PUBLIC BUDGETING AND POVERTY REDUCTION IN NIGERIA

BY

EGBIDE BEN-CALEB
CUGP070187

JANUARY, 2015
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A THESIS IN THE DEPARTMENT OF ACCOUNTING,
SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES
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OTA, OGUN STATE

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY (Ph.D) IN ACCOUNTING

JANUARY, 2015
DECLARATION

I, Ben-Caleb, Egbide hereby declare that this Ph.D thesis titled ‘Public Budgeting and Poverty Reduction in Nigeria” is my original work undertaken in the Department of Accounting, School of Business, College of Development Studies, Covenant University, Ota. To the best of my knowledge, all information sources used in the study have been duly acknowledged. Also, the thesis has not been presented, either whole or in part, for the award of any other degree either in this or any other university.

..................................................  ..................................................
Signature                               Date
BEN-CALEB, Egbide
DEDICATION

This thesis is humbly and wholeheartedly dedicated to the Almighty God, the custodian of all Knowledge and Wisdom and Whose exceeding Grace was sufficient to complete this work.
CERTIFICATION

We the undersigned, certify that we have read and hereby recommend for acceptance by Covenant University a dissertation/thesis titled: “Public Budgeting and Poverty Reduction in Nigeria” in partial fulfilment of the requirements for the award the Degree of Doctor of Philosophy (PhD) in Accounting of Covenant University, Ota, Nigeria.

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Abstract

Public budgeting is reckoned as the most rational, logical, legal, and acceptable basis for the mobilisation and allocation of resources to government strategic areas of national priorities, of which poverty reduction is principal. However, the increasing trend of the population in poverty in Nigeria negates this expectation, contradicts conventional wisdom and suggests the existence of infractions in the budget process and management. Hence, this study was envisioned and preoccupied with the objective of establishing the relationships between the attributes of sound budgeting namely: allocative efficiency, operational efficiency, budget discipline and budget reforms and poverty reduction in Nigeria. To achieve these objectives, explanatory research design was adopted employing both primary and secondary data. The primary data were obtained from the administration of 400 copies of questionnaire to two sampled groups, namely, government agencies and non-governmental organisations. Secondary data were obtained from official government publications sourced from Central Bank of Nigeria (CBN) and the National Bureau of Statistics (NBS). The data were analysed using Partial correlation (PC), Ordinary Least Square (OLS) Regression, Paired sample T-test as well as Mann-Whitney U Test. In addition, the long-term relationship of the predictor and the outcome variables were gauged using the Johansen cointegration technique. The outcome of the analyses reveals that budgetary allocation is negatively and significantly associated with poverty index (Long-run coefficient of LPBAKS -1.499277, T-statistic -3.51487) while budget discipline does not have a strong influence on poverty incidence in Nigeria (long-run coefficient LBDISC - 0.123401, T-statistic -1.71511). Also, the relationship between the incidence of poverty and operational efficiency of the budgetary process was found to be significant (Long-run coefficient of LEDEXP and LTDSERV 0.158931, T-statistic 5.98782 and -0.211144, T-statistic -10.3891 respectively). It was also found that budget-related reforms namely MTEF (POI/MTEF, t = 1.680, sig = 0.168) and FRA (POI/FRA, t = -3.830 sig = 0.62) had not had any significant impact on poverty reduction in Nigeria. The research also found the existence of peculiar budgeting problems in Nigeria, including budget indiscipline/corruption (rank value 4.63/5), fiscal impropriety (rank value 4.35/5), allocative inefficiency (rank value 3.51/5) and poor budget governance (rank value 2.97/5) among others. The study recommended that government should, as a deliberate policy, increase allocation to the economic and social sectors, such as: education, agriculture, health, transport and communication, in view of their direct impact on the poor. The enforcement of budget discipline in all its three dimensions was also recommended to ensure that allocations are not misdirected. It was recommended that budgetary institutions be strengthened through participative budgeting and adherence to the provisions of the Fiscal Responsibility Act (FRA) and enforcing other budget-related reforms to enhance their impact on the budget management and poverty reduction. These and other recommendations made in this study have the potential to transform the federal budget from just an annual ritual to a concrete instrument for economic transformation, as well as a practical tool in the hand of government for winning the war against poverty in Nigeria.
CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The prosperity of any nation is largely determined by the efficiency with which national resources are allocated and utilised. In fact, all countries and governments have to mobilise resources appropriately and sufficiently, allocate and utilise their resources responsively and efficiently to meet the national goals (Djurović-Todorović & Djordjevic, 2009). Budgeting invariably provides the most rational, legal, and acceptable basis for resource mobilisation and allocation to national strategic areas and priorities in order to meet the macroeconomic objectives (Omolehinwa, 2001; Olomola, 2006a). This is why the development of a nation’s budget is considered the government’s single most important instrument of development in any given year (Government Finance Officers Association (GFOA) 1999; National Democratic Institute (NDI), 2003). Besides, the budget document is the mechanism through which government establishes its economic and social priorities, sets the direction for the entire economy, determines who gets what and when, as well as provides funds to implement new initiatives/policies (Bengali, 2004). It is therefore suggestive that without the instrumentality of budgeting, resource mobilisation and allocation could be characterised by political frictions and inadequate socio-economic development. It is not surprising that all nations including Nigeria have embraced budgeting as their main development instrument and have approached the attainment of the nation’s socio-political and economic transformation from the perspective of budgeting, among others (Adubi & Fajingbesi, 2002).

Fundamentally, therefore, the budget process and management should be targeted at addressing the major challenges of government, of which poverty reduction is critical. Poverty reduction remains one of the most difficult developmental challenges facing the world today, as a significant proportion of
the population is considered absolutely or relatively poor (Ogwumike, 2000; Salawu, Ayanwale & Ajobo, 2004; Dada, 2005). Available statistics reveal that out of the estimated 6.9 billion world’s population, about 1.5 billion live on less than US $ 1 per day, with Africa contributing over 250 million of the world’s total poor population (Abiodun & Uffort, 2007; Central Intelligence Agency (CIA), 2011). Consequently, Africa remains the poorest continent in the world, as all African countries, except South Africa, are said to be in poverty (Feridun & Akindele, 2005). Paradoxically, Nigeria, being one of the most resource-endowed nations in the world, is considered to be one of the poorest countries in the world (UNDP, 2005; Dada, 2005; Agu & Evoh, 2011). Statistics also reveal that about 70.2% of Nigerians live on less than $1 a day, while about 90.8% live on less than $2 a day (Agu & Evoh 2011, National Bureau of Statistics, 2011). This is not only paradoxical but also indicates that Nigeria is far from meeting the millennium development goal.

Expectedly, poverty reduction has taken the centre stage in national and global development agenda, as exemplified by Nigeria’s National Economic Empowerment and Development Strategy (NEEDS), the United Nation’s Millennium Development Goals (MDGs) and Vision 20:2020 (Daggash, 2002, Centre for Democracy and Development 2008; National Planning Commission, 2009). While they are relative agreements on the causes of poverty, the solution seems intractable. Although the use of the budget as a tool for economic management and poverty reduction has long been institutionalised, the economic crisis of the 1980s exacerbated the poverty situation and gave poverty reduction the needed attention in the development agenda of the nation (Obadan, 2001; Ogwumike, 2001; Ajakaiye & Adeyeye, 2002; Obi, 2007; Abdulazeez, 2010). This fiscal policy strategy is in tandem with the global best practice which emphasises the effective management of a nation’s budget as a veritable process for economic growth and poverty reduction (Obi, 2007; Etim & Ukoha, 2010).

However, the poverty situation in Nigeria seems to confirm the failure of budgetary strategy and the ineffectiveness of the budget process and
management. A comparison of government budgetary expenditure and the incidence of poverty in Nigeria from 1980-2010 (Figure 1.1), reveals that within the period under consideration, both the budgeted expenditure and number of people who are poor increased. This is contrary to conventional wisdom that increases in government expenditure should (all things being equal) enhance the people welfare and reduces poverty.

Several factors have been attributed to the above mentioned state of affairs. Most of these factors border on poor resource management, poor linkage of policy and budgets as well as budget indiscipline among others (Aruwa, 2006; Akpan & Orok, 2010; Olaoye, 2010). These observations are consistent with the opinions of Foster, Fozzard, and Conway (2002) and the Centre for Social Accountability (CSA) (2008) that poor management of public resources translates directly into poor public service delivery and undermines poverty reduction policies. In summary, it can therefore be inferred from the above that effective and efficient public budgeting is a necessary condition for poverty reduction.

Figure 1.1 Preliminary Comparisons of Budgeted Expenditure and Population in Poverty

Source: Charted by the researcher (2013) from data obtained from National Bureau of Statistics (NBS) (2012)
Effective budgeting or sound budget management in its simplest form connotes well-planned and implemented public spending strategies that promote technical efficiency, allocative efficiency and equity (Lucien, 2002). In other words, it is the budget process that is characterised by fiscal discipline and efficiencies in both operational and allocative dimensions (Olomola, 2006b). Discipline entails adherence to budgetary rules and limits, efficiency demands that budgetary allocations must be coherent with the priorities of government. Therefore, any budget outturn that is devoid of the three policy objectives of discipline, efficiency and effectiveness does not qualify as a sound budget instrument, and may not promote socio-economic development. The lack of the basic ingredients of sound budgeting in most African countries, including Nigeria, has justified the description of their budgetary performances as disappointing and provides the explanation for the paradoxical socio-economic indices of Nigeria with high incidence of poverty in spite of her resource endowment (Lienert & Sarraf, 2001).

It was therefore necessary to examine critically the components of sound budget management and how they relate to and impact on poverty reduction in Nigeria. It is against this background that this study was pursued. Thus, the study is to show how the policy objectives of an effective budgetary instrument relate to and impact on poverty reduction as well as identify the most influential factors affecting budget management with specific focus on Nigeria’s federal annual budgets.

