



Effective Budgeting System, and Efficiency in Management of Resources in the Nigerian Public Sector

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ABSTRACT

The study seeks to examine effective budgeting system, and efficiency in management of resources in the Nigerian public sector. The study employed the survey research design and data were obtained from primary source through the aid of questionnaires. The hypotheses were tested with the use of chi-square (X^2). The test revealed that effective budgeting helps to ensure efficient management of public sector fund, budgeting is prepared in line with the objectives of Nigerian federal government plan, the period given for the submission of estimate form the different ministries is tax short and recommends that Government should ensure the independence of the committee preparing budget, it should be accountable only to the governor of the federal and also, when preparing budget the government or those in charge should ensure that the budget is prepared in line with the government plans for the year.

Keywords: Budgeting, finance, governance, public sector,

1. Introduction

In the dynamic terrain of contemporary governance, the efficient management of public resources remains an enduring concern—especially within emerging economies like Nigeria, where the gap between budgetary promises and developmental realities continues to widen. Budgeting, though traditionally understood as a technical financial exercise, serves a much broader function in the public sector: it is the tangible articulation of a government's priorities, constraints, and social contract with its citizens.

At its core, budgeting is not merely about numbers—it is about choices. Choices regarding who gets what, when, and how. It reflects the balancing act between limited state resources and unlimited societal needs. In a context marked by systemic resource scarcity, where social infrastructure is often underdeveloped and population growth continues to pressure existing public services, the role of effective budgeting cannot be overstated. Budgeting determines whether a child receives access to education, whether a community has clean water, or whether life-saving medication is stocked in a rural clinic.

In Nigeria, budgeting is constitutionally mandated and politically significant. It is one of the few instruments through which governments demonstrate stewardship and strategic direction. However, a recurring paradox persists: while national and subnational governments announce ambitious budgetary allocations annually, actual developmental outcomes remain dismal. Roads remain dilapidated, healthcare systems underfunded, and public trust in government accountability erodes further. Scholars such as Ajakaiye & Akinbinu (2000) have long cautioned against the ritualisation of budgeting—where the process is undertaken for formality, rather than for fiscal discipline or developmental impact.

Numerous factors have been identified as contributing to this discrepancy between budget estimates and actual outcomes. These include weak institutional capacity, poor regulatory oversight, political interference, and a culture of non-implementation. Mhone (2003) describes African budgetary

systems as undergoing several reformist cycles without meaningful transformation in developmental results. In Nigeria, despite the repeated calls for fiscal discipline and public financial management reform, the disconnect between budget formulation, execution, and evaluation persists, leading to an inefficient use of scarce public resources.

Yet, effective budgeting holds transformative potential. When embedded within a transparent, accountable, and participatory framework, it can enhance public trust, align expenditures with development priorities, and improve service delivery. This is particularly true at the state level, where ministries such as the Ministry of Finance in Edo State serve as critical nodes in the public financial management architecture.

The digital age also offers new opportunities for reform. Contemporary public finance systems are increasingly adopting technologies such as e-budgeting platforms, open data dashboards, and performance-based budgeting models. These innovations can help to strengthen transparency and monitor compliance, but only when backed by political will and institutional capacity.

This study seeks to assess the effectiveness of budgeting systems in ensuring resource efficiency within the Nigerian public sector, with a specific focus on Edo State. By investigating how budgets are formulated, implemented, and reviewed at the subnational level, the study contributes to the broader discourse on governance and fiscal accountability in Nigeria.

Specifically, this research seeks to answer the following questions:

RQ1: To what extent does effective budgeting help ensure efficient management of public sector funds?

RQ2: Is the budget preparation process aligned with the objectives of the Nigerian state government's development plans?

RQ3: What are the primary causes of variances between budget estimates and actual fiscal outcomes?

In addressing these questions, the study also identifies the challenges and constraints that hinder effective budget implementation and evaluates whether public budgeting in Nigeria genuinely facilitates development or remains an exercise in financial abstraction.

By situating this inquiry within a real-world institutional setting, the study provides practical insights for policymakers, financial administrators, and governance reform advocates. Ultimately, it underscores the imperative of shifting from performative budgeting to a results-based approach that places citizens at the heart of public finance decisions.

