# EFFICIENCY AND ACCOUNTABILITY OF PUBLIC SECTOR REVENUE AND EXPENDITURE IN NIGERIA (1970-2014)

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**ABSTRACT:** Nigeria is the sixth largest producer of oil and gas in the world, but the average Nigerian on the street is poor and there is poor infrastructure like power supply, roads, hospitals etc. This study examines the efficiency and accountability of public sector revenue and expenditure in Nigeria (1970-2014). Data on total federal government revenue and expenditure, state governments' revenue and expenditure were collected from Statistical bulletin from the Central Bank of Nigeria from 1970-2014. The results were analysed using relevant statistical tools. The findings reveals that the level of accountability is very poor in Nigeria because the attributes of accessibility, comprehensiveness, relevance, quality, reliability and timely disclosure of financial information, social and political information about government activities are completely non available or partially available for the citizens to assess the performance of public officers mostly the political office holders. Conclusively and evidently the study has revealed that there is significant relationship between efficiency of public sector expenditure, recurrent expenditure and capital expenditure in Nigeria from 1970-2014. On the basis of these, the paper recommends among others that for accountability to be successful in the management of public funds in Nigeria there must be a reduction in the level of corruption, improving public sector accounting and auditing standards, legislators as champions of accountability and restructure the public accounts committees and the value of money must be applied in the conduct of government business.

**KEYWORDS:** Accountability, Financial Reporting, Financial Resources, Public Finance, Public Sector Accounting, Management, Nigeria.

#### INTRODUCTION

The Nigerian society is filled with stories of wrong practices such as stories of ghost workers on the pay roll of Ministries, Extra-ministerial Departments and Parastatals, frauds, embezzlements and setting ablaze of offices housing sensitive documents and corruption are found everywhere in the country (Okwoli, 2004). According to Bello (2001), huge amount of Naira is lost through one financial malpractice or the other in Nigeria, which to say the least, drains the nation's meager resources through fraudulent means with far-reaching and attendant consequences on the development or even socio-economic or political programmes of the nation. Billions of Naira is lost in the public sector every year through fraudulent means. This represents only the amount that is ferreted out and made public. Indeed much more substantial or huge sums are lost in undetected frauds or those that are for one reason or the hushed up. Appah and Appiah (2010) argues that cases of fraud is prevalent in the Nigerian public sector that every segment of the public service, could seem to be involved in one way or the other in some of these nasty acts.

The bane of public sector financial mismanagement in Nigeria since the oil boom years a period under which there existed structurally weak control mechanism, which create a variety of loopholes that have tended to facilitate and sustain, corrupt practices. This is coupled with the fact that there is a near total absence of the notion and ethics of accountability in the conduct of public affairs in the country (Bello, 2001). Tanzi (1999) noted that:

good governance is essential part of a framework for economic and financial management which includes: macroeconomic stability; commitment to social and economic equity; and the promotion of efficient institutions through structural reforms such as trade liberalization and domestic deregulation. Poor governance may result from factors such as incompetence, ignorance, lack of institutions, the pursuit of economically inefficient ideologies, or misguided economic models. It is often linked to corruption and rent seeking.

Okoh and Ohwoyibo (2009) opine that accountability reflects the need for government and its agencies to serve the public effectively in accordance with the laws of the land. Appah (2010) point out that with the number and monetary value of public sector activities has increased substantially. This increase in activities has brought with it an increased demand for accountability of public officers who manage these activities of the public. Achua (2009) says "serious consideration is being given to the need to be more accountable for the often vast amounts of investment in resources at the command of governments, which exercise administrative and political authority over the actions and affairs of political units of people. Government spending is a very big business and the public demands to know whether the huge outlays of money are being spent wisely for public interests". Accountability is a fundamental value for any political system. Citizens should have the right to know what actions have been taken in their name, and they should have the means to force corrective actions when government acts in an illegal, immoral, or unjust manner (Peters, 1999). Accountability is also important for government. It provides government with the means of understanding how programs may fail and finding ways that can make programmes perform better. Kaufman (2005) argues that an emphasis on accountability by citizens is one aspect of the growing emphasis on eliminating corruption and promoting transparency in government. However, the issue of accountability in Nigeria is a fundamental problem because of the high level corruption in all levels of government in the country. The Transparency International global Corruption Perception Index in October 2010 ranked Nigeria 134 from its 130 position in 2009 and 121 in 2008. The 2010 CPI, drawn on a scale from 10 (highly clean) to 0 (highly corrupt), showed that Nigeria scored 2.4, and is ranked 134 amongst the 178 countries surveyed. This fearful situation of Nigeria's lack of financial accountability in the public sector provided the need for this paper. Therefore, the objective of this paper is to examine the accountability of public officers in the management of the financial resources of the country and means of achieving efficient, accountable and transparent society like that of Denmark, New Zealand and Singapore that ranked first in the 2010 CPI with scores of 9.3.