### 1.2 Statement of the Research Problem

There is no doubt that Nigeria is endowed with abundant natural resources, but why these resources have not translated into national prosperity remains an intractable question. What seems to be paradoxical is that the more resources are mobilised and spent, the poorer the people and the nation become. For instance, from the 1980s when the issue of poverty reduction took a prominent place in the Nigerian developmental agenda to 2010 when the latest poverty survey was conducted, the total budgeted expenditure increased from a meagre
N26.3 billion to about N 3.4 trillion while the rate of poverty increased from about 27 percent to about 70 percent in direct sympathy with expenditure (Obi, 2007; Abdulazeez, 2010; Kale, 2012). More so, in 2010, the Global Monitoring Report (GMR) of the United Nations Education, Scientific and Cultural Organization (UNESCO), revealed that about 92 per cent of the Nigerian population survive on less than $2 daily, while about 71 percent survive on less than $1 daily. The report also revealed that Nigeria, with its enormous resources, was 20th among the world's poorest countries (UNESCO, 2010).

This resource-poverty paradox is a clear confirmation of the existence of infractions in the budget process and management since the budget serves as the transmission mechanism. Such infractions would have contributed to engender poor management of resources, hence, the failure of all the government anti-poverty strategies and policies. This is in line with the position of Foster, Fozzard, and Conway (2002) that poor management of public resources translates directly into poor public service delivery and thus undermines poverty reduction policies. The budget-poverty dichotomy has attracted very little attention in literature, as most of the studies in the field of budgeting are centred around the impact of budgeting/government expenditure on economic growth [Darajan, Swaroop and Zou, (1996); Mitchel, (2005); Maku, (2009); Usman, (2010); Olopade and Olopade, (2010) and Aruwa, (2010)]. Few studies that relate budgeting/government expenditure with poverty where either carried out outside Nigeria or were too narrow in scope/methodology (Akpan and Orok, 2009; 2009; Anger, 2010). Consequently, wide gap is created in literature as regards how the specific components of sound budgeting, namely, effectiveness, efficiency, discipline, transparency, accountability and reforms relate to and impact on the poverty reduction goal of government.

Specifically, the government spends so much time and resources in the process of budgetary allocation every fiscal year. This is done partly to align budgetary allocations with budget objectives as well as national priorities. However, the functional relationship between such allocations and poverty reduction has not yet been established empirically, nor has it been sufficiently investigated.
Globally, budget discipline is acknowledged not only as a fundamental tenet of sound public financial management but also as a crucial requirement for enabling government to perform its duties and create a stable economic framework that engenders prosperity (Remi, 2009; Swan, 2011). This presupposes that national prosperity is a function of fiscal or budgetary rigours in any country. It is in this wise that all European Union (EU) countries have agreed to operate within the constraint of stringent fiscal rules (Remi, 2008). In Nigeria, the budgetary process in the last three decades was always distorted by budget indiscipline as manifested in the forms of unsustainable extra budgetary expenditure, unfavourable budget variances and lack of budget integrity all of which translate into weak methods of delivering public good to citizens among others (Aruwa, 2004; Olomola, 2006(a)(b); Abe, 2009; Olaoye, 2010). While it is logically sound to assume or attribute the depth and severity of the poverty incidence in Nigeria to these poor manifestations in budget management, empirical confirmation of these characteristics is still in want.

Again, the reoccurring budget deficits in Nigeria for majority of the years since 1980 indicate operational inefficiency in the budgetary process rather than an economic stabilising strategy adopted in times of depression. This had resulted in a heavy debt burden on the country since the fiscal gap is mainly financed by external debt. The external debt of Nigeria, for instance, rose from US$13.1 million (first loan from the Paris Club) in 1964 to an unsustainable level of US$36 billion in 2004 before the debt relief in 2006 (Debt Management Office (DMO), 2005). Six years after debt relief, Nigeria’s debt profile has begun to rise again, causing worries even to the government as the debt profile now stands at US$44 billion from both domestic and external sources (Ndubuisi, 2012). More worrisome is the fact that budgetary allocation for debt servicing in the 2012 budget of about N600 billion is higher than the allocation to five poverty reducing agencies combined namely: Education: N400.15 billion; Agriculture, N78.98billion; Transport, N54.83billion; Communication, N18,31billion and Land and Housing, N26.49billion (Jonathan, 2011). Although, there is no empirical consensus as regard the impact of external debt
on poverty reduction, theoretically, it is opined that heavy debt burden exacerbates poverty in low income countries and is a significant obstacle to poverty reduction goal (Lumina, 2008). Could this theoretical relationship be true of Nigeria? Or what is the impact of budgetary operational efficiency on poverty in Nigeria?. These questions need answers and further probing.

Furthermore, between 1999 and 2007, the government had introduced a number of reforms and Acts aimed at reducing indiscipline and promoting transparency and accountability in the budgetary process. Among these reforms are the introduction of the Medium Term Expenditure Framework (MTEF) in 2005, the Public Procurement Act (PPA) 2007 and the Fiscal Responsibility Act (FRA) 2007 (Osanyintuyi, 2007; Olomola, 2009; Olaoye, 2010). The impact of these reforms on budget management and poverty reduction in Nigeria is still a moot. This no doubt suggests the need for more studies in this area in order to put the reforms in perspective and assess the need to reform the reforms.

1.3 Research Questions

The following research questions were addressed in consonance with the statement of the research problem:

i. What is the functional relationship between budgetary allocation and poverty reduction in Nigeria?

ii. How is budget discipline related to poverty reduction in Nigeria?

iii. What is the association between budgetary operational efficiency and poverty reduction in Nigeria?

iv. In what way and to what extent has budgetary reforms impacted on poverty reduction in Nigeria?

v. What are the main challenges militating against Nigeria’s budgetary system and how can these challenges be addressed?
1.4 Objectives of the Study

This study was conceptualised to establish the nexus between effective public sector budgeting and poverty reduction in Nigeria, as well as show the extent to which the Federal Government of Nigeria can use the instrument of budgeting to reduce the incidence of poverty in the country.

Specifically, the objectives of this study were to;

i. ascertain the functional relationship between allocative efficiency and poverty reduction in Nigeria.

ii. establish a relationship between budget discipline and poverty reduction in Nigeria

iii. find out the functional relationship between operational efficiency of the budgetary process and poverty reduction in Nigeria.

iv. determine the impact of budgetary reforms on poverty reduction in Nigeria.

v. identify the main problems that have inhibited the Nigeria budgetary process/management from achieving the objective of poverty reduction.

1.5 Research Hypotheses

This study was anchored on four hypotheses stated below in their null form:

1. $H_01$: There is no significant functional relationship between allocative efficiency of the budgetary process and poverty reduction in Nigeria.

2. $H_02$: Budget discipline has no significant effect on poverty reduction in Nigeria.

3. $H_03$: There is no significant relationship between budget operational efficiency and poverty reduction in Nigeria.

4. $H_04$: The introduction of budget-related reforms has no significant impact on poverty reduction in Nigeria.
1.6 Significance of the Study

The significance of effective budgeting in relation to poverty reduction in Nigeria cannot be over-emphasised. This is because the budgetary process and performance of Nigeria have been described as weak, which is said to substantially account for its poverty level (Lienert & Sarraf, 2001; Lucien, 2002). The implication of the above observation is that effective budgeting can be employed to boost the performance of the economy and thereby reduce the incidence of poverty, given that government is the largest employer of labour and accounts for a substantial outlay of the national wealth on goods and services. Besides, there are few studies that had dealt with the interplay between budget provisions and poverty level, thus creating the research gap and opportunity which this study sought to fill.

More specifically, the study makes addition to the existing body of knowledge, by bringing to the fore the empirical association between poverty index and the attributes of an effective budget management in Nigeria. This would form the pivot for further studies.

Also, establishing the relationship between budgeting and poverty level provides a platform for assessing government fiscal policy by the general public. This will also facilitate effective monitoring of budget implementation with a view to ensuring that government deliver the anticipated budgetary objectives as specified in the annual Appropriation Acts.

Policy makers and the governmental agencies will find this study relevant, since it provides insight on the interaction between an effective budgeting and poverty index, the impact of budgetary reforms on poverty reduction as well as the factors inhibiting budgetary process and management in Nigeria. This understanding will help the government to be more result-oriented in fighting poverty, thereby accelerate the achievement of the MDGs and Vision 20:20:20.

Furthermore, the international agencies/institutions will find the outcome of this work beneficial. This is because organisations like the World Bank, IMF and United Nations are attracted to countries with sound budget governance.
Therefore, modelling a link between budgeting and poverty reduction will assist the international agencies in assessing the extent of progress made towards achieving the Millennium Development Goal (MDGs) of eradicating extreme poverty and hunger.

1.7 Scope of the Study

This study attempted to model a nexus between sound public budgeting and poverty level in Nigeria, using both primary and secondary data. The study focused on the federal annual budget and national poverty statistics. The choice of the federal budget data was based on the fact that the federal government superintends the entire country and its data has national coverage.

A time horizon of 31 years (1980 to 2010) was also considered for this study. The choice of this period was predicated on the fact that before the oil crash of the 1980s, the Nigerian government did not view the issue of poverty as a major challenge (Olaniyan, 2000). The economic crisis of the 1980’s, exacerbated by the general mismanagement of economic resources during the oil boom era, caused a drastic rise in the incidence of poverty between 1980 and 1985, thus bringing the issue of poverty reduction into prominence, as evidenced by the adoption of the Structural Adjustment Programme (SAP) in 1986 (Ajakaiye & Adeyeye, 2002; Obi, 2007; Abdulazeez, 2010, Ikwuba, 2011). Besides, since most of the budget-related reforms (MTEF, FRA) took place within this period, it is only safe to have reasonable pre and post-reforms periods in order to assess the impact of the reforms on the variables under consideration.