2. Literature Review

Definition of Budget

A budget is fundamentally a financial plan that outlines expected government revenues and proposed expenditures for a specific financial period (Melnichuk, 2015). Shim et al., (2011) further describes a budget as a set of proposals concerning anticipated revenues from various sources and the corresponding expenditures to be made on different items. Budgets can be categorized based on their balance: a surplus budget occurs when revenue exceeds expenditure ($R > ER > ER > E$), a deficit budget arises when expenditure surpasses revenue ($E > RE > RE > R$), and a balanced budget is when revenue equals expenditure ($R = ER = ER = E$). Sandalgaard & Nikolaj (2014) emphasizes the importance of budgeting in business-oriented organizations, noting that it involves setting financial plans and identifying means to achieve organizational goals. Budgeting is thus a forward-looking process, involving the projection of future revenues and expenditures to support planned activities.

Kolade (2012) also outlines several reasons for budgeting, including its role as a coordinating device, a target-setting tool, and a mechanism for aligning fiscal and monetary policies to promote macroeconomic stability. Additionally, budgeting helps ensure fiscal discipline, clarifies lines of authority, facilitates prompt execution of urgent projects, and ultimately aims to influence the actions of those governed by the budget to optimize long-term organizational performance.

Classification of Budgets

Budgets are generally classified into three main categories:

- **Short-Term Budgets:** According to Budding & Grossi (2014), short-term budgets typically cover a period of up to one year and are often prepared monthly or quarterly. In the public sector, these budgets identify revenue sources and estimate both revenues and expenditures for the fiscal year. At the end of the period, actual results are compared with the budgeted figures to assess performance.
- **Medium-Term Budgets:** Kolade (2012) defines medium-term budgets as those spanning three to five years. These budgets facilitate consideration of long-term financial commitments, project continuity, and the future financial implications of current expenditures.
- **Long-Term Budgets:** Long-term budgets, often associated with capital projects, cover periods of at least five years and involve commitments over an extended timeframe.

Types of Budgets

Kolade (2012) identifies several types of budgets:

- **Traditional Line-Item Budgeting:** This approach focuses on controlling administrative expenditure through accountability systems. It emphasizes tracking expenditures by item rather than by outcomes, aiming to ensure that appropriated funds are used as intended.
- **Planning Programming Budgeting System (PPBS):** Tulkoff et al., (2010) describes PPBS as a system that integrates planning and programming into the budgeting process. PPBS links objectives with resource allocation, emphasizing the evaluation of program achievements and the analysis of alternatives. The system uses both monetary and concrete goals as performance measures and encourages rational decision-making in resource allocation.

Merits of PPBS:

1. Addresses shortcomings of traditional budgeting.
2. Reduces costs by avoiding duplication of functions.
3. Promotes coordination among government agencies.
4. Facilitates rational resource allocation.
5. Focuses on productivity, economy, and efficiency.

Demerits of PPBS:

- Limited time for decision-making.
- Requires formal organizational structures for implementation.
- Policy makers may lack the analytical background.
- High costs and challenges in obtaining timely information.

Zero-Based Budgeting (ZBB): ZBB is a flexible approach that requires justification for all expenditures, starting from a "zero base" each period. The process involves identifying decision units, analysing and ranking decision packages, and allocating funds accordingly.

Merits of ZBB:

- a. Promotes efficient resource allocation.
- b. Encourages regular reappraisal of funding needs.
- c. Fosters cost consciousness.
- d. Sharpens goal setting and consideration of alternatives.
- e. Avoids incremental increases based on previous budgets.

Demerits of ZBB:

- Time-consuming preparation.
- May involve unnecessary arguments over starting from zero.
- Difficulty in defining decision units and measures.
- Considered costly and complex, leading to limited adoption.

Performance Budgeting: According to Schick (2014), performance budgeting links requested funds to specific objectives and program outcomes. It emphasizes monitoring actual performance against budgeted costs and classifies budgets by function.

Merits of Performance Budgeting:

- Facilitates cost determination and project efficiency.
- Clearly defines goals and means to achieve them.

Demerits of Performance Budgeting:

- i. May not measure effectiveness adequately.
- ii. Challenges in comparing program performance.
- iii. Reliability issues due to lack of dependable data.

