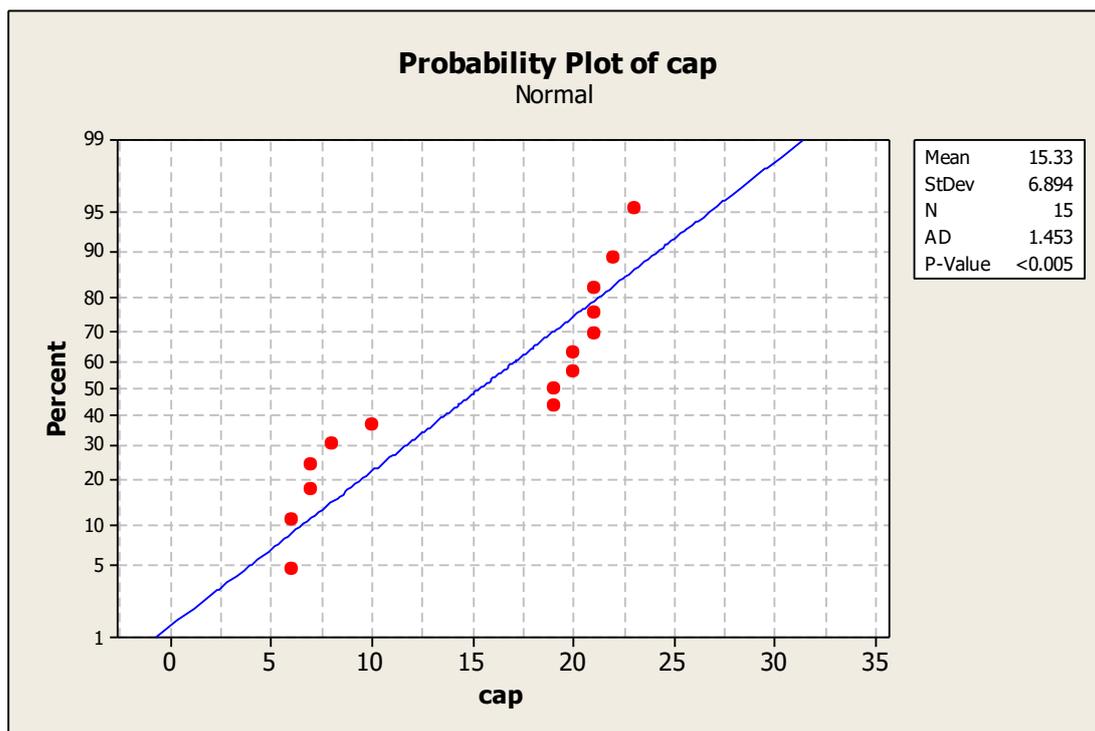


**Fig. 1: Probability Plot of ADP**

**Fig. 2: Probability Plot of CAP**

### Findings

The study found that the Borno state government has the capacity to formulate implementation plan and sustain the tempo through transparency and regular training of staff in the ministries, departments, and agencies which bring about specialization and overcome the perceived difficulties encountered in the current budgeting system thereby speeding up the passage of the appropriation bill by the state legislature. Consequently, this is in concurrence with the omnibus tests model coefficients which shows the standardized beta weights of the **R** coefficients and the Chi-square indicating the correlation between the adoption of zero-based budgeting in Borno state and the predictor variable that are perceived to have contributed to the adoption of zero-based budgeting viz; capacity to implement ($X^2$=113.53, df=3, N=86, P<0.001). Table 4.3 shows Cox and Snell **R** square of 0.0736 and Nagelkerke**R** square of 1.00. These "Pseudo" $R^2$ estimates indicate that approximately 74% or 100% of the influence of whether or not it is possible to adopt zero-based budgeting in Borno state can be predicted accurately from the linear combination of the variables.

### Conclusion

The study was able to establish that the variable capacity to implement is statistically significant in predicting the possibility of adopting zero-based budgeting in Borno state. More so, the linear combination of the covariate suggests a strong correlation among the variables with an overall of 63%, correctly predicted the possibility of adopting of zero-based budgeting in Borno state as shown in table 4.3 model classification.

### Recommendations

Based on the findings of the study, the following recommendations were made:

1. Firstly, it becomes pertinent to recommend the adoption of zero-based budgeting system in Borno state because it is viable more especially in this era of fiscal constraint, where budgets cutbacks are considered to be more rational and comprehensive approach to dealing with austerity measures.

2. The state government should formulate implementation framework through capacity building, regular training of its staff in charge of budgets and accounts in the ministries, departments, and agencies, organize workshops and seminars so as to be acquainted with the new system of budgeting in order to achieve sustainable fiscal transparency expected of budgets.