However, a survey to garner the views of stakeholders (budget preparers and budget beneficiaries) was conducted in 2013. Hence, the study reflected current realities.
1.8 Operational Definitions of Terms

The operational definitions of some terms which were frequently used in this study are given as follows:

Allocative Efficiency: This is the degree to which the allocation of resources is in tandem with citizen’s preference or national priorities or government agenda.

Budget Deficit: This is the excess of budgeted expenditure over budgeted revenue

Budget Discipline: This refers to the degree of adherence to rules and limits in the preparation and implementation of budgets. It covers three main areas namely, adherence to budgetary estimate, adherence to budget calendar and adherence to budget policies.

Budget Input: The allocation of money to particular uses in the budget.

Budget outcomes: The ultimate impact on the society or economy as the result of budget allocation to a particular programme or sector.

Budget output: The public services that are provided by the government through the use of budget inputs.

Budget Practice: a procedure that assists in accomplishing a principle and element of the budget process.

Budget Process: This connotes the series of activities involving budget conceptualisation, budget preparation, approval, implementation, monitoring and evaluation. It is simply the process of producing a budget and implementing the budget to achieve the budgeted objectives.

Budget Surplus: This is the excess of budgeted revenue over budgeted expenditure for a budget year.

Budgetary Control: This relates to the systematic control of an organisation’s operations through the establishment of standards and targets regarding income
and expenditure, and a continuous monitoring and adjustment of performance against them.

**Effective Budgeting:** This refers to the budgetary process that is characterised by discipline, efficiency and effectiveness. In an effective budget, the budget outcomes must have great resemblance to the original plans. In other words, effective budgeting can be assessed through the following criteria

i. Budgetary allocations must be in congruence with national cum citizens’ priorities and hence must be geared towards achieving those priority objectives (budget effectiveness)

ii. Budget estimates must be strictly adhered to or at least only favourable variances are permitted (budget discipline).

iii. The achievement of budgetary objectives should not put unnecessary pressure (or overheat) on the economy. In other words, the economy should not be thrown into debt or unfavourable balance of payment because of the desire to achieve budgetary objectives (budget Efficiency)

**Line-item Budgets:** This is a budget in which the expenditures are expressed in considerable details, but the activities being undertaken are given little attention. It shows the nature of the spending but not the purpose.

**Operational Efficiency:** This is the degree to which the budgetary resources are utilised to meet societal needs. It also refers to the capacity to use budget input to generate budget output and outcomes

**Poverty Reduction:** This connotes the degree of reduction in the poverty level. That is, the practical decreases in the number or percentage of the population living below an acceptable poverty line of say $1, $1.25 or $2 a day.

**Poverty Alleviation:** This refers to all the direct and indirect means and actions for the purpose of improving the poor’s’ access to properties and their capacities of using them.
**Poverty Level**: this represents the percentage of the population who are considered poor. In other words, it is the number of persons living below the poverty line.

**Poverty Line**: a poverty line typically specifies the income (or level of spending) required purchasing a bundle of essential goods (typically food, clothing, shelter, water, electricity, schooling, and reliable healthcare).

**Poverty**: Poverty can be defined as the inability to achieve a certain minimal standard of living. More clearly, it is a condition of insufficient resources or income; in its most extreme form, it is the lack of basic human needs such as health services, education and drinking water, among others. In this study, the relative poverty line established by the National Bureau of statistic was adopted. Consequently, all persons whose per capita expenditure is less than N66.802.20 as at 2010 where considered poor otherwise they are non-poor (Kale, 2012)

**Public Budget**: It is a comprehensive statement of government finances, including spending, revenues, deficit or surplus, and debt which indicate how the government plans to use public resources to meet policy goals.

**Public Debt**: Government debt is the outstanding amount that the government owes to private lenders nationally and internationally at any given point in time. If the debt is owed within a country, it is called a national or domestic debt, but if it is owed to individuals and organisations; outside the country it is called external debts.

**Relative Poverty**: Relative poverty separates the poor from the non-poor in a given society on the basis of their living standards. It is computed as the sum of household expenditure divided by consumer price index (Kale, 2012).
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focused on the exploration of the accumulated work of others relevant to the objectives of this thesis. The rationale is to place this study in a proper context as well as gain appropriate, updated, conceptual and theoretical foundation. To this end, therefore, this chapter is divided into three main sections, namely: the conceptual framework, the empirical framework and the theoretical framework.

2.2 Conceptual Framework

This section focuses on the conceptual connotations and relationships of the main variables of this thesis. Specifically, this section reviews some of the legal underpinning of budgeting in Nigeria namely: the 1999 Constitution, the Central Bank of Nigeria Act (CBNA) 2007 and the Fiscal Responsibility Act (FRA) 2007. Conceptual issues reviewed in this study include: the nature of public budgeting, the budget cycle, the concept of sound budget management as well as the strategies and approaches to public budgeting. Other issues captured in this section are: the concept of poverty and poverty alleviation, causes of poverty, measurement of poverty, the incidence of poverty in Nigeria and the efforts toward poverty reduction in Nigeria. This section is concluded with a demonstration of the conceptual relationship between budget processes, budget management and poverty reduction.
2.2.1 1999 Constitution

The 1999 Constitution is the most important legal underpinning of budgetary management in Nigeria. The Constitution makes provision for the power and rationale for national resources management, the framework for budget planning, enactment, implementation and monitoring, as well as defines the roles and responsibilities of the different agents of government in the budgetary process. The related sections are: sections 16, 80-89 and 162-168.

For instance, section 16 confers the powers of resources management to the state. It recognises the fact that the prosperity of a nation and the welfare of the citizens is the cardinal essence of the existence of the state, and that the resources of the state must be managed prudently for the achievement of government’s economic objectives (Constitution of the Federal Republic of Nigeria, 1999). An excerpt from section 16 is as follows:

Sec 16 – (1) The state shall, within the context of the ideals and objectives for which provisions are made in this Constitution-
(a) harness the resources of the nation and promote national prosperity and an efficient, a dynamic and self-reliant economy;
(b) control the national economy in such manner as to secure the maximum welfare, freedom and happiness of every citizen on the basis of social justice and equality of status and opportunity:
(2) The state shall direct its policy towards ensuring-
(a) The promotion of a planned and balanced economic development;
(b) That the material resources of the nation are harnessed and distributed as best as possible to serve the common good;
(c) that the economic system is not operated in such a manner as to permit the concentration of wealth or the means of production and exchange in the hands of few individuals or of a group; and
(d) That suitable and adequate shelter, suitable and adequate food, reasonable national minimum living wage, old age care and pensions, and unemployment, sick benefits and welfare of the disabled are provided for all citizens (Constitution of the Federal Republic of Nigeria, 1999)

The above constitutional provisions make it clear that the purpose of national resources management is to promote national economic prosperity and for the
common good and welfare of all citizens; the young and the old, the sick and the healthy, the employed and the unemployed, the able and the disabled. It also emphasises even or balanced distribution of wealth among Nigerians (Sec, 16:2: C). This suggests that managing the economy in a manner that permits a wide gap between the rich and the poor is a deviation from the Constitution. The Constitution also recognises and emphasises the importance of efficiency in the management of national resources as the only way to achieve self-reliance and balanced economic development (Sec, 16: 1a)). Therefore, indiscipline, inefficiency and waste in the management of a nation’s resources are aberrations of the Constitution of the Federal Republic of Nigeria. Section 16 of the 1999 Constitution is, in fact, the legal underpinning of the relationship between budgeting and poverty reduction in Nigeria. It should be recognised that the budget is the instrument by which the government can justifiably mobilise and legally expend resources.

Sections 80-89 of the Constitution make provisions for the powers and control over public funds. Specifically, section 80(2) provides for the establishment of the Consolidated Revenue Fund (CRF) of the federation, into which shall be paid all revenues and other moneys raised or received by the federation, except those that were specifically designated to other funds. Sub-sections 2, 3 and 4 make it illegal for any money to be paid out of the CRF without expressed provision being made for it in the Appropriation Act or supplementary Appropriation Act or any other Act of the National Assembly. The implication of the above is that extra-budgetary expenditures are unconstitutional and hence contraventions of the Constitution.

Furthermore, the specific mandate for the preparation of the annual appropriation Act (annual budget), supplementary appropriation Act, and authorisation of expenditure from the CRF are enshrined in sections 81 and 82 of the constitution. However, there are noticeable drawbacks in these sections. For instance, section 81 (1) allows the President to present the budget to the National Assembly at any time of the year prior to the target fiscal year. The phrase “at any time” suggests that no time during the year is too early and no
time is too late constitutionally. The President has the latitude to present the budget from January 1 to December 31. This lack of specific time-frame for the presentation, debate and approval of the budget has been acknowledged as part of the inadequacies of the 1999 Constitution. Also, section 82 allows the President to authorise the withdrawal from the Consolidated Revenue Fund (CRF) for six months or until the budget is approved, whichever is shorter. These provisions permit laxity in the budget process and could possibly account substantially to the delays in the presentations and passages of the annual budgets as well as the general poor implementation of the annual budget in Nigeria (Ajam, 2007).

The Constitution also defines roles and responsibilities in the budget process. For instance, the legislature is expected to influence the budget and to exercise oversight functions on the budget execution. This is to ensure the effectiveness, efficiency and economy of service delivery as well as ensure that public spending is translated into positive impacts on the poor communities. However, this traditional expectation of the Constitution is found to be flouted in practice as multiple institutions have similar and overlapping responsibilities over budget preparation, management and monitoring (Ajam 2007).

Generally, the Constitution has valuable provision that underpins effective budgeting in Nigeria. But the observed limitations, including the lack of budget calendar, have been found to contribute to the inefficiencies associated with budgeting in Nigeria (Olomola, 2009).