Functions of Budgets

Government budgets serve multiple functions, which may vary across nations. Generally, budgets are tools for income distribution, resource allocation, planning, stabilization, management, and control (Cusack, 2019). Budgets allocate scarce resources, influence private sector activities through taxation and expenditure policies, and can be used to protect local industries. They also help governments address income inequality and promote equitable wealth distribution. In terms of planning, budgets provide direction, reduce uncertainty, and assign responsibility for achieving governmental goals (Cusack, 2019; Azhar et al., 2024; Willoughby, 2014). Budgets also play a role in economic stabilization by enabling governments to manage inflation and unemployment through fiscal policies. Lastly, budgets are essential for management and control, providing a framework for monitoring performance, identifying deviations, and implementing corrective actions (Freeman, 2013).

3. Methodology

3.1 Research Design

The cross-sectional research design was adopted in this study in the course of data collection. This is because the researcher made observations at a particular point in time.

3.2 Population of the Study

This study focusses on the effective budgeting and efficient management of resources in the Nigeria public sector. However, the population of this study covers some selected staffs of Ministry of Finance in Benin City, Edo state.

3.3 Sample Size

Thirty (30) respondents were sampled for the interview. The information collected which serve as the sample size will be used for the analysis.

3.4 Sampling Technique

The sampling procedure adopted is non-probability method otherwise known as judgmental sampling technique. This technique was adopted to ensure that every subset in the population of the study must have equal chance of being selected.

3.5 Source of Data Collection

The focal point of research work is the gathering of relevant data for analysis purpose. With regard to information for this research work, the primary source of data collection method would be used.

The Primary Sources of Data

These are data obtained from staffs of ministry of finance Benin City, Edo state with the aid of some prepared questionnaires which are differently answered by the staffs. In addition, oral interview was conducted with some staffs to enable the researcher obtain a more reliable and accurate information.

The Secondary Source of Data

The secondary data consists of data from several sources, they include; textbooks on accounting and finance, taxation, business management, journals, periodicals.

The secondary data is very important in this resources study as it provided the direction and preview of the work.

3.6 Method of Data Presentation

To aid understandability and analysis of data, the data collected will be presented using tables and a simple percentage for easy comprehension of users.

3.7 Method of Data Analysis

The questions for the questionnaire which is the primary source used, was analysed mainly with the use of table and simple percentage by the use of the following formula represented below;

$$\frac{\text{Types of responses}}{\text{Total numbers of responses}} \times \frac{100}{1}$$

After analysing the data, the hypothesis earlier formulated is then tested using chi-square. The test of hypothesis is a parameter or procedures for deciding whether to accept or reject the hypothesis since the hypothesis may be tested with a view to reject a null hypothesis usually denoted by H_0 and the rejections of the null hypothesis leads to the acceptance of the alternative hypothesis denoted by H_1 .

The hypothesis is tested using chi-square analysis with the formula below;

$$X^2 = \frac{\sum (F_o - F_e)^2}{F_e}$$

Where χ^2 = Chi-square

Σ = Summation sign

F_o = Observed frequency

F_e = Expected

4. Results

4.1 Data presentation

The method adopted for the presentation of data is table. The data collected through the administration of questionnaires are presented in a tabular form. This table is divided into rows and column with each table carrying a heading titled. Simple percentage serves as the basic for analysing and interpreting the responses derived from the questionnaires.

4.2 Data Analysis

Table 4.1: Sex classification

Sex	No of respondents	Percentage %
Male	19	63.33
Female	11	36.67
Total	30	100

Source: computed from survey data 2018

From the table, 19 respondent's males representing 63.33% while 11 respondents are female representing 36.67%.

Table 4.2: Marital status

Status	No of respondents	Percentage %
Single	3	10
Married	20	66.67
Divorce	-	-
Window	7	23.33
Total	30	100

Source: computed from survey data 2018

The table analysis the marital status, 3 respondents are single 10%, 20 respondents representing 66.67% are married and 7 respondents representing 23.33% are widows.

Table 4.3: Age of workers

Years	No of respondents	Percentage %
20-25	-	-
26-30	-	-
31-35	9	30
36-40	6	20
Above 40	15	50
Total	30	100

Source: computed from survey data 2018

From the table 9 respondent represent 30% are age of 31-35%, 6 respondent represent 20% are the age of 36-40, 25 respondents represent 50%, are the age of 40 and above.

Table 4.4: Education qualification

Qualification	No of respondents	Percentage %
Pry School	-	-
WAEC/GCE	-	-
B.Sc/OND/HND	22	73.33
Professional	8	26.67
Total	30	100

Source: computed from survey data 2018.