## **Research Questions**

The following research questions have been examined in this study:

- (i). What is the efficiency implication of public sector expenditure on recurrent expenditure?
- (ii). What is the efficiency implication of public sector expenditure on capital expenditure?

#### **Research Hypothesis**

This hypothesis has been tested in this study:

Ho: There is significant relationship between the efficiency of public sector expenditure, recurrent expenditure and capital expenditure in Nigeria from 1970-2014.

#### CONCEPTUAL AND THEORETICAL FRAMEWORK

#### Accountability and the efficiency of public sector expenditure in Nigeria

The basis for accountability and the efficiency of public sector expenditure in Nigeria is entrenched in a number of conceptual and institutional (or legal) frameworks (Ijeoma, 2014; Izedonmi & Ibadin, 2013; Owolabi et al., 2013). Conceptual framework is the heart of the efficiency of public sector expenditure; it spells out government accounting principles and conventions, which forms the basis for the preparation of budgets, financial statements and audits (Ijeoma, 2014).

According to Izedonmi and Ibadin (2013), the legal and institutional framework (such as the Constitution of the Federal Republic of Nigeria, 1999, the Finance (Control & Management) Act, 1958, the Fiscal Responsibility Act, 2007, the Audit Ordinance No. 28, 1956 and the International Public Sector Statement of Accounting Standards) formed the background for developing financial regulations, treasury and financial circulars used in measuring the level of accountability in Nigeria. The Constitution contained provisions for managing government funds, external controls for operating the accounting system, and procedures for annual appropriations (Oshisami, 1992; Owolabi et al, 2013). The Finance (Control & Management) Act 1958 regulates the accounting system adopted for preparation of government financial reports (Izedonmi & Ibadin, 2013). In the words of Izedonmi and Ibadin (2013), it is clear that the most important aspect of Finance (Control and Management) Act of 1958 is the fact that it specifically provided for the use cash accounting basis in the preparation of government accounts. The Audit Ordinance Act, 1956 as amended by Audit Act 1988 provided for the audit and accountability for the public funds by the government in Nigeria. The Act sets out the duties of the Auditor-General for the federation and timing for audit and presentation of audited financial statements to the public (Izedonmi & Ibadin, 2013).

A considerable body of literature has developed on accountability in Nigeria, particularly in examining the nature of government accounting and the efficiency of public sector expenditure (Izedonmi & Ibadin, 2013; Ngwu, 1999; Omolehinwa & Naiyeju, 2011; Oshisanmi, 1992; Shehu, 2010). Also, general and specific comments from national regulatory bodies such as Public Accounts Committee (PAC) and international bodies like United Kingdom's Department for International Development, World Bank and Transparency International, suggest that there are major weaknesses in the systems for accounting and the efficiency of public sector expenditure in Nigeria (Aruwa, 2002). According to him, some of the major issues identified by these international bodies include: a perceived gap in the content of government financial report and information need of users; lack of external accountability; poor linkages between government budgeting and financial reports; and the need to reform budgeting processes in view of the recurring large amount budget variances reported. Okpala (2013: 115), in his study on effectiveness of the Public Accounts Committee (PAC) in conducting their oversight functions on government accounts

found out that: "...the PAC has not effectively exercised its statutory oversight function due to late submission of audited reports by the Auditor General of the Federation, availability of weak regulatory framework for reporting and poor committee members' qualifications and experience in conducting their functions".

The increased demand for access to government's financial information from both within and outside the country, global financial crises and enthronement of democracy has put governments under constant pressure to deliver efficiency gains with less resource (Jones & Luder, 2011). Individuals and institutions outside the government (such as taxpayers, citizens, investors, international development partners, etc) have become virtually interested in the financial activities of governments and have subjected their efficiency of public sector expenditure function to the greatest amount of criticism in recent years (Adegoroye, 2008). Adegoroye stated further that various persons, who have written on the subject of the efficiency of public sector expenditure in Nigeria have defined the system adopted as antiquated, fragmented, incomplete, unreliable and lacking timeliness of reporting. Also, various authors and researchers (Adegoroye, 2008; Aruwa, 2002; Ibanichuka and James, 2014; Izedonmi and Ibadin, 2013; Ngwu, 1999; Oshisami 1992) had criticised the mandatory legal requirement by the Finance (Management & Control) Act for the sole use of cash accounting in government the efficiency of public sector expenditure.