2.2.2 The Central Bank Act 2007

The Central Bank of Nigeria (CBN) Act 2007 was primarily enacted to strengthen monetary formulation and implementation as well as ensure their effective transmission and enhance the general supervisory capacity of the Bank (CBN, 2007). However, certain provisions of the Act are relevant to the budget process and thus could suffice as part of the legal underpinning of this thesis.
Section 2(a) of the Act makes it clear that one of the core objectives of the CBN is the maintenance of price stability (CBN Act, 2007). This is an important function, since macroeconomic stability which, itself is a function of price stability is essential for growth and development in any economy. Price stability is the ability of CBN to moderate inflation, attain stable interest and exchange rates as well as create a conducive investment climate for long term growth and development (CBN, 2007). This implies that both monetary and fiscal instrument must be harmonised to achieve the function of price stability. The CBN will adopt necessary measures in collaboration with the fiscal authorities to control the rate of inflation. Among these measures, the CBN is to keep watch on government spending as persistently huge budget deficit tends to lead to volatility in prices which in turn negatively impacts the standard of living.

Section 38 of the Act provides for the financing of a deficit of the Federal Government budget. This is done by granting temporary advances at a rate of interest determined by the Bank. The total amount of the advances, however, is not expected to exceed 5% of the previous year’s actual revenue of the federal government (CBN Act, 2007). The repayment of such advances is expected at the end of the Federal Government financial year for which they are granted. According to the Act, failure on the part of the Federal Government to repay the advances would cause the CBN to be constrained from exercising such power in subsequent years.

### 2.2.3 The Fiscal Responsibility Act 2007

The Fiscal Responsibility Act (FRA) was signed into law by President Musa Yar’Adua in 2007. It is meant to ensure prudent management of national resources, a mandate consistent with section 16 of the 1999 Constitution. It was also to ensure long term macroeconomic stability in line with section 2 of the CBN Act 2007. Besides, the FRA was set up to promote greater accountability and transparency in fiscal operations within the medium term fiscal policy framework (Omolehinwa & Naiyeju, 2011). The responsibility for enforcing
compliance of the provisions of the FRA is saddled on the Fiscal Responsibility Commission established under section 1 of the Act.

Under the Act, the annual budget must be derived from the Medium Term Expenditure Framework (MTEF) and shall be the basis for the preparation of both revenue and expenditure estimates as well as the sectorial and compositional distribution of the estimates (Part III, sect 18 (1) (2)). One important ingredient of the Act is the listing of documents to accompany the annual budget presentation as enshrined in section 19 of the Act.

The FRA also makes other very important provisions, such as budgetary planning of corporations and related agencies which applies to 24 corporations and agencies including NNPC, CBN, BPE, NDIC (Omolehinwa & Naiyeju, 2011). Others are: budget executions and achievement of targets, responsibility of the preparation of monthly cash plan, and disbursement schedule as well as the condition for the restriction of commitment among others. (FRA, 2007; Garba, 2011)

One major weakness of the FRA, 2007 like the 1999 Constitution is the absence of a clear budget calendar. Although it stipulates in section 21 (2) that government corporations and agencies and government-owned companies shall submit an annual budget to the Minister not later than the end of August in each financial year, the specific time-table for budget presentation, debate, approval, implementation and disbursement are not clearly stated.

### 2.2.4 Nature of Public Budget

There are several definitions of a budget, as there are experts in the field as well as the disciplines influencing the subject. Accordingly, most of the definitions are biased by the author’s discipline and, or the author’s sector of focus. Generally, however, a budget can be considered as a document, or a quantitative expression of a plan of action which aids the coordination and implementation of the plan (National Minority AIDS Council, 2009). It is a statement of
intended expenditure and its sources of finance over a definite period (Osanyintuyi, 2007).

Public sector budgeting is a complex, multi-disciplinary field, having been influenced by many disciplines including political science, public administration, economics and accounting (Onuma & Simpson, 2008). Each of these disciplines had impacted on public budgeting both in theory and in practice. The politician, for instance, sees the budget as a political document through which money is appropriated according to value judgements and by means of a political process conducted within a political arena (Hogye, 1998). In public administration, the budget serves as a decision-making instrument by which priorities are set, goals and objectives established, operating programmes compiled and control exercised (Hogye, 1998). Under this thinking, the public sector budget is an important policy document through which the government establishes its economic and social priorities and sets the direction of the economy. In other words, the budget reflects the fundamental values underlying the government's economic policies and objectives and whose execution is expected to realise public objectives (Bengali, 2004).

For the economist, the budget is a matter of allocating resources in terms of opportunity cost, where allocating resources to one consumer takes resources away from another consumer. The role of the economist therefore is to provide decision makers with the best possible information.

The accounting discipline had also influenced budgeting in some remarkable ways. The focus of accounting is the implementation of budgetary decisions in line with relevant regulatory authorities or simply, the accountability value in budgeting (Onuma and Simpson, 2008). Generally, accounting discipline is concerned with the financial implication of budgetary transactions, the recording of receipts and payments leading to the creation of assets and liabilities, ascertaining whether the results of the transactions were those initially intended as well as whether the state resources are used properly and efficiently (Onuma & Simpson, 2008). According to the United Nations (1988), in Onuma and Simpson, (2008), the accounting process helps to hold officials
accountable by probing into questions such as: how much was spent?, by what authority was it spent?, what was the funding source?, what special purpose was served?, and what types of goods or services were acquired? Answers to these questions guarantee accountability and ensure meaningful use of budgetary resources. This is the gamut of accounting responsibility in budgeting and it is invariable the interest area of this thesis.

From the foregoing, it can be seen that budgeting goes beyond mere accumulation of revenue and expenditure projections; it relates to the plans, goals and objectives of the budgeting entity and how these plans are to be achieved, with the ultimate aim of improving the lives of the people (Osanyintuyi, 2007).

2.2.5 The Budget Process

The logical series of activities from budget conception to evaluation is technically called the budget process or simply budgeting. More formally, it is the chain of activities and processes through the gamut of identifying expenditure needs, and mobilising the allocation of resources to meet the needs as well as the monitoring and control of expenditure (Osanyintuyi, 2007). This view of budgeting emphasises the centrality of expenditure and revenue in the construction of a budget, since the needs expressed in a budget can only be realised by the availability of resources (Idahosa, 2002). Whereas the above definition considers the process to consist of discrete stages, Karl-Martin, Gardner, Hagen and Keser (1999) view a budget process as rules for decision making which culminates in a budget, from its formulation, through its legislative approval to its execution. This view that a budget process is made up of rules for decision making could be contested or criticised, since in reality the components of the budget process are not just mere decision making rules, they are tangible stages of activities to be carried out.

For instance, Idahosa (2002) identified budget formulation, budget execution and budget evaluation as the constituent stages of the budgetary process.
Similarly, Lienert and Jung (2004) delineated the stages in the budget process with a bias towards explaining the roles of the executive and the legislature in the annual budgetary process. To that end, they identified five generic steps in the budget process, namely, budget preparation, budget discussion or parliamentary stage, budget implementation, parliamentary control stage and the audit and review stage. Others had viewed the budget process as a series of seven discrete stages, namely, budget conception, budget preparation, budget approval, budget execution, and budget evaluation, with monitoring and control pervading through all the stages of the cycle (Adeleye, 2001; Olomola, 2006). In the view of Aborishade (2008) the main components of a budgetary process include: budget formulation, budget enactment, budget execution and budget audit and assessment. This four-stage budget process was adopted in this study and hence, given detailed discussion.

From the foregoing, they seems to be a lack of consensus as regards the number of stages that make up the budgetary process. The number and delineation of the stages most times depends on the perception and conviction of the author. However, what is also clear is the fact that the stages of the budget process are both discrete and continuous and follows a cyclical pattern; hence it is sometime referred to as the budget cycle. This is because the end of a process (budget audit) signals the beginning of another cycle as well as provides feedback for the first stage (budget formulation), and the cycle continues. The budget cycle, according to Jones and Bartet (2007), is designed to allow for the absorption of new information by the system, response to it and create a platform for the government to be held accountable for its actions. It is also informative to mention that the stages are not stand-alone activities, as there may be activities related to several stages of the cycle happening at the same time, and what happens in one stage can influence decisions made in the others (IBP, 2011). Figure 2.1 represents a typical four-stage budget cycle.
i. **Budget Formulation**: In the public sector, this connotes the drawing up of the budget by the executive arm of government. According to the International Budget Partnership (IBP) (2011), this stage of the annual budget takes place behind closed doors. Accordingly, the legislature and the civil society have little or no access to this stage of the process. However, because the public sector budget is not usually zero-based, major part of the budget may be anticipated by stakeholders outside the executive, thereby creating opportunity for analysis and advocacy at the formulation stage (IBP, 2011).

In Nigeria, the formulation stage of the budget process involves several sub-stages or steps which Adeleye (2002) classified as budget conception and budget preparation. According to him, the budget conception stage involves the review of the previous year’s budget while the preparation stage relates to the actual assembling of data. A well-formulated budget should incorporate government goals, objectives and policies as well as the identification of socio-economic and political constraints expected in the budget year (Adeleye, 2002). However, the Fiscal Responsibility Act (FRA) (2007) requires that the annual budget be derived from the Medium Term Expenditure Framework (MTEF). To
this end, the MTEF forms the basis for the preparation of revenue and expenditure estimates of the budget. It also allows for consistency between the sectorial and compositional distribution of the estimates of the expenditure and the medium term developmental priorities (section 18 FRA).