## References

Abdullahi, A. A. (2007). *Public sector accounting: Theory and practice(1st ed).* Zaria: Sa'ad-Deen Press.

Adesopo, A. A. (2011). Inventing participatory planning and budgeting for participatory local governance in Nigeria. *International Journal of Business and social sciences*, 2(7), 111-116.

Ahmad, A. A. A. (2007). Zero-Base Budgeting: Employees Perceptions and Attitudes in Brunei Public Sector Organizations. *Economics and Administration*, 21(1). 3-14.

Baiman, S. (1982). Agency Research in Managerial Accounting: A Survey. *Journal of Accounting Literature,* 1: 154-213.

Centre for Social Justice (2014). Abuja, Nigeria.

Chegwe, K. (2010). Improved Budget Implementation: Key to Nigeria's Recovery. Retrieve from http://www.focusnigerfa.com/budget-implcmentation.htm.

Demski, J. S. (1998). Performance measure manipulation. *Contemporary Accounting Research*, *15*(3), 261-285.

Ekanem, E. (2014). Zero-based budgeting as a management tool for effective budget implementation. *European Journal of Business and Social Sciences,* 2(11), 11 -19.

Forrester, J. P., & Adams, G. B. (2002). Budgetary Reform through Organizational Learning: Toward an Organizational Theory of Budgeting. *Administration & Society,* 466-488.

Gliem, J. A., &Gliem, R. R. (2003). Calculating, interpreting, and reporting cronbach'salpha reliability coefficient for Likert-type scales. *Midwest Research-to-Practice Conference Proceedings in Adult, Continuing, and Community Education.*

Gujarati, D. (2004). Basic Econometrics. United States Military Academy, West Point.

Haxholli, B. N. (2015). Zero Based Budgeting in KCS Implementing Zero Based Budgeting Method in Kosovo Correctional Service. Kosovo: (Postgraduate Thesis) at the American university, Kosovo. Available @http://ritscholarworks@rit.edu.

Ibrahim, M., Ashgar, A., Bello, A., B, Mamuda, U., A. (2017). Zero-based budgeting is a panacea to fiscal distress: Do the perceived benefits significantly influence its adoption in Borno state. *SaudiJournal of business and management studies. Scholars middle east publishers,* 02(10), 943-950

Kamlet, M. S., & Mowery, D. C. (1985). The first decade of the Congressional Budget Act: Legislative imitation and adaptation in budgeting. *Policy Sciences*, *18*(4), 313-334.

Khan, A., &Hildreth, W. B. (Eds.). (2002). *Budget theory in the public sector.* USA: Greenwood Publishing Group.

Langfield-Smith, K., Thorne, H., & Hilton, R. W. (2006). *Management Accounting: information for managing and creating value.* McGraw-Hill Higher Education.

Lucey, T. (2009). Costing (7lh Ed.) London: Thomson learning new cengage publisher.

Meliano, S. (2011). Survey of management perception on the usefulness of zero based budgeting: Evidence from nongovernmental organizations in Kenya, *University of Nairobi, Kenya.*

Mohamed, A. I., Evans, K., &Tirimba, O. I.(2015). Analysis of the Effectiveness of BudgetaryControl Techniques on Organizational Performance at Dara-Salaam Bank Headquarters in Hargeisa Somaliland: *International Journal of Busmen Management and Economic Research (1JBMER). 6(6). 327-340.*

Nunnally, J. C., & Bernstein, I., H. (1994). Psychometric Theory (3rd ed.). New York, USA: McGraw Hill.

Robinson, P. I., Faris, C. & Wind. Y, (1967). Industrial buying and creative marketing. Marketing science institute. National research libraries.

Ross, S. A. (1973). The economic theory of agency- The principal's problem. *American economicassociation*. 63(2).

SawHill, C. & Williamson, D. (2001). Mission impossible: Measuring success in nonprofit organizations.*Nonprofit management and leadership,* 11(3). 384-385.

Shelby, R. (2013). Zero-Base Budgeting for the 21st Century Public Administrator. *Atlanta: FiscalResearch Center/Andrew Young School of Policy Studies/Georgia State University*.

Shayne, K. (2012). Zero-Based Budgeting: Modern Experiences and Current Perspectives. *Government Finance Review*. Georgia, USA:

Surianti, M., &Dalimunthe, A. (2015). The Implementation of Performance Based Budgeting inPublic Sector. *Research Journal of Finance and Accounting,* (6) l2.

Uluum, L. (2004). Accounting of Public Sector. Yogyakarta: Umm Press.

Veiga, L. G., Mathew, K. & Reza, A. (2015). Intergovernmentalfiscal relations: Questions of accountability and autonomy. *Springer Briefs in environmental science conference proceedings.*