#### The Concept of Accountability

Accountability is all about being answerable to those who have invested their trust, faith, and resources to you. Adegite (2010) defined accountability as the obligation to demonstrate that work has been conducted in accordance with agreed rules and standards and the officer reports fairly and accurately on performance results vis-à-vis mandated roles and or/plans. It means doing things transparently in line with due process and the provision of feedback. Johnson (2004) says that public accountability is an essential component for the functioning of our political system, as accountability means that those who are charged with drafting and/or carrying out policy should be obliged to give an explanation of their actions to their electorate. Premchand (1999) observed that:

the capacity to achieve full accountability has been and continues to be inadequate, partly because of the design of accountability itself and partly because of the widening range of objectives and associated expectations attached to accountability. He further argues that if accountability is to be achieved in full, including its constructive aspects, then it must be designed with care. The objective of accountability should go beyond the naming and shaming of officials, or the pursuit of sleaze, to a search for durable improvements in economics management to reduce the incidence of institutional recidivism. The future of accountability consists in covering the macro aspects of economic and financial sustainability, as well as the micro aspects of service delivery. It should envisage a three-tier structure of accountability: that of official (both political and regular civil employees), that of intra governmental relationships and that between government and their respective legislatures.

According to Coker (2010), the various approaches to accountability based on the language of account can be grouped into: (1) **Process Based Accountability:** This approach measures compliance with pre set standard and formally defined outcomes. This includes fiscal and

managerial accountability with reliance on the use of accounting methodologies. (2) Performance Based Accountability: This approach measures performance against broad objectives. This measure may be qualitative and the criteria against which performance is measured less precisely defined. Adegite (2010) also noted that there are three pillars of accountability, which the UNDP tagged ATI (Accountability, Transparency and Integrity). Accountability which is segmented into: (1) Financial Accountability: The obligation of any one handling resources, public office or any other positions of trust, to report on the intended and actual use of the resources or of the designated office. (2) Administrative Accountability: This type of accountability involves a sound system of internal control, which complements and ensures proper checks and balances supplied by constitutional government and an engaged citizenry. These include ethical codes, criminal penalties and administrative reviews. (3) Political Accountability: This type of accountability fundamentally begins with free, fair and transparent elections. Through periodic elections and control structure, elected and appointed officials are held accountable for their actions while holding public office. (4) Social Accountability: This is a demand driven approach that relies on civic engagement and involves ordinary citizens and groups exacting greater accountability for public actions and outcomes. Ojoakor (2009) argues that the factors and forces which militate against accountability in Nigeria include ethnicity and tribalism, corruption, religious dichotomy and military culture.

#### Public management of financial resources in Nigeria

Public financial management is concerned with the planning, organizing, procurement and utilization of government financial resources as well as the formulation of appropriate policies in order to achieve the aspirations of members of that society. Premchand (1999) sees public financial management as the link between the community's aspirations with resources, and the present with future. It lies at the very heart of the operations and fiscal policy of government. The stages of public financial management include:

- 1. Policy formulation: Policy formulation is one of the most important stages in public financial management structure. According to Premchand (1999), "the transformation of the society's aspirations into feasible policies with well-recognized financial implications is at the heart of financial management. Issues not addressed during policy formulation tend to grow in magnitude during implementation and may frequently contribute to major reversals in the pursuit of policies or major slippages that may lead to contrary results". Public financial management should be designed to achieve certain micro and macro-economic policies. It entails a clearly defined structured and articulated system that moves to promote cost-consciousness in the use of resources. The government needs to have an estimate of revenue and expenditure to achieve the policy objective of government.
- 2. Budget formulation: The budget formulation is the step that involves the allocation of resources before the submission to the legislature for review and final approval. According to Appah (2009), in Nigeria the budget formulation involves the articulation of the fiscal, monetary, political, economic, social and welfare objectives of the government by the President; based on these, (i) the department issues policies and guidelines which form the basis of circulars to Ministries/Departments requesting for inputs and their needs for the ensuring fiscal periods; (ii) accounting officers of responsibility units are required to obtain and collate the needs of their units; and (iii) accounting officers of ministries, in this case the Permanent Secretaries, are required