This stage of the budgetary process in Nigeria has been criticised for its inherent weaknesses. According to Olomola (2009), the weaknesses associated with the budget preparation stage include but are not limited to improper articulation of the motives of consultation, limited coverage of relevant issues, dwindling enthusiasms of participants and inauspicious timing of the pre-budget consultations. He lamented that the pre-budget consultations are mere formalities meant for the information of the audience since, in most cases, the inputs from such consultations are never considered for inclusion into the budget. In the same vein, Onyekpere (2010) observed an inconsistency between the MTEF and Annual Budget contrary to the expectation of the FRA (2007). For instance, in 2010 the benchmark price for crude oil as per MTEF was $50 per barrel at a ten-year moving average, while the annual budget proposal’s benchmark was $57 per barrel (Onyekpere 2010). This inconsistency may yield little or no accruals to the Excess Crude Accounts (ECA) which is the buffer for the government in case of volatility and shocks in the oil market.

ii. Budget Enactment/Approval: This is the stage of debating, alteration and enactment into law by the legislative arm of government (Aborishade, 2008). At this stage the President presents the budget in the form of Appropriation Bill to the joint session of the National Assembly as is the case in Nigeria. The bill will then go through different stages in the two Houses of the National Assembly and must be passed by the two Houses before it can become law (Adeleye, 2002). In the case of disagreement, a joint session of the two Houses will be constituted to resolve the issue, and the bill is enacted by the two chambers for the President’s assent. In the process of deliberations and amendments, the legislature may pass the appropriation in excess of what was
presented or less than what was presented and they can also alter the budget in favour of a department or an area (Adeleye, 2002).

The approval stage of the budget process in Nigeria has been characterised by a lot of delays which, according to Olomola (2009), result from several factors, including, the lack of legal timing for budget presentation, screening and approval. This is of course a constitutional weakness, as the 1999 constitution did not specify the duration for any of the stages in the budgetary process (Aruwa, 2006). Other weaknesses of the approval stage include: undue reliance on the budget process as an instrument for settling political squabbles between the executive and legislature, the tendency to impose extra-budgetary conditions on the budget approval process, poor implementation of previous budgets, inadequate monitoring of previous budgets, low level of priority given to budget debates by legislators and confusion and inexperience on the part of some legislators (Olomola, 2009).

iii. Budget Implementation: the implementation of the budget is an executive function and involves the execution of the budget as approved by the legislature (Aborishade, 2008). This is one of the most crucial stages in the budget process, since it involves the practical disbursement of funds to execute programme and projects in accordance with the budget. According to ODI (2004), budget implementation deals with the transformation of numbers in the budget documents into actual delivery of outputs and successful achievement of government objectives. It encompasses budget monitoring and budget control. Budget monitoring is viewed as an accounting function in the budgetary process and involves the systematic collection of data on specific indicators to provide management and main stakeholders of an on-going developmental intervention, with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds (Jatau, 2008). Budgetary control, on the other hand, connotes a methodical control of an organisation’s operations through the establishment of standards and targets regarding income and expenditure, and a continuous monitoring and adjustment of performance against those standards and targets (Jatau, 2008). It relates to the continuous
comparison of actual with the budgeted to ensure the achievement of budget policy or to provide a basis for adjustment of the policy. The control aspect of budgeting begins immediately after the budget estimates have been agreed and approved, and hovers round all other stages of the process to ensure efficiency and effectiveness of the entire budgetary process. IBP (2011) opined that unless the executive issues public reports regularly on the status of expenditure during the year, civil society organisations have limited ability to monitor the flow of funds. However, CSOs do have an interest in an effective oversight system that promotes adherence to the budget estimates (budget discipline) and reduces mismanagement and corruption. The monitoring aspect could be focused on whether the amounts for specific projects such as a school or a road have been used for the intended purpose (budget effectiveness) or whether the government funds allocated for this purpose, have been used effectively and have reached the intended beneficiaries (Jatau, 2008). On the other hand the main thrust of budgetary control is to measure performance against target in order that swift remedial action may be taken in case of adverse variances and to serve as feedback for budget planning (Quail, 1997).

In Nigeria, the implementation of the budget is reportedly more opaque than transparent and is characterised by a myriad of weaknesses including delays in the release of funds, disregard of budgetary rules, lack of adherence to budgetary estimates, unpredictability and variation in the appropriated funds received, among others (Olomola, 2009). There is also wide deviation between allocated funds and actual spending by MDAs, which according to Olomola (2009) can be attributed to the following factors:

(i) policy changes during the year, (ii) reallocation of expenditure during budget implementation, (iii) inability to implement policies, programs and projects (v) inadequate counterpart funds in some instances (vi) inaccurate or inappropriate determination of budget ceiling often prescribed for the MDAs and (vii) poor targeting (estimation) of the expected revenue to be collected by the agencies responsible for revenue generation and collection (Olomola, 2009:17)
Assessing the implementation of budgets in the first (2000-2003) and second terms (2004-2007) of the Obasanjo’s administration, Olomola (2009) observed that the 2000-2003 period witnessed relatively weak budget performance, as it was basically a carry-over from the military era which was characterised by absence of clear linkage between policy, planning and budget, weak legal framework translating into flagrant budget indiscipline and mismanagement of resources. On the other hand, the 2004-2007 sub-period recorded improvement in budgetary performance, being the period for the introduction and operation of many reforms including NEEDS, DMO ACT 2004 and MTEF introduced in 2005 even though its legal backing came in 2007 (Olomola, 2009).

iv. Budget Audit and Assessment: This is the stage of auditing actual expenditures and assessing them for effectiveness, efficiency and economy (Aborishade, 2008, IBP, 2011). According to IBP (2011), this stage of the budgetary process presents a valuable opportunity for budget groups to obtain information on the effectiveness of particular budget initiatives, as well as to advance accountability by assessing whether the legislative and executive branches respond appropriately to the finding of the audit reports.

In Nigeria, the importance of auditing in the budget process in order to ensure efficiency and effectiveness of the resources used in the economy as a whole has been acknowledged, but the needed infrastructures have not been put in place, the relevant modalities are not well-understood and strictly complied with, audit reports are not published on time (Olomola, 2009). According to IBP (2011), when audit reports for instance are available in a timely manner, they often document a litany of poor expenditure practices, leakages, and procurement irregularities which, when spread widely, can enhance accountability and can also be used to advance reforms.

Other weaknesses of the budget audit in Nigeria are: lack of result-orientation in the discussion of audit results, lack of independence and credibility of the internal auditors, among others (Olomola, 2009).
2.2.6 Sound Budget Management

Budget management of government can be a potent tool for growth and poverty reduction. This is because budget management enforces fiscal discipline, fosters macroeconomic stability, improves the portfolio of programmes by rewarding effective and efficient programmes and builds a culture of performance and accountability within the government bureaucracy (Pascua, 2005). Effective budget management here refers to sound budget management which connotes managing all the components of the budget cycle efficiently, effectively, economically and equitably. It is synonymous with a system of well-planned and implemented public spending strategies that can promote technical and allocative efficiencies, as well as equity through timely and appropriately focused budget implementation and service delivery (Lucien, 2002).

According to Neely, Bourne and Adams (2003), for a budget to be effective, it must first be aligned with the organisation’s strategies and must be value-based. This view presupposes that a budget is a strategic document that is intended, upon implementation to add value to the organisation or the community as the case may be. In a related view, Allen (2004) while crafting budgeting’s future agenda for Senior Budget Officers (SBO) of the OECD countries, defines good budgeting in terms of the following criteria:

i. The budget should establish a stable, sustainable fiscal position for the medium term and beyond.
ii. The budget should facilitate the shift of resources to more effective, higher priority uses.
iii. The budget should encourage spending units to operate efficiently.
iv. The budget should be accessible to citizens and responsive to their interests.
v. The budget (in tandem with other financial management practices) should assure accountability in the expenditure of public money. (Allen, 2004:94)

The above criteria are consistent with the submission of Olomola (2006) who identified discipline, efficiency and effectiveness as major characteristics of sound budgeting, and also as conforming well with the third budgeting principles of the European Union (EU) which, among other things, emphasise
budget discipline as the key ingredient of sound financial management, including the highest standard of financial control and independent audit, and greater focus on the delivery of outcomes in programme design and evaluation (HM Treasury, 2008).

From the foregoing, it can be summarised that sound budgeting is characterised by discipline, efficiency, effectiveness, integrity, accessibility or transparency and accountability as well as stability. These will be discussed in turn.

i. **Budget Discipline**

Budget discipline has to do with the extent to which an institution or nation stays within the budget or, better still, the ability of a government to confine itself to the limit of expenditure in the approved budget or supplementary budget (Aruwa, 2004). The approved budget could fall under any of the three national budget strategies (deficit, surplus or balanced). Whatever it is, discipline is expected in order to maximise the benefits of such a strategy. Conceptually, budget discipline is different from fiscal discipline in the sense that while budget discipline is measured by the ratio of budgetary expenditure to actual expenditure, fiscal discipline is measured by the ratio of budget deficit to the Gross Domestic Product. However, both are attributes of efficient fiscal policy management, hence, share similar implication on the economy (GDP) (Nazarovetes, 2001). To that end, while the two terms will be used interchangeably in this work, the emphasis will, however, be more on budget discipline.

There are three principal areas or dimensions of budget discipline, namely, i) adherence to stated budgeting policies without wavering; ii) adherence to budget calendar in the development, approval, implementation and monitoring; and iii) adherence to approved estimates in the appropriation Act (Oshisami, 1992; Omolehinwa, 2001). These three dimensions, summarised as timing discipline, policy discipline and numerical discipline respectively, are crucial for the effective working of the budget, and a breach in any level constitutes
indiscipline, which has been adjudged to be iniquitous to the economic progress of any nation. The United States Department of Treasury (2000), in a press release, acknowledged the seminal role of fiscal discipline in ensuring the prosperity of an economy. The Treasury Secretary stated thus

*We owe our unprecedented economic success to many factors. But this moment of prosperity would not have been possible without the responsible policy of fiscal discipline that we have pursued over the last seven years, and the broader increase in confidence and market credibility that such discipline has helped to promote.*

In Africa, there seems to be a consensus of observation in much of the literature that budget indiscipline is a fundamental characteristic of budget practices of most countries in Sub-Sahara Africa, including Nigeria (Lienert & Sarraf, 2001; Aruwa, 2004; Obidegwu, 2005; Abe, 2009; Olaoye, 2010). Obidegwu attributed this fiscal behaviour to the degeneration in governance and the increasing lack of cohesion between government policies and the budget. This suggests that fiscal indiscipline will be reduced if policies are integrated into the budget or there is cohesion between budgets and government agenda, which is one of the issues this thesis intends to address. It could also be deduced that the effectiveness of any budgetary system is dependent on the working of the government and the sincerity of her programmes.

