



Assessing the Efficacy of Budget in Controlling Fraudulent Personnel Cost Figure in Borno State Civil Service, Nigeria

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Author's contribution

The sole author designed, analyzed, interpreted and prepared the manuscript.

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ABSTRACT

The Borno State Government in its effort to rid the state civil service of the ghost worker syndrome made a lot of efforts such as verification of staff by consultants and physical head count of staff by committee. The present administration and its predecessors have all made that effort, but the syndrome seems far from over. It is in light of the above that this study seeks to investigate the Personnel Cost Budget of the state government in respect of education and health sectors to see if it assisted in controlling fraud in personnel cost. Both primary and secondary data were used for this research. Closed ended questionnaire was administered to personnel depart of the education and Health sectors, while the Borno state budget figure for these sectors are extracted from the State budget document of 2015 to 2019. These data were analysed by the use of Benford's Law. The study found out that budget is being prepared annually on incremental basis using the previous year's budget figure as basis. It also found out that the budgeted figure is always higher than the actual giving rise to favourable variance, and do not usual follow the pattern of Benford Law in which figures are supposed to appear in a numeric data setup in line with its rule.

Keywords: Benford's law; personnel cost budget; health sectors; contractual agreement.

1. INTRODUCTION

There is always a contractual agreement between an employer and employee as to remunerations. Remunerations are agreed benefits in terms of cash the employer is supposed to pay the employee in a given circle as per the terms and condition of service usually monthly or twice a month. The process entails listing of staff according levels and preparing what is due to employee and paying on cash basis or through their accounts in a designated bank. This process is known as pay rolling or payroll. In a situation where the total benefit of an employee exceeds the agreed remuneration or the total of the employees' benefit exceeds the legally allowed amount, it is said that there is payroll fraud. In other words, payroll fraud is where employees collaborate to hike their emoluments in order to benefit unjustly without the consent of the employer. However, another type of fraud may also occur in the organization. This takes the form of unremitted tax by the employer himself to the relevant tax authorities. Tax is usually deducted from the taxable income of employees for onward remittance to tax authorities and this is the duty of the employer and in some instances, this is not affected, hence it becomes tax fraud from the payroll system.

1.1 Statement of the Problem

In the past sixteen (16) years, precisely from the year 2004 to date, the Borno State government have been battling with how to eliminate payroll fraud and reduce personnel costs which is largely attributed to ghost worker syndrome. The fact still remains that despite huge amounts employed apart from the waste of manned hours to put this syndrome, government is yet to succeed. This is evidenced by repeated employee verification or biometric of the state civil servants to fish out fake or ghost workers. Despite the various verifications and biometric data of the state civil servants, no tangible discovery was made nor report was produced to indict any employee or employees. No discoveries as far as the financial implications are concern was made public, no any suspect paraded or punished for such crime as payroll fraud.

There are very many studies on fraud in the public sector of Nigeria, including that of payroll fraud by such authors like [1,2,3]. These studies were conducted in different states or clime. Similarly, no study was conducted on payroll fraud in Education and Health sectors of Borno

State of Nigeria, where bulk of the state's manpower lies in these ministries. Since there were no findings from the various committees set by the state nor recommendations on how to overcome payroll fraud and more so that previous studies conducted were in different climes and dates, it is important to conduct a study on budgeted and actual Personnel Cost using Forensic Accounting technique to find a remedy to the scheme.

1.2 Objective of the Study

It is the main objective of this study to assess budgeted personnel cost of Borno State civil against the actual in controlling fraudulent figure. However, the specific objectives are to Investigate:

- i. Whether proper staff records are being maintained in the Education and Health sectors
- ii. Whether budgets are prepared regularly on personnel costs in line with government policy

2. METHODOLOGY OF THE STUDY

Both primary and secondary data were used for this research. Closed ended questionnaire was administered to personnel depart of the education and Health sectors, while the Borno state budget figure for these sectors are extracted from the State budget document of 2015 to 2019 [4]. These data were analysed by the use of Benford's Law.

2.1 Review of Related Literature

Staff or employee remuneration or emolument is a known package or benefit that every employee enjoys from his employment. However, there are instances when these benefits overshoot the bench mark peg by the employer thereby the employees or their collaborators or those enshrine with the responsibility of paying out these emoluments take undue advantage by enriching themselves from this proceed, hence committing payroll fraud. This type of fraud can be committed through Pay As You Earn Tax, Buddy Punching, Pay cheque diversion, unauthorized hours and Ghost employees. The payroll process involves process information about the number authorized hours to be worked, approval of the hours worked, calculation and authorization of pay and calculation of deductions and subsequent remittance to authorities or organizations concern and create payments.

The Transparency International [5] (TI) ranking placed Nigeria the 149th position out of 179 countries polled in 2020 in their corruption perception index (CPI). This indicates that the level of corruption is high in Nigeria. According to Olaleye [1], ostentation, affluence and high-profile living standard by any means leads to financial malpractices in the public sector of Nigeria.