- Published by European Centre for Research Training and Development UK (www.eajournals.org) to collate these proposals which would be defended by unit heads before the supervising minister.
- 3. **Budget structures:** According to Anyanwu (1997), budget structure addresses the question of how the budget is or should be composed. In Nigeria, budgets have revenues and expenditure sides. According to Prenchard (1999), many governments have yet to put in place cash management systems, which would pave way for coordinated domestic management. The practice of limiting outlays to collected revenues has exacerbated this problem. He, further argued that there is a massive underfunding of programs and projects provided for in the budget.
- **4. Payments system:** This involves the operational procedures for receiving monies for the public and for making payments to them. In Nigeria, governments make payments using a variety of procedures. These include book adjustments, issue of cheques, and payment authorities and electronic payment systems.
- 5. Government accounting and the efficiency of public sector expenditure: Government accounting and the efficiency of public sector expenditure is a very important component of the public sector financial management process in Nigeria. As Adams (2001) noted that government accounting entails the recording, communicating, summarizing, analyzing and interpreting financial statement in aggregate and in details. In the same vein, Prenchard (1999) argues that government accounts have the dual purpose of meeting internal management requirements while providing the public with a window on government operations. Government financial reports should be prepared with the objective in mind of providing full disclosure on a timely basis of all material facts relating to government financial position and operations (Achua, 2009). Financial reports on their own do not mean accountability but they are an indispensible part of accountability.
- **6. Audit:** One of the fundamental aspects of public sector financial management in Nigeria is the issue of audit of government financial reports. Audit is the process carried out by suitably qualified Auditors during the accounting records and the financial statements of enterprises are subjected to examination by the independent Auditors with the main purpose of expressing an opinion in accordance with the terms of appointment. The high level of corruption in the public sector of Nigeria is basically as a result of the failure of auditing. As Prenchard (1999) puts it "many audit agencies are legally prevented from reviewing policies. Most of them cannot follow the trail of money, as they do not have the right to look into books of contractors, and autonomous agencies". One fundamental failure of audit is the absence of value for money in the Nigerian public sector.
- 7. Legislative control: The legislature (House of Representative and Senate) in Nigeria is expected to perform this very important task of controlling and regulating the revenue and expenditure estimates in any fiscal year. It is the responsibility of the members of the National Assembly to ensure that the budget estimates are properly scrutinized to ensure accuracy, effectiveness and efficiency of government revenue and expenditure.

#### Achieving accountability in public financial management in nigeria

Legislatures to champion the cause of accountability: The legislators in Nigeria and other developing countries have the constitutional responsibility to ensure that the executive are accountable to the people for the management of public funds. But the revise is the case in Nigeria, where the legislators are part and parcel of the collapse of the system. However, for accountability to be achieved in Nigeria, legislators at all level of government must ensure that appropriate laws and over-sight functions are properly performed by them.

**Re-orientation of Value System:** One fundamental problem in Nigeria is the failure of the value system. This failure has resulted to the high level of corruption and lack of accountability by public officers. According to Adegite (2010), that corrupt tendencies pervade the strata of the Nigerian society so much so that the youths, who are supposed to be the leaders of tomorrow, are neck deep in examination malpractice, 419 and internet fraud. She recommends that for Nigeria to be among the most developed economies in 2020, and then the nation's value system should be strengthened through the reintroduction of civics and ethics into the curricula of our educational system while a national orientation for the rebirth of our value system should be urgently initiated.

**Management accountability framework:** Accountability law is only a part of the accountability process. A proper accountability framework would require that the government should put in place guidelines for preparing and approving work plan, method of monitoring plans, reporting performance, accumulation of portfolio of evidence on performance reporting, system of validation and oversight of performance reports, establishing and resourcing public accountability institutions, training public managers and guidelines for dealing with political institutions by public managers.

**Protection of Whistleblowers:** One fundamental means of achieving optimum accountability in Nigeria is the protection of the whistle blowers. An effective framework of accountability requires that those who blow the whistle should be protected against any reprisal. The government in Nigeria should establish appropriate laws to protect the whistleblowers.

**Creating an environment of accountability**: An effective framework of accountability rests, besides, formal structures, on a proper environment. It requires such things as existence of a proper code of conduct, training in ethics, appearance of equal treatment by senior managers toward all employees, and unforgiving accountability of senior officers. It also means that the oversight bodies should adopt a reasonable attitude toward public managers.

Adoption of International Public Sector Accounting Standards: The success of accountability in the public sector in Nigeria lies on the proper implementation of the International Public Sector Accounting Standards. Public sector organizations in Nigeria use the cash basis of accounting. It is very necessary that Ministries, Departments and Agencies should begin to use the accrual basis of accounting. A complete accrual basis of accounting would make public managers accountable for recording and safeguarding of public assets, managing public cash flows, and disclosing and discharging public liabilities. Adegite (2010) says that to attract foreign direct investments to Nigeria, the the efficiency of public sector expenditure processes must be aligned with international standards.

**Public performance reporting:** Public managers are in a business that affects virtually every aspect of a person's life. People, therefore, have a right to know, how the public managers are

doing their business. The legislators need to take a lead in this regard and enact necessary laws making it obligatory for all public entities to report on their performance. Public reporting on performance of departments or programs should be made mandatory.

**Determination of the cost of doing government business:** One major problem affecting the growth of public expenditure and corruption in Nigeria is the high cost of doing government business. A large number of costs in the form of use of existing assets and facilities are not recorded in the year the assets are used. The government following cash-based accounting does not have a system of charging depreciation to the government assets and allocating them to various programs and projects. Thus the true cost of doing government business remains hidden. A proper accountability framework would require that a detailed cost accounting system be introduced in government.

The establishment of the benchmark of efficiency: A very important problem facing public sector managers in Nigeria is the clear absence of performance benchmark. Public performance reporting requires that benchmarks of efficiency be devised for all ministries, departments and agencies. This should be done in consultation with the MDA's themselves and should remain open for periodic review and revisions.