In Nigeria, budget indiscipline has been observed and identified to be one of the serious problems of the budgetary process. According to Aruwa (2004), “the principle of strict budget discipline has evaded the implementation of the federal budget”. This observation has been corroborated by a number of scholars. For instance, Orebiyi and Ugochukwu (2005) related budget implementation failures in Nigeria to non-adherence to rules and control mechanisms associated with long years of military rule, as they stated thus:

...in recent times, literature are limited with regards to budgetary control, practices and procedures in Nigeria. This can be partially attributed to the fact that Nigeria was under the military rule for more than 30 years out of the 44 years of her independence. Whenever budgets are formulated, planned, prepared and...
presented, the control mechanisms were never adhered to thus resulting in budget implementation failures (Orebiyi & Ugochukwu, 2005:70)

The above statement acknowledged the fact that budget failures in Nigeria are engendered by indiscipline, which the authors partially attributed to long years of military rule. If this is true, with over ten years of democratic government, these unhealthy budgetary practices would have been abated. The reality, as observed by Orebiyi and Ugochukwu (2005), is that the practice of non-implementation of the budget to the letter has continued in the new democratic Nigeria. It was this worrisome fiscal management that led to the inclusion of budget discipline improvement in the Obasanjo’s public sector reform agenda (Ahmed, 2007).

In a recent study on budget discipline in government, Olaoye (2010) lamented that from whatever angle one looks at the subject of budget discipline, whether it is timing, policy or numerical, Nigeria still has a long way to go. The reasons for this lack of discipline relate to what Lienert and Sarraf (2001) had identified as innovative ways of circumventing expenditure controls and corruption among other reasons.

Timing discipline refers to the extent to which the budget calendar is adhered to during the budget process. Without any constitutional provision of any specific calendar, it is common knowledge that a national budget should be prepared, presented, debated and approved before the commencement of the fiscal year to which it relates. In this respect, Olomola (2009) observed that from 2000 to 2008, except for 2006 and 2007, there was no year the budget was approved earlier than April. For instance, the 2005 budget was approval in June; the 2006 budget was approved on February, 2006. For the 2007 budget, an improvement was recorded as the 2007 budget was finalized by December 2006. By 2008, the system had deteriorated again leading to the approval of the budget in mid-April 2008 (Olomola, 2009). According to him, the observed delay in the passage of the budget and approval resulted from misunderstandings, acrimonies and political intrigues that characterized the budget process among others.
The situation might not be very different with respect to policy discipline and numerical discipline. Aborishade (2008) opined that implementing the budget exactly as agreed in the annual budget may not be possible in reality, as deviation of actual spending from the budget could be actuated by executive abuse, conscious change of policy direction or fundamental economic or other changes beyond the control of the executive. He, however, advised the CSOs and progressive politicians to monitor the budget to ensure strict adherence to the budget as enacted into law by the legislature. It was also submitted that if changes are necessary, it should be agreed in the proper fashion and should be appropriate to guarantee that resources are concentrated on projects that are of key importance to the electorate.

ii. Budget Effectiveness

The word “effectiveness” connotes the extent to which objectives are achieved (Weihrich and Koontz, 2003). With respect to public sector budgeting, it means the extent to which budgetary allocation are in congruence with national cum citizen’s priorities as well as the extent to which those priorities are achieved. Every budget is expected to have ends in view for which their achievement or otherwise will be compared at the end of the fiscal year. The budget is adjudged effective if the preconceived objectives are achieved; otherwise it is ineffective. According to Osanyintuyi (2007), the ultimate goal of budgeting is to improve the lives of the people. To that extent, if a budget does not lead to improvement in the lives of the people, it does not qualify as being effective. To make a budget effective, Olomola (2006a) opined that budget effectiveness will be possible if budgets and strategic plans of government are synchronised. This assertion is predicated on the economic premise that government resources are scarce in relation to the demand for them. Effective budgeting therefore entails judicious allocation of scarce resources in tandem with government priorities, and monitoring of the implementation to ensure the achievement of the budgetary objectives.

In Nigeria, for instance, infrastructural facilities, jobs creation and poverty reduction are central objectives of the annual budget as exemplified in the
themes of the 2005, 2006, 2007 and 2011 budgets (Obasanjo, 2004, 2005, 2006; Jonathan, 2010). But whether those objectives were achieved is an issue for another day. It should also be noted that effective budgeting also entails effective control over expenditures and ensure that methods which have been employed by administrators to circumvent the implied purposes of appropriations are rendered ineffective.

iii. Budget Efficiency
Efficiency in the management of resources is very crucial whether it is individual, organisation or in government. It connotes the extent to which inputs are minimised and outputs maximised or simply, the relationship between inputs and outputs (European Commission, 2008). In the opinion of Farrell (1957), as cited in European Commission (2008), an organisation can increase her output by simply increasing her efficiency without necessarily increasing her inputs. According to this thinking, efficiency is fundamentally the difference between inputs and outputs. Although it had been acknowledged that the measurement of efficiency had remained a conceptual challenge, the input-output ratio is the most basic measure of efficiency. In other words, the greater the output for a given input or the lower the input for a given output the more efficient the activity is said to be (European commission, 2008).

With respect to budgeting generally and public sector budgeting in particular, efficiency is a pivotal attribute of a sound budgeting system as its measures the extent to which the government can achieve her objectives as enshrined in the budget with the least amount of resources (Weihrich & Koontz, 2003; Olomola, 2006). That is, the ability of the government to achieve our developmental
aspirations at minimum cost to the nation. To this ends therefore, a budget is said to be efficient if the achievement of budgetary objectives does not overheat or put unnecessary pressure on the economy. In an efficient budgetary system, the economy should not be thrown into debt or unfavourable balance of payment because of the desire to achieve budgetary objectives.

iv. **Budget Transparency**
Budget Transparency connotes the full disclosure of all relevant fiscal or budget information in a timely and systematic manner (Organisation of Economic Co-operation and Development (OECD), 2002). It is the ease with which ordinary citizens and civil society organisations can access information about how public resources are allocated and used, and whether or not public office holders’ are good stewards of public funds. The main thrust of fiscal transparency is public accountability and credibility of government through better-informed budget debate. Budget transparency has been found to have enormous and positive effects on fiscal performance since it is an important precondition for good governance, macroeconomic fiscal sustainability; it lowers public debt, reduces budget deficit as well as determine the overall fiscal rectitude in government operations (Kopits & Craig, 1998; Alt & Lassen (2003) in ECA, 2005).

v. **Fiscal Transparency**
This entails being open to the public about the government’s past, present and future fiscal activities, and about the structure and functions of government that determine fiscal policies and outcomes (IMF, 2011). In line with the foregoing, a budget is said to be transparent when it is easily available to the public and to participants in the policy-making process and present consolidated information. On the other hand, when a budget incorporates numerous ‘special accounts’ and fails to consolidate all fiscal activities into a single ‘bottom line’ measure it is not transparent (Poterba & Von Hagen, 1999 in ECA, 2005).
Budget Transparency has been adjudged to be a fundamental precondition for accountability and public participation in governance processes. This is because it allows citizens to provide inputs into the budget process and to assess whether a government executes the development plans in accordance with budgetary allocations. Transparency in governance, especially with respect to budgeting, engenders participation and result in better outcomes by reducing manipulations of budget, misappropriation of resources; and fosters sensible, accountable and equitable resource allocation. Lack of transparency in the budget processes creates opportunities for graft and corruption which has been the bane of budget implementation in many developing countries.

In 1998, the IMF in response to the agitations of civil society movement yearnings for improvement in the disclosure of budget information in both the developed and developing countries, developed a set of codes (IMF Code of Good Practices on Fiscal Transparency) which provides a set of guidelines to establish a sound and viable transparency framework for fiscal policy (IMF, 2011). The Code which was updated in 2007, is based on four general principles. First, is the principle of clarity of roles and responsibilities which emphasises the disclosure of clear distinction between government commercial activities, as well as clear legal and institutional framework governing fiscal administration and relations with the private sector. Open budget processes is the second principle and it entails the presentation of budget information in a way that facilitates policy analysis and promotes accountability. The third principle--Public Availability of Information- relates to the provision of complete information to the public on the past, current and projected fiscal activity of government and on major fiscal risks. Assurances of Integrity principle states that fiscal data and practices should meet accepted quality standards and should be subjected to independent scrutiny (IMF Fact Sheet, 2011).

Aside the IMF codes, the Economic Commission for Africa (ECA) (2005) identified the following as some of the prerequisites for successful fiscal transparency practice: political will and commitment, commitment to fight
corruption and mismanagement, strong legal framework and enforcement mechanisms, citizens’ participation, addressing capacity constraints, a learning culture, freedom of expression and access to information. Although the measurement of fiscal transparency is considered difficult, yet the extent to which ordinary citizens are able to express informed views about economic management determines their access to information and the clarity thereof. This by extension is an indication of transparency (ECA, 2005). Onyekpere (2010) reported that in Nigeria, a good part of the budget process and other financial activities of the government are still shrouded in secrecy. This is partly justified by the public service Rules no. 020209, 030415, 030416 and 030417 (Oath of Secrecy), which prohibit the disclosure of official information without the permission of government. The implication is that getting information about government fiscal activity in Nigeria becomes very difficult due to the bureaucracy that these rules stipulate.

vi. Budget Accountability

The concept of budget accountability is anchored on the principle of “no taxation without representation”, which states that taxpayers have a right to participate in and be informed of the government’s decision regarding the use of public resources (ODI, 2004). According to the Auditor-General of Canada (1997) cited in Omolehinwa (2012), “accountability is an obligation to answer for the execution of one’s assigned responsibilities”. In other words, it is the ability to hold public officials responsible for their actions (Olaniyan, 2001). Accountability is a basic tenet of democratic society or, better still, a benchmark of good governance (Lee 2011 in Omolehinwa, 2012). To that end, opaque budgets or inadequate controls in the budgeting process can seriously undermine the democratic process and impede the delivery of value to the society. Also the lack of transparency and adequate accountability measures keep this principle quite far from common practice. It is in the light of this that ODI (2004) advocated the need to hold governments to account for their budgetary promises and actions through a variety of mechanisms such as civil society participation and capacity building, the enhancement of the role of the
parliaments in the budget process, transparency measures that allow for information to be disseminated and shared, and auditing procedures which ensure adequate ex-post control (ODI, 2004)

2.2.7 The Concept of Poverty and Poverty Reduction

The terms poverty and poverty reduction have become major slogans in international developmental agenda, in terms of development goals as well as for new instruments in international finance (Guobao, 2000). While the causes of poverty seem consensual, the definition is not yet universal and the remedies are still in want. The difficulty in defining poverty stems from the different perspectives in which the subject is seen. This is because what may be termed poor by one may not be considered poor by another; besides; there is always the difficulty in deciding where to draw the line between the poor and the non-poor (Obayelu & Uffort, 2007).