Moses and Micah [6] conducted a study on the implementation of Integrated Personnel Payroll Information System in Nigeria, and discovered that that it had reduced the level of payroll fraud in the federal civil service. Although it has reduced, but the system is not without its practical negative implications. Various unions have kicked against the system, notably the Academic Staff Union of Universities and some other unions. In fact, to some, it is only a change in the beneficiaries of the fraud.

Etale and Pouzigha [7] examine the effect of electronic payment on payroll of selected ministries in Bayelsa state of Nigeria through a primary source of data. They found out that to curtail payroll, the government should encourage the use of BVN for employees. The findings of the study were based on responses to questionnaire, which has difference with this study which adopted both secondary and primary data. Thus, the secondary data is being corroborated by the primary.

Toakodi and Assi [8] investigated corruption in Bayelsa State of Nigeria civil service with particular attention on payroll fraud using secondary data. Their findings revealed that there were numerous names that were not civil servants. Even as it were, there was no evidence of culprits being reprimanded. Even though the study was conducted on payroll fraud, there is time, geographical and methodological difference with this study.

Chukwuma, Efeeloo and Nkeiruka [9] investigated payroll fraud in Rivers State of Nigeria using primary. They concluded that there is positive relationship between the manual and electronic system of maintain payroll system as far as fraudulent attitude is concerned. They recommended that the financial crimes commissions should join hands with the government to curb payroll fraud. This study also did not take into account the root cause of the fraud. That is to say whether the preparation of budgets and its implementation by government ministries aid in perpetrating payroll fraud.

However, Babalobi [2], presents weak government institutions, inadequate employee remuneration, secrecy and lack of transparency as main causes of financial corruption in the public sector.

The unwillingness in the part of government to scout for and arrest and prosecute culprits and their collaborators, including syndicates if any is in part encouraging fraudulent financial practices in the the public sector. This idea is also supported by Ukoko, [10].

According to Obinna [11], payroll fraud is an organize crime in the civil service of Nigeria. This assertion can carry some weight, because for a fraud to take place there must be some collaborators within the system, more especially where there is segregation of duty.

Faustinus [12], observed that those in administration, finance and the banks are in collaboration to encourage ghost worker syndrome or payroll fraud even in the digital period. Most of these ghost workers operate bank accounts for salaries and employee entitlements which constitute employee remuneration.

Abba [13], conducted a study in katsina state of Nigeria. He analysed the budget statement for a period of 10 years using descriptive statistics and correlation and concluded that the senior management should train the lower cader so that there is proper implementation of budget. The study therefore indicates that senior officers are not carrying their subordinates in the implementation. This may cause budget variance favourable or unfavourable. Which ever is achieved does not mean a success in budget. This will erode one of the objectives of budget as a document for control purpose.

Mohammed & Mohammed [14], conducted a study on Government Financial Management Information System (GFMIS) and effectiveness of budgetin public sector. The study was conducted using primary data and concluded GFMIS does not affect the effectiveness of budget in public sector. This for the budget to serve as guide in achieving government policy, financial information is generally required by the operators of the system. The more the available the financial information, the accuracy and avoidance of variance in implementation, inclusive of personal cost.

Albert, Mziu and Brahim, [15] conducted a study on General Financial Information System (GFIS).

They related their study to implementation budgets and internal control system. The right use of GFIS will bring better implementation and good internal control. When budget is properly implemented, it curtail over provisions in the budget for various expenditure heads thereby controlling accountants and financial officers in trying to exhaust amount budgeted for that head at all cost.

Oladele and Olaoye [16], studied financial control and public sector budgeting in South Western Nigeria. They concluded that there is significant relationship between budget performance and implementation. Hence leading to financial control and budget performance. This will curtail variance in expenditure against budget. Thus controlling fictitious or uncertain figure the various heads.

Obara, L. C., [17] reviewed the negative budget performance in Nigeria. The study advocated Value for Money Audit in order to achieve positive budget performance. Revealed expenditure head by head will go along way in curtailing budget surplus or deficit, which can affect implementation. It will make both administrators and accountants to sit and be accountable to all actions.

Osibote (2005) believes that budgetary control as the budget or budgets to control activities of the organization. It is a means for planning and controlling Functions in accounting. Budget and budgetary control is also a technique for the establishment of budget, relating the responsibilities of executives to the requirement of a policy, it is a management function, which is essential if control is to be established over the different sections of the business. The question is whether Borno State government utilizes this function of budget to detect or control the level of fraud in the State Civil Service.

According to Chartered Institute of Management Accountants, budgetary control is the establishment of budgets relating to the responsibilities of executives of a policy and the continuous comparison of the actual with the budgeted results, either to secure by individual action the objective of the policy or to provide a basis for its revision.

In light of the above assertions, budget as produce every financial year by government is one of the tools of controlling public expenditure including personnel cost. It is expected therefore

that government shall compare personnel cost (budgeted against actual) of previous year before embarking on current year budget. This subjects the implementation process into scrutiny from the appropriate authority, thus eliminating wastages, errors, misrepresentation and outright fraud by employees and their associates.