**Strengthening the Public Accounts Committee:** Public accounts committees play a very significant role in accountability of public officers in Nigeria. Public accounts committees should be strengthened with a system of familiarizing the members with the audit scope, approach and methods through workshops and powers to take action if their recommendations are not implemented.

Change in the structure of Government Accounting and Auditing: Governmental accounting system in Nigeria is grossly deficient. Financial reports are outdated and unreliable at all levels of government. Little attention is paid to financial accountability I the public service. Achua (2009) posit that there is an urgent need to protect the commonwealth from poor performance and fraud, and to protect individuals from lawless, arbitrary and capricious actions by the state's surrogate administrators. Therefore, the is an urgent need to restructure the public sector accounting system taking into consideration the frailties and flaws of governmental accounting in Nigeria. Adegite (2010) also says the rapid development and changes that have taken place in the nation's public sector since 1958. It is urgently necessary a comprehensive revision of the entire audit laws of the country with a view to aligning them with current realities and demands of globalization.

#### Revenue and expenditure in Nigeria

The government of Nigeria has different sources of raising revenue for carrying out the various state functions. The sources of revenue can be classified into twelve (12) namely: customs and exercise, licenses and internal revenue, direct taxes, fees, mining royalties, earnings and sales, armed forces revenue, interest and repayment (general), interest and repayment (state), reimbursements; rent on government property; statutory and non-statutory financial transfers and miscellaneous revenue (Anyanfo, 1996; Anyanwu, 1997; Adams, 2001). However, Section 149 of the 1999 Constitution as amended provides that all revenues collected by the Government of the Federation shall be paid into the Federation Account except for the proceeds of personal income taxes of the Armed forces of the federation, the Nigerian Police Force, External Affairs personnel and residents of the Federal Capital Territory.

Expenditure in Nigeria involves the all the expenses which the public sector incurs for its maintenance, for the benefit of the economy, external bodies and for the country. Public expenditure in Nigeria is usually categorized into recurrent and capital expenditure. According to Anyanfo (1996), a recurrent expenditure is made frequently or regularly. In the context of government financial management, recurrent expenditure has an economic life span of less than one year. A capital expenditure has a life span of more than one year for the purpose of acquiring or improving on a fixed asset.

Table 1: Revenue collected by the federal government (Ministry of Finance), recurrent and capital expenditure for the period 1970 - 2014

Year	Revenue	Recurrent	Capital	Total
		expenditure	Expenditure	Expenditure
	#Million/	# Million/	#Million/	#Million/
	Billion	Billion	Billion	Billion
1970	634.00	716.10	187.80	903.90
1971	1168.80	823.60	173.60	997.20
1972	1405.10	1012.30	451.30	1463.60
1973	1695.30	963.50	565.70	1529.20
1974	4537.40	1517.10	1223.50	2740.50
1975	5514.70	2734.90	3207.70	5942.60
1976	6765.90	3815.40	4014.30	7856.70
1977	8042.40	3819.20	5004.60	8823.80
1978	7371.00	2800.00	5200.00	8000.00
1979	10,912.40	3187.20	4219.50	7406.70
1980	15,233.50	4806.20	10,163.30	14,968.50
1981	13,290.50	4,846.70	8,567.00	11,923.20
1982	11,433.70	5506.00	8,417.20	11,923.20
1983	10,608.30	4750.80	4,885.70	9,636.50
1984	11,253.30	5,827.50	4,100.10	9,927.60
1985	15,050.80	7,576.40	5,464.70	13,041.10
1986	12,595.80	7,696.90	8,526.80	15,223.70
1987	25,380.80	15,646.20	6,372.50	22,018.70
1988	27, 596.70	19,409.40	8,340.10	27,749.50
1989	53,870.40	25,994.20	15,034.10	41,028.30
1990	98,102.40	38,219.60	24,048.60	60,268.20
1991	100,453.80	38,243.50	28,349.90	66,584.40
1992	190,453.20	53,034.10	39,763.30	92,797.40
1993	192,769.40	136,727.10	54,501.80	191,228.90
1994	201,910.80	89,974.90	70,918.30	160,893.20
1995	459,987.30	127,629.80	121,138.30	248,768.10
1996	523,597.00	124,491.30	212,926.30	337.217.60
1997	528,811.10	158,563.50	269,651.70	428,216.20
1998	463,608.80	178,097.80	309,018.60	487,113.40
1999	949,187.70	449,662.40	498,027.60	947,690.00
2000	1,906,159.70	461,600	239,450.90	701,059.40