According to the United Nations Statistical Division (UNSD, 2005) the earliest definitions of poverty centred on the inability to obtain adequate food and other basic necessities, the contemporary focus continues to be on material deprivations, i.e., the failure to command private resources. The World Bank Report (1990) and Aigbokhan (2000) considered poverty simply as the inability to achieve a certain minimal standard of living. But standard of living in itself is determined by several factors of which income is chief. This presupposes that defining poverty in terms of standard of living is invariably defining it in terms of income. Also, Aluko (1975) in Asinobi (2003) referred to poverty as a lack of command over basic consumption needs. That means the poor have inadequate level of consumption giving rise to insufficient food, clothing and/or shelter, and moreover the lack of certain capacities, such as being able to participate with dignity in society. This view was corroborated by Kamanou (2005) who opined that being poor is generally associated with deprivation of some of life’s basic needs, such as food, shelter, clothing, basic education, primary health care, and security. These are invariably some of the elements that define or determine standard of living. The Copenhagen Declaration of
1995 gave a more comprehensive description of what constitutes poverty as follows;

Poverty has various manifestations, including lack of income and productive resources sufficient to ensure sustainable livelihood; hunger and malnutrition, ill health; limited or lack of access to education and other basic services, increase morbidity and mortality from illness, homelessness and inadequate housing; unsafe environments, social discriminations and exclusion. It is also characterized by a lack of participation in decision and in civil, social and cultural life (Edoh 2003 in Anger 2010:138)

In the above sense, poverty is both an economic and social problem that manifests in various ways. It is also clear from the above that no matter how poverty is defined or the way any one may look at the concept of poverty, it portrays or conveys insufficiency of some essential element of life, reduces the confidence and dignity of man as well as the social and psychological prestige of its victims (Adejo, 2006; Anger, 2010). In this study, however, we decided to remain simple with respect to the definition of poverty since the focus of the study is not to join in the debate of what constitutes poverty, rather, to craft a model of reducing this socio-economic and psychological scourge called poverty using the instrumentality of budgeting. Hence, we have adapted the view of Akinyede, Boyinbode and Alese (2010) that poverty is a condition of insufficient resources or income. The level of insufficiency that differentiates the poor from the non-poor is called the poverty line, and it typically specifies the income (or level of spending) required to purchase a bundle of essential goods (typically food, clothing, shelter, water, electricity, schooling, and reliable healthcare) (UNSD, 2005). By this view, people are living in poverty if their income and resources (material, social and cultural) are inadequate as to preclude them from having a standard of living which is regarded as acceptable by their society generally (Akinyede, et al, 2010).

The manifestation of poverty has led to different classifications of the subject. Some of these ways include absolute poverty, relative poverty, income poverty, non-income poverty, case poverty, insular poverty, among others. These will be explained in turn.
i. **Income Poverty versus Non-Income Poverty**

The dichotomy between income poverty and non-income poverty depends on whether the definition is confined to the material core; the nature of the material and whether they embrace also relational/symbolic factors associated with poverty. Income poverty refers to insufficiency or inadequacy of income required to meet life’s basic necessities. This suggests that poverty can be calibrated by the poverty line, hence, can be eliminated once all households command resources equal to or above the poverty line (UNSD, 2005). Income poverty is akin to absolute poverty described below. Non-income poverty is defined in terms of the deficiency in other elements that give rise to poverty other than income.

ii. **Absolute Poverty versus Relative Poverty**

Poverty has been conceptualised in both the relative and absolute sense based on whether relative or absolute standards are adopted in the determination of the minimum income required to meet basic life’s necessities (Abiodun & Uffort, 2007). Absolute poverty (AP) has been understood as the minimum set of resources a person needs to survive, while Relative Poverty (RP) on the other hand is a measurement of the resources and the living conditions of parts of the population in relation to others. (Schwartzman, 1998). AP is a matter of acute deprivation, hunger, premature death and suffering and because the dividing line between acceptable and unacceptable deprivation is not just biological and can change from society to society, AP is difficult to measure in a consistent way. The UNSD (2005) posited that a poverty line indicates deprivation in an absolute sense, i.e. the value of a set level of resources deemed necessary to maintain a minimal standard of wellbeing. RP is a matter of social equity, and is associated with the development of policies for the reduction of social inequalities and the creation of mechanisms to compensate for the more extreme differences in wealth, living conditions and opportunities (Schwartzman, 1998). The measurement of absolute poverty is typical of less developed countries in Latin America, Africa and Asia, while the measurement of relative poverty is
more typical of highly industrialized and developed countries, such as the United States, Canada and Australia.

iii. Case Poverty versus Insular Poverty

Akinyede, Boyinbode and Alese (2010) citing Dike (2004) and Galbraith (1958) classify poverty into case poverty and insular poverty. Accordingly, case poverty is “the poverty seen in every community, rural and urban”. It manifests in poor families with “junk-filled yards and dirty children playing in the bare dirt”. Other attributes of individuals and families afflicted by case poverty include: mental deficiency, bad health, inability to adapt to the discipline of modern economic life, excessive procreation, alcoholism, insufficient education, or perhaps a combination of several of these handicaps. These conditions hinder their victims from participating in socio-economic and political activities that allow meaningful living. Insular poverty, on the other hand, manifests itself as an island. In this imaginary island, everyone or nearly everyone is poor. As Galbraith (1958) noted, it is difficult to explain insular poverty by individual inadequacy, because the environment in which the people find themselves may have made them poor or may have frustrated them.

iv. Objective Poverty versus Subjective Poverty

Objective indicators of poverty are quantitative in nature. These include such measures as income and consumption, calorie intake, medical data etc. these measures of poverty are defined externally by researchers or policy makers analysing poverty and not by the poor themselves. Subjective poverty, on the other hand, is always dependent on the specific context and is therefore specific and not universal (UNCTAD, 2012).

v. Stock Poverty versus Flow Poverty

Stock poverty arises as a result of inadequate accumulation of stocks of assets which precludes an individual from responding to shocks when they arise. The stocks of assets may be in the form of physical assets, monetary, social, as well as human assets. Flow poverty on the other hand relates to poverty defined in
terms of the flow of goods and services (Income). According to UNCTAD (2012), stock poverty like flow poverty plays a very important role in explaining poverty particular with respect to responding to shocks.

vi. Input Poverty versus Output Poverty
Input poverty captures an individual’s or group’s capabilities and abilities to function (example is the income poverty). Input poverty does not represent a direct measure of well-being. Output poverty represents output indicators of well-being, there are the impacts of inputs indicators. For example, money invested into education (input indicator) may increase the capability to participate in decision-making processes in the community, which would be an output or impact indicator. The link between the input income and the output is however not automatic, it manifests in the medium to long run (UNCTAD, 2012).

vii. Individual Poverty versus Household Poverty
The traditional measurement of poverty had been based on household and not individual. The rationale is that decisions on production, savings and expenditures are often taken at the level of household (UNCTAD, 2012). Household poverty measures the changes in income needed to bring households of different sizes and composition to the same level of welfare. However, in order to adjust for size and composition of households, the concept of “equivalence scale” has been used. The size of a family is important since they are economies of scale in the larger household. Composition is important because different members of a household may require different costs of maintenance. For instance, a child is generally considered to be less expensive than an adult, and women less expensive than men. In the context of composition of household, the question of within-household difference and bargaining within households has stimulated a trend towards disaggregated analysis in order to capture differences in the type causes of deprivation affecting men, women, elderly, children, etc. (UNCTAD, 2012)
viii. **Snapshot Poverty versus Dynamic Poverty**

Snapshot poverty measures the incidence or extent of poverty at a specified point in time and captures the poor who at that time fall below a specified threshold or poverty line, while Dynamic poverty is subjective and takes into account the changes in perceptions of poverty if the poor change. It also captures the lifelong experience or dynamics of poverty over time. Dynamic analysis of poverty had given rise to other concepts such as transient poverty, chronic poverty, actual poverty as well as potential poverty discussed hereunder (UNCTAD, 2012).

ix. **Transient Poverty versus Chronic Poverty**

Transient poverty had been defined as a transitory/temporary form of poverty linked to natural or man-made disasters (Ajakaiye & Adeyeye, 2002). It usually occurs after a shock such as drought or war and is more reversible but can become chronic if it persists (UNCTAD, 2012). Chronic or structural poverty on the other hand connotes a persistent or permanent socio-economic deprivation (Ajakaiye & Adeyeye, 2002). In other words, it is a situation where people experience poverty for extended periods of time or throughout their lives (UNCTAD, 2012). Chronic poverty is a problem in most less-developed countries and usually caused by a number of factors including: limited productive resources, lack of skills for gainful employment, endemic socio-political and cultural factors and gender, among others (Ajakaiye & Adeyeye, 2002)

x. **Actual Poverty versus Potential Poverty**

Poverty researchers also observed the group of people in both developing and developed countries who live close to the poverty threshold and move in and out of poverty as consequence of shocks. This observation gave rise to actual and potential poverty. Actual poverty captures those who are identified as poor at a specific point in time, while potential poverty also includes those who are vulnerable to shocks because they are exposed to many risks and do not have
good coping strategy, even if the current income classifies them as non-poor (UNCTAD, 2012).