The above table shows that 22 respondents representing 73.33% workers are B.SC/OND/I IND, 8 respondent represent 26.67% workers are professionals.

Table 4.5: No of years working with the ministry

Years	No of respondents	Percentage %
1-5	9	30
6-10	5	16.67
11-15	9	30
16 above	7	23.33
Total	30	100

Source: computed from survey data 2018

From the table, it was show that 9 respondents representing 30% have worked with the ministry between 1-5 years, 5 respondents representing 16.67% have work with the ministry between 6-10 years, 9 respondents representing 30% have been with the ministry from 11-15, 7 respondent representing 23.33% have worked with the ministry between 16 and above years.

Table 4.6: Question 1: Does effective budgeting help to ensure efficient management of public sector fund?

Response	No of respondents	Percentage %
Yes	30	100
No	Nil	Nil
Total	30	100

Source: from researcher's field work 2018

From the table above, the respondents agreed that they have a budget department.

Table 4.7: Question 2: Is the budget prepared in line with the objectives of Nigerian federal government plan?

Response	No of respondents	Percentage %
Yes	25	83
No	5	17
Total	30	100

Source: form researchers' field 2018 From the table above, 83% of the respondents agreed that the budget is Prepared in line with development plan while 17% disagreed.

Table 4.8: Question 3: Does the Federal share of the Federal revenue materially affect revenue of the Federal?

Response	No of respondents	Percentage %
Yes	30	100
No	Nil	Nil
Total	30	100

Source: from researcher's field work 2018

From the table the respondents agreed that the federal share of the federal revenue materially affect the revenue of the federal

Table 4.9: Question 4: Is there current year budget based on previous year's budget?

Response	No of respondents	Percentage %
Yes	20	80
No	10	20
Total	30	100

Source: from researchers' field work 2018

From the table above, 80% of the respondents agreed that there is a current year's budget based on previous year budget, while 20% disagreed

Table 4.10: Question 5: Are there any criteria used in determining capital project embark upon in a particular year

Response	No of respondents	Percentage %
Yes	15	50
No	15	50
Total	30	100

Source: from researcher's field work 2018

From the table above, 50% of the respondent agreed that there are criteria and in determine capital project embarked on particular year while 50% of the respondent disagreed.

Table. 11: Question 6: Do the government prepare budget on yearly basis?

Response	No of respondents	Percentage %
Yes	30	100
No	Nil	Nil
Total	30	100

Source: from researcher's field work 2018

From the above, all the respondent agreed that the government prepare budget on yearly basis.

Table 4.12: Question 7: Is there a particular committee responsible for reviewing proposal from every ministry?

Response	No of respondents	Percentage %
Yes	25	90
No	5	10
Total	30	100

Source: form researcher field work 2018

From the table above, 90% of the respondents agreed that there is a particular committee responsible for reviewing proposal from the ministry while 10% disagreed.

Table 4.13: Question 8: Does the division solely responsible for budget preparation?

Response	No of respondents	Percentage %
Yes	10	20
No	20	80
Total	30	100

Source: from researcher's field work 2018

From the table above, 20% of the respondents agreed that the division is solely responsible for budget particular while 60% of the respondent disagreed.

Table 4.14: Question 9: Are the objectives of the federal government's budget achieved with a given year?

Response	No of respondents	Percentage %
Yes	20	80
No	10	20
Total	30	100

Source: from researcher's field work 2018

From the table above, 80% of the respondents agreed that the objectives of the government are achieved within a given fiscal year while 20% of the respondents disagreed.

Table 4.15: Question 10: Is it the governor that gives the final approval of the project?

Response	No of respondents	Percentage %
Yes	30	100
No	Nil	Nil
Total	30	100

Source: from researcher's field work 2018

From the table above, all the respondents agreed that it's the governor that gives the final approval of the budget.

Table 4.16: Question 11: Is there a separated division in the ministry of finance responsible for budget preparation?

Response	No of respondents	Percentage %
Yes	18	70
No	12	30
Total	30	100

Source: from researcher's field work 2018 From the table above, 70% of the respondents agreed that there is a separated division in the ministry of finance responsible for budget preparation while 30% of the respondent disagreed.

1.4. Hypotheses Testing

Hypothesis One

H₁: Effective budgeting does not help to ensure efficient management of public sector fund.