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2001	2,231,600.00	579,300.00	438,696.50	1,018, 025.5
2002	1,731,837.50	696,800.00	321,378.10	1,018,158.1
2003	2,575,095.90	984,300.00	241,688.00	1,225,965.9
2004	3,920,095.00	1,032,700.00	351,300.00	1,426,200.0
2005	5,547,500.00	1,223,700.00	519,500.00	1,822,100.0
2006	5,965,101.90	1,290,210.90	552,385.60	1,938,002.5
2007	5,715,600.00	1,589,270.00	759,323.00	2,450,896.7
2008	7,866,590.10	2,117,362.00	1,123,458.	3,240,820.0
2009	4,844,590.00	2,127,970.00	1,152,800.0	3,280,770.00
2010	7,303,670.00	3,109,440.00	883,870.00	3,993,310.00
2011	11,116,850.00	3,314,440.00	918,550.00	4,232,990.00
2012	10,654,750.00	3,325,160.00	874,840.00	4,200,000.00
2013	9,759,790.00	3,689,080.00	1,108,390.0	4,797,470.00
2014	10,068,850.00	2,530,340.00	2,681,080.0	5,211,420.00

Source: Central Bank of Nigeria (2014) Statistical Bulletin

The table above shows the federal government revenue, recurrent and capital expenditure for the period 1970-2014.

#### RESEARCH METHODOLOGY

In this study, quasi experimental design involving the use of existing data or secondary data were adopted.

#### **Model Specification**

EPSE = f(RE, CA)

Where:

EPSE = Efficiency of Public Sector Expenditure

RE = Recurrent Expenditure

CA = Capital Expenditure

## **Mathematical Specification**

This study used Efficiency of public sector expenditure (EPSE ) (proxied by total revenue generated by government) as the dependent variable while recurrent expenditure (RE) and capital expenditure (CE) have been used as explanatory variables. The model is therefore specified thus:  $Y = \alpha + RE \beta_{t\,1} + CE \beta_{t\,2} + \epsilon_t$ 

Where:

Y = Efficiency of public sector expenditure

RE  $\beta_{t1}$  = Recurrent Expenditure

CE  $\beta_{t2}$  = Capital Expenditure

 $\alpha$  = The parameter which represents the intercept

 $\beta$ ,  $\beta$  = The regression parameters are to be used in determining the significance of the effect of each of the independent variables  $_{t1}$ ,  $_{t2}$ , on the dependent variable Y,

 $\epsilon$  = Random disturbance term. These include the variables which (although not specified) in this model may also affect efficiency of public sector expenditure on accountability. They include transparency, government policies, political instability, corruption, fraud, tax evasion etc. The implications of efficiency of public sector expenditure on accountability are to be measured in billions Naira.

**Decision rule:** If the regression coefficient is positive and the calculated t-value is greater than the tabulated value, it is an indication that there is positive relationship between the independent and independent variables. The coefficient of determination (R<sup>2</sup>) is to be used to measure the rate at which the independent variable is explained by dependent variables. Finally, if the Durbin Watson test is approximately two (2), it shows the absence of autocorrelation.

#### **Sources of Data Collection**

The research instruments used in collection of data for this study were mainly secondary data from the National Bureau of Statistics' Website and Central and Bank of Nigeria (CBN) Annual Statistical Bulletins.

#### **Method of Data Analysis**

Descriptive and inferential statistics were used to analyze the data for this study. The descriptive statistics are normally used for the analyzing and understanding of any treatment of numerical data, which do not involve generalization, while the inferential statistics are used to make generalization, predictions and/or estimations about a given data, (Baridam, 2007). In this study, a two-stage least square estimation has been adopted, t – test statistical tools and regression were equally used to test the hypotheses formulated in this study.

#### **Results of Data Analysis and Discussions**

The results of the regressions of the key objectives of the study specified in objectives and the research questions. The estimates have been subjected to various statistical tests meant to address the research questions and achieve the research objectives. On the basis of the empirical findings provided by the results, the hypothesis of the study was tested.

#### **Presentation of Regression Results**

The summary of the government expenditure regression result from the Two - Stage Least Squares Analysis is as shown in the model summary in Table 2. The table presents the results of the empirical regression estimates for the specified equation in the model.

**Table 2: Model Summary** 

Adjusted Std. Error Change Statistics									
		R	R	of the	R Square	e F		Sig. F	Durbin-
Model	R	Square	Square	Estimate	Change	Change df1	df2	Change	Watson
1	$0.985^{a}$	0.970	0.965	5.06301	0.970	238.423 2	15	0.000	1.929

$$R^2 = 0.970$$
,  $R = 0.985$  F  $(2,15) = 92.33$ ,  $DW = 1.929$  Adj.  $R^2 = 0.965$ , F. Change = 238.423, Sig Change = 0.000

**Table 3:** Summary of the Results

R	=	0. 985
$\mathbb{R}^2$	=	0.970
Adj. R	=	0. 965
Std Error of estimate	=	5.06301
Durbin – Watson	=	1.929
F Value	=	238.423
DF	=	45-2 = 43 i.e. F-tab = 2.37
Significance change	=	0.000