The various studies presented above revealed that payroll fraud is prevalent in almost all the state civil service studied. Every researcher examined or investigated by using either primary or secondary data. However, none of the researchers conducted their investigation on budget implementation of personnel cost comparing to the actual and collaborate with a primary data. Thus, there is difference in time, location and methodological difference between this study and others.

3. RESULTS AND DISCUSSION

It is worthwhile to take a critical look at Table 1 which analysed the budget figure of the period under review using Benford's Law. Comparing the Benford and observed probability, in almost all instances, the digits 1-9 are higher than the Benford probability. This indicates that the budgeted figures do not follow the law. The observed chi-square from the Benford indicate that a statement that "there is no significant relationship between the budget figures of personnel cost by Borno State Government" cannot be rejected as in Table 1 either at 95% or 99% confidence level.

In Table 2, budgeted and actual figures for 5 years is presented. Observation of the figures if not for 2017, is on incremental basis. Throughout the period under study the budgeted figures are higher than the actual. The percentage of the variance rose from 10.29% in 2015 to 34.73% against the budgeted figure to the actual.

To collaborate to the figures on the financial statement, questionnaire was administered to accountants and administrators who are supposed to handle or make input in the preparation of budget and subsequent implementation. Their response is presented in Table 3. The following are the questions 1-6 administered: That they have staff personnel record in your Departments, they are updated regularly and Audited on regular basis according to the responses (38 out of 47). The records serve as a guide in the preparation of personnel cost budget in the Departments. Preparation of

staff emoluments such as salary of is not done by them in the departments. It is also accepted by majority (31 out of 47) that the final personnel cost budget is returned for final input before being sent to the chief Executive for presentation.

3.1 Findings of the Study

The study found out that budget is being prepared annually on incremental basis using the previous year's budget figure as basis. It also found out that the budgeted figure is always

higher than the actual, giving rise to favourable variance, and do not usual follow the pattern of Benford Law in which figures are supposed to appear in a numeric data setup in line with its rule. Even though, accountants, auditors and administrators are available in all MDAs, staff emolument such as salary is not prepared departmentally, living them with no knowledge of personnel cost. Since the departments do not prepare their personnel, there is every tendency of over payment or under payment, since it can oly be detected if compared to the personnel record.

Table 1. Analysis of Five Years Personnel Cost Using Benford's Law

First Digit Tests - Comparing Observed to Benford Probabilities

Digit	Benford Probability	Observed Probability	Number of Data Points	192
1	30.10	34.90	ChiSquare Value	15.109
2	17.61	10.42		
3	12.49	13.02	Critical Thresholds for Chi-square Tests (8 degrees of freedom)	
4	9.69	10.94	95%	15.5073
5	7.92	3.13	99%	20.0902
6	6.69	8.33		
7	5.80	5.21		
8	5.12	6.77		
9	4.58	5.21		
Critical Thresholds for Chi-square Tests (8 degrees of freedom)				
95%	15.5073			
99%	20.0902			

Testing goodness of fit to Benford's law

Null hypothesis: data is described by Benford's law

Results

Cannot reject Null Hypothesis at 95% level

Cannot reject Null Hypothesis at 99% level

Source: Field Work Analysis 2021

Table 2. Borno State Personnel Cost

Year	Budget	Actual	Variance	% Variance
2015	15,244,833,300	13,675,466,920	1,569,366,380	10.29441483
2016	29,374,343,405	23,572,157,340	5,802,186,065	19.75256429
2017	41,462,191,739	29,083,546,853	12,378,644,886	29.85525937
2018	32,106,400,000	23,419,124,029	8,687,275,971	27.05777032
2019	33,587,331,375	21,923,077,032	11,664,254,343	34.72813667

Source: Borno State Financial Statements 2015-2019

Table 3. Analysis of Questionnaire Administered on Accountants and Administrators

Question	Response	Frequency	Percent	Cumulative Percent
1	YES	47	100.0	100.0
2	NO	9	19.1	19.1
	YES	38	80.9	100.0
	Total	47	100.0	
3	NO	9	19.1	19.1
	YES	38	80.9	100.0
	Total	47	100.0	
4	YES	47	100.0	100.0
5	NO	41	87.2	87.2
	YES	6	12.8	100.0
	Total	47	100.0	
6	NO	16	34.0	34.0
	YES	31	66.0	100.0
	Total	47	100.0	

Source: Field survey 2021

4. CONCLUSION AND RECOMMENDATION

The budget revealed the figures are not in line with Benford Law, indicating that it is abnormal are prone to fraud. The conclusion therefore is that the budget is prepared centrally and without recourse to those who are in charge of administration and finance at the grass root level. It is recommended from the findings and conclusions that; if incremental budget is to be adopted, it should be based on the actual of the previous year and not the budgeted figure. Since audit of personnel files are being conducted, the budget department of the state government should liaise with the administrators and accountants in the MDAs to ascertain the actual personnel cost than adopting incremental budget more so that there is embargo on employment in the state. Triangulation of preparation of personnel cost budget and expenditure among the accountants/administrators, auditors and central budgeting will prevent fraud. Furthermore, it makes employees responsible to actions of fraud.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Author has declared that no competing interests exist.

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