Table 4.6: Question 1: Does effective budgeting help to ensure efficient management of public sector fund?

Response	No of respondents	Percentage %
Yes	30	100
No	Nil	Nil
Total	30	100

Source: from researcher's field work 2018

Calculated X₂

value

Option	Fo	Fe	$Fo - Fe$	$(fo - Fe)^2$	$(fo - Fe)^2/fe$
Yes	30	15	15	225	15
No	0	15	-15	225	15
Total	50				30

$$\text{Formular} = \text{Chi - square } (X^2) = \sum \frac{(Fo - Fe)^2}{Fe}$$

Where:

Fo = Observed frequency

Fe = Expected frequency

X^2 = Chi - square

$$Fe (\text{Expected frequency}) = \frac{\text{Total frequency}}{\text{Total Number}}$$

$$Fe = \frac{30}{2} = 15$$

Degree of freedom is given as $(r - 1) (e - 1)$

Where:

r = Number of rows

e = Number of columns

$$(2 - 1) (2 - 1)$$

$$1 \times 1 = 1$$

The critical value is given as 3.841 which is the value in the tabulated X^2 distribution at 5% level of significance using 1 degree of freedom. Decision Rule: Since table value (3.841) is less than calculated value (30) we reject H_0 (null hypothesis) and accept H_1 (alternative hypothesis) that effective budgeting helps to ensure efficient management of public sector fund.

Hypotheses Two

H_2 : Budgeting is not prepared in line with the objectives of Nigerian federal government plan.

Table:4.7: Question 2: Is the budget prepared in line with the objectives of Nigerian Federal government plan?

Response	No of respondents	Percentage %
Yes	25	53
No	5	17
Total	30	100

Source: from researchers' field work 2018

Option	Fo	Fe	$Fo - Fe$	$(fo - Fe)^2$	$(fo - Fe)^2/fe$
Yes	25	15	10	100	10
No	5	15	-10	100	10
Total	50				20

$$\text{Formular} = \text{Chi-square } (X^2) = \sum \frac{(Fo - Fe)^2}{Fe}$$

Where:

Fo = Observed frequency

Fe = Expected frequency

X² = Chi-square

$$Fe (\text{Expected frequency}) = \frac{\text{Total frequency}}{\text{Total Number}}$$

$$Fe = \frac{30}{2} = 15$$

Degree of freedom is given as $(r - 1) (e - 1)$

Where:

r = Number of rows

e = Number of columns

$$(2 - 1) (2 - 1)$$

$$1 \times 1 = 1$$

The critical value is given as 3.841 which is the value in the tabulated X^e distribution at 5% level of significance using 1 degree of freedom.

Decision Rule: Since table value (3.841) is less than calculated value (20) we reject H₀ (null hypothesis) and accept H_a (alternative hypothesis) that budget is prepared in line with the objectives of Nigerian federal government plan.

5. Summary, Conclusion and Recommendation

Summary of Findings

- 1 Effective budgeting helps to ensure efficient management of public sector fund.
- 2 Budgeting is prepared in line with the objectives of Nigerian federal government plan.
- 3 The period given for the submission of estimate form the different ministries is too short.

In conclusion, this study establishes that effective budgeting is a vital tool for ensuring the efficient management of public sector resources in Nigeria. The findings confirm that when budgets are properly aligned with government objectives, they serve as essential instruments for fiscal discipline, transparency, and development. However, despite the formal alignment of budgets with national plans, operational inefficiencies such as unrealistic timelines for budget preparation and weak implementation frameworks continue to undermine budget effectiveness. Furthermore, the influence of human behaviour, bureaucratic constraints, and poor accountability mechanisms contribute significantly to the persistent gap between budgetary projections and actual outcomes.

To improve the budgeting process and achieve greater resource efficiency, it is recommended that the Nigerian government extends the timeframe for budget preparation to allow for comprehensive planning and consultation. There is also a need to strengthen the technical capacity of budget officers through continuous training on modern financial management practices. Implementing transparent monitoring and evaluation mechanisms, alongside adopting performance-based budgeting, will enhance accountability and ensure that expenditures are directly linked to developmental outcomes. Additionally, leveraging digital technologies in budget management and fostering greater stakeholder participation will further improve transparency, reduce inefficiencies, and enhance the overall impact of public sector budgets.

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