The coefficient of correlation R and Coefficient of determination R<sup>2</sup> measure the explanatory power of the regression model. From the results, there is a high coefficient of correlation (98.50 %) between the dependent and explanatory variables. The implication is that the variables in the equation are useful for explaining the implications the efficiency of public sector expenditure in government made from 1970-2014. There is also a highly significant coefficient of determination (97 %). The standard error of the estimates also known as residual standard deviation has a value of 5.06301. The F- statistic value is found to be 238.423. The F value is significant at the 5 percent level. The overall fit of the regression model measured by the F- statistic, is statistically significant at this level. The Durbin Watson (DW) statistic of 1.929 indicates that there is no problem of serial correlation in the regression model. This is a case of positive serial correlation. Also, multi-colinearity which is often present in cross-sectional data seems to be nonexistent in the model. In Table 3 the estimation results using the two explanatory variables are presented at alpha equal to 0.05 level of significance.

Table 4 Regression Results of the Relationship between Financial Reporting in Government and Recurrent Expenditure and Capital Expenditure on Accountability in Nigeria from 1970-2014

			Unstandardized Coefficients		Standardized Coefficients		
			Coefficient			t-	
			(B)	Std. Error	Beta	statistic	Prob.(Sig
Y	(Constant-EPSE)		379.182	173.438	-	2.186	0.045
REβ <sub>t1</sub>	$RE\beta_{t1}Recurrent$ Ex $(RE)$	xpenditure	0.895	0.306	0.425	2.930	0.010
$RE\beta_{t2}$	Capital Expenditure (	(CE)	0.853	0.217	0.572	3.939	0.001

Dependent Variable: Efficiency of public sector expenditure

#### **Model Estimation**

$$Y = 379.182 + 0.895 (RE) + 0.853(CA)$$
  
 $t = (2.186) (2.930) (3.939)$ 

Where the variables remain as previously defined.

The above table shows the results of the regression analysis where Efficiency of public sector expenditure (EPSE) was regressed on Recurrent Expenditure (RE) and Capital Expenditure (CA).

$$R^2 = 0.970, \ R = 0.985 \ F (2,15) = 92.33, DW = 1.929 \ Adj. \ R^2 = 0.965,$$
 
$$F. \ Change = 238.423, Sig \ Change = 0.000$$

#### **Analysis of Results for Model 1**

The overall statistical significance of the estimated equation is satisfactory ( $f^* = 238.423$ ), the joint influence of the endogenous variables were equally high ( $R^2 = 0.970$ ) meaning that 97 percent variation in efficiency of public sector expenditure is being jointly explained by changes in recurrent expenditure and capital expenditure in Nigeria. This also reveals that efficiency of public sector expenditure do effectively have implications on accountability in Nigeria in spite of the absence of other the efficiency of public sector expenditure variables because the EPSE has significant effect of 2.930 i.e (t-value) on recurrent expenditure and as well significant effect of 3.939 i.e (t-value) on capital expenditure. The result of the study further reveals the presence of auto correlation.

#### Implications of Efficiency of public sector expenditure on Recurrent Expenditure

From the regression results shown in table 4.4 above, efficiency of public sector expenditure had a t-statistic of 2.186 and a coefficient of 0. This implies that on the average and holding all other variables constant, a unit change in government the efficiency of public sector expenditure would lead to a 0 increase in accountability because of wrong information. The conclusion, therefore, is that the efficiency of public sector expenditure has zero implication on proper accountability in Nigeria. This finding is in line with the Keynesian theory and the findings of Al-Yousif, Ram and Erkin that in some cases efficiency of public sector expenditure has significant implication on accountability with reference recurrent expenditure the has the t - value of 2.930. The nature of causality between efficiency of public sector expenditure and recurrent expenditure was examined by using the pairwise granger causality test. Since the *F*-statistic of 238.423>F<sub>cal</sub>=2.37, we conclude that there is strong relationship between efficiency of public sector expenditure and recurrent expenditure, however, with zero value implication in proper accountability.

## Implications of the Efficiency of public sector expenditure on Capital Expenditure

The results of the study show that in effect, a positive and / or significant relationship exists between the efficiency of public sector expenditure and capital expenditure CE  $\{t\text{-computed }(3.939) \text{ is } > t\text{-value }(2.55) \text{ crit } @ 45; 0.05)$ . The implication is that there is strong relationship between the efficiency of public sector expenditure and capital expenditure, however, with zero value implication in proper accountability

#### **Analysis and Test of Hypothesis**

The study has earlier been formulated as follows:

Ho: There is no significant relationship between the efficiency of public sector expenditure and recurrent expenditure and capital expenditure in Nigeria from 1970-2014.

$$Y = 379.182 + 0.895 (RE) + 0.853(CA)$$
  
 $t = (2.186) (2.930) (3.939)$ 

The estimation / model is statistically significant as the f- statistic value is 92.325 against table value of 2.37.

Based on the facts that have emerged out of the estimations {t-computed (2.930) is > t-value (2.37) from the statistical table} representing recurrent expenditure and {t-computed (3.939) is > t-value (2.37) from the statistical table} representing capital expenditure the study has rejected the null hypothesis and accepted the alternate hypothesis, indicating that "there is significant relationship between efficiency of public sector expenditure, recurrent expenditure and capital expenditure in Nigeria from 1970-2014".

#### **CONCLUSION**

Accountability is a central concept for governance. Accountability requires that those who hold positions of public trust should account for their performance to the public or their duly elected representatives. Accountability, therefore, implies that decision makers are monitored by, and are responsible to, others, each of whom is, in turn, responsible to the people of the country. In respect of public financial management, there are several mechanisms through which accountability is enforced such the auditor general, public account committee, and the ombudsman. These accountability mechanisms must be strengthened to reduce the level of corruption in the country. The nation's annual budget must be an instrument of accountability, a stewardship report of what was done in any given financial year and just a reflection of how money was allocated, unspent and subsequently returned to the coffers of the government or even wasted.

Cash accounting system used by most of the governments for accountability and the efficiency of public sector expenditure have been proven to be inadequate for providing important information to citizens for planning, decision making and analysis (Bellanca & Vandernoot, 2014; Bruno, 2014; Ibanichuka & James, 2014; Jones & Browrey, 2013; Owolabi & Dada, 2014; Seenivasan, 2014). The system which only records the cash coming in and out, fails to report other important information necessary for taking decisions and assessing performance.

Conclusively and evidently the study has revealed that "there is significant relationship between the efficiency of public sector expenditure, recurrent expenditure and capital expenditure in Nigeria from 1970-2014".

#### RECOMMENDATIONS

Based on the findings and the conclusion reached in this study, the following recommendations have been made:

Government: (i) Should ensure that they create enabling environment for the development of professional Accountants and employed them in the civil service. This will be achieved by retaining the existing through motivation and attracting the new with good working conditions. (ii) The problem of ethical and accountability failure in the public sector should be tackled by strengthening the capacity for control institutions through re-orientation programs (iii) A proactive legislature and regulatory framework that should not only exist on paper but must be operational. (iv) The provision of 1999 constitution giving time for submission of financial statement auditing and report, and review by PAC should be strictly adhered to with punishment spelled out for non-compliance (v) The constitution should be amended to provide for the qualification of members of PAC.

**Professional Accounting Bodies:** (i) The professional bodies should redesign their programmes and carry out more enlightenment campaign activities to attract more Nigerians to the profession. (ii) There should be re orientation of members to encourage them to work in the public sector.

**Citizenry:** Another control mechanism is that the citizenry should be motivated by the civil society and organized labour union to be more vibrant in other challenge the actions of the bureaucrats.

**As accountability** is the hallmarks for good governance, if Nigeria is to a member of the twenty most developed nations of the world by the year 2020, political office holders, citizens and all stakeholders in the Nigerian project should embrace integrity, transparency and accountability in the management of public funds.

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# **APPENDICES**

Two Stage Least Square Estimation for Efficiency of public sector expenditure

# **Model Summary**

Equation 1	Multiple R	.985
	R Square	.970
	Adjusted R Square	.965
	Std. Error of the Estimate	506.301

# **Descriptive Statistics**

	Mean	Std. Deviation	N
EPSE	2351.9778	2723.31847	18
RE	1102.1717	1293.07382	18
CE	1155.6894	1824.77057	18

## **Correlations**

	-	EPSE	RE	CE
Pearson Correlation EPSE		1.000	.968	.976
	RE	.968	1.000	.951
	CE	.976	.951	1.000
Sig. (1-tailed)	EPSE		.000	.000
	RE	.000		.000
	CE	.000	.000	
N	EPSE	18	18	18
	RE	18	18	18
	CE	18	18	18

## **ANOVA**

Sum of Squares	df	Mean Square	F	Sig.

Equation 1 Regression	122234773.335	2	61117386.667	238.423	.000
Residual	3845106.061	15	256340.404		
Total	126079879.396	17			

# Coefficients

	Unstandardized Coefficients				
	В	Std. Error	Beta	t	Sig.
Equation 1 (Constant)	379.182	173.438		2.186	.045
RE	.895	.306	.425	2.930	.010
CE	.853	.217	.572	3.939	.001

# Model Summary<sup>b</sup>

				Std. Error		Change	Statist	ics		
			Adjusted		R Square	F			Sig. F	Durbin-
Model	R	R Square	R Square	Estimate	Change	Change	df1	df2	Change	Watson
1	.985ª	.970	.965	5.06301E	.970	238.423	2	15	.000	1.929
				2						

a. Predictors: (Constant), CE, REb. Dependent Variable: EPSE

# **Coefficient Correlations**

			RE	CE
Equation 1	Correlations	RE	1.000	951
		CE	951	1.000
	Covariances	RE	.093	063
		CE	063	.047