### 2.2.8 Causes of Poverty

Although poverty is a global issue, its severity differs from continent to continent and from country to country according to the factors that actuated it. Poverty is not caused by one factor but a combination of several complex factors contribute to it. Among the factors identified as contributory to the global poverty crises are: low or negative economic growth, corruption, unemployment, poor infrastructure, hash economic policy, poor governance or poor leadership, low productivity, a lag in human resources development among others (Ajakaiye & Adeyeye, 2002, Kolawole & Torimiro 2006; Adeyemi 2012). Poverty is also caused by poor leadership, lack of a comprehensive National Poverty Reduction programme, lack of sound agricultural policy, neglect of agricultural sector, lack of basic infrastructure, rapid population growth (Anger, 2010). Other factors which have contributed to a decline in living standards and are structural causes or determinant of poverty include increase in crime and violence, environmental degradation, retrenchment of workers, a fall in the real value of safety nets as well as changes in family structures (Ajakaiye and Adeyeye, 2002). The Thinkers Forum International (2006) also added mismanagement of resources, corruption, trade injustices and greed among others as the most recent causes of global poverty. Some of these factors are examined below;

#### i. Low Economic Growth:

Economic growth implies increase in the quantities or bundles and values of goods and services needed for the wellbeing of the citizens of a nation (Adeyemi, 2012). Therefore a low economic growth means low or insufficient goods and services for the people, which is in fact the simplest definition of poverty. According to Ajakaiye and Adeyeye, (2002), growth that is employment generating and with export based is desirable in order to achieve growth that is poverty reducing with equity especially in
developing countries like Nigeria. Although, it is generally acknowledged that the economic performance of countries in the world has generally been highly volatile since the early 1980s and exacerbated by the global financial crises of 2007-2009 the global poverty rate is reported to have been in decline for about 25 years. But in Africa and in Nigeria in particular, the records showed an ever increasing rate of poverty in absolute terms, attributed mainly to the low or stagnated economic performance (Ajakaiye & Adeyeye, 2002; Collier, 2007).

ii. **Harmful Economic Systems**: The World Hunger Education Service, (2011) identified harmful economic system as the principal cause of poverty and hunger. It was asserted that the principal underlying cause of poverty and hunger is the ordinary operation of the economic and political systems in the world. Essentially control over resources and income is based on military, political and economic power that typically ends up in the hands of a minority who live well, while those at the bottom barely survive, if they do.

iii. **Macroeconomic Shocks and Policy Failure**: These have also been identified as a major cause of poverty in several countries of the world (Ajakaiye & Adeyeye, 2002). It is observed that many economies in the world faced macroeconomic disequilibrium, mostly in the balance of payments due to expansive aggregate demand policies, terms-of-trade shock, and natural disasters, which makes it necessary to undertake major policy reforms. In the process such economies become vulnerable to poverty largely because such shocks and policy failures constrain the poor from using their greatest assets “labour”. Also, monetary policies that adversely affect cost and access to credit by the poor as well as fiscal policy which raises the domestic cost of production in an import dependent production system will affect the poor negatively.

iv. **Corruption**: Corruption has been identified as one of the chief causes of poverty in the world (Thinkers Forum, 2006). In Nigeria, cases abound where
local and national treasuries have been and continue to be looted. In 2006 the former World Bank President, Wolfowitz stated that for the past 40 years, about US$300 billion oil wealth has disappeared from the country and noted that this is contributory to why about 75% of Nigerians now live on less than one dollar per day (Bakre, 2008). The relationship between corruption and poverty is predicated on the fact that looted funds in most cases are stacked in foreign accounts, thereby robbing the country of adequate funds and depriving the local citizens of resources meant for meaningful developmental efforts. The aftermath of this unholy act therefore is increase in the poverty profile of the nation-state. (Kolawole & Torimiro 2006).

v. Political Instability: Political Instability has also been linked to corruption and this can be seen in the illegal takeover of government as a result of military coups, embezzlement, nepotism, looting, bribery and vote buying, all of which are by-products of corruption. Corruption has assumed a national dimension and accounts for the failures of poverty reduction programmes as the greater part of the nation’s wealth has been dispensed to the few privileged at the expense of majority who continue to live in absolute poverty.

vi. Unemployment: Labour is the most abundant resource at the disposal of the poor (Ajakaiye and Adeyeye, 2002). If this resource is not utilised due to unavailability or insufficient jobs then poverty thrives. It is also opined that employment is a key determinant of poverty. Gainful employment is important for individuals to earn income and escape from “income” poverty. While generally in countries of the world the non-poor suffer from transitional or involuntary unemployment, the poor are faced with problems of structural unemployment due to lack of skills or extremely low educational levels, medical problems, geographical isolation and in some countries, discrimination based on race or other attributes (Adeyemi, 2012). Also related to the problem of unemployment is the issue of underemployment, which is said to occur largely in the informal sector and results in low incomes for an important segment of the labour force, particularly in rural areas.
vii. Poor Human Development/Low Level of Education: Human development is identified as key for capability to escape from poverty (Ajakaiye & Adeyeye 2002). Continued investment in human capital with improvements in efficiency is necessary to sustain reduction in poverty. This is because investment in people can boost the living standards of households by expanding opportunities, raising productivity, attracting capital investment, and increasing earning power. In addition, providing additional educational opportunities for adolescents may prevent some youths from becoming involved with gangs, drugs and violence, given the evidence linking the perpetrators of crime with school dropouts.

According to Anyanwu (2012), labour is by far the most important asset of the poor; therefore, increasing the education of the poor will tend to reduce poverty. By implication education increases the stock of human capital, which in turn increases labour productivity and wages. In fact, a cyclical relationship was found between education and poverty, in that a vicious cycle of poverty in that low education leads to poverty and poverty leads to low education (see Bastos et al, 2009). In Nigeria, however, it was found that having no education significantly increased the level of poverty in Nigeria, while on the other hand and more pleasantly, holding a post-secondary certificate in Nigeria significantly reduces poverty.

viii. Poor Health Condition: It is popularly said and truly too, that “health is wealth”. This is because good health is basic to human welfare and a fundamental objective of social and economic development. Poor health on the other hand shackles human capital, reduces returns to learning, impedes entrepreneurial activities and holds back growth and economic development. Diseases cause poverty and vice-versa. In most countries of the world, major diseases causing poverty include malaria, HIV/AIDS and other infections. In Nigeria, for instance, AIDS prevalence is about 5.4% with an infected adult population of 2.6million. This will constrain the availability and participation of
this segment of the population in the labour market to earn income. (Ajakaiye & Adeyeye 2002)

ix. **Debt Burden:** In several developing countries of the world, the debt burden had grown to a crises level and is assuming increasing importance as a cause of poverty. The major factors that escalated the debt situation in those countries include mismanaged lending and spending, corrupt leadership, harsh conditionality associated with the World Bank and IMFs’ Structural Adjustment Policies among others (Elumilade, Asaolu & Ologunde, 2006). In such countries, the amount of resources needed to service the debt (internal and external) is enough to provide some sort of socio-economic development (Anger, 2010). The aftermaths are that the productive sector such as agriculture, manufacturing etc. are constrained, leading to low productivity, low capacity utilization, under employment and low purchasing power, thereby subjecting the masses to abject poverty. In Nigeria, it is reported that at the end of December 2000 external debt stood at US$28.5 (about 80% of GDP). The amount required to service this debt annually is enough to hamper government expenditure for the provision of social and physical infrastructure for the poor (Ajakaiye & Adeyeye, 2002). World Bank (2002) reported that Nigeria’s yearly bill on debt service had been in the range of $3.0 billion to $3.5billion. The actual debt service outlay for 2000 was over $1.9 billion, which translates to about 4 times the Federal Government’s budgetary allocation to education and about 12 times the allocation for health”. Except for the debt relief enjoyed in 2006, Nigeria debt burden was enough to impoverish even the generation yet unborn.

It is also observed that the respite from the debt bondage was ephemeral, as the debt had begun to build rapidly, causing worries even to government as the Minister of Finance Dr Ngozi okonjo-Iweala was reported to have alluded to. For instance, as at April 17, 2012, the Finance Minister declared that Nigeria’s public debt stands at US$44bn for both domestic and external (Ndubuisi, 2012). It is therefore not surprising why the allocation to debt services in the 2012
budget proposal of about N600bn is far more than the allocation to five core ministries (education, agriculture, transport, communication and housing) together- N578.76bn (Jonathan, 2011)

x. **Poor or Inadequate Governance**: The persistence and pervasiveness of poverty in several countries has been linked to the lack of popular participation in governance and decision-making as well as a weak institutional base. This is also referred to as poor leadership (Anger, 2010). The governance problem also relates to deficiencies in the ability of a government in providing its citizens with a conducive socio-economic environment to reside, which inevitably causes a state of poverty in the country. It also leads, among other things, to poor accountability, lack of transparency in resource allocation, weak programmes implementation and monitoring, scuttled development programmes, waste resources and renders poverty reduction initiatives ineffective (Ajakaiye & Adeyeye 2002, Adeyemi, 2012).

### 2.2.9 Measurement of Poverty

A poverty measure is a summary statistic on the economic welfare of the poor in a society. The rationale for undertaking poverty measurement includes, but is not limited to, the assessment of a country’s progress in poverty reduction, the evaluation of specific poverty reduction policies and projects and the determination of a yardstick for measuring the standard of living. Poverty measurement is also undertaken to determine a cut-off poverty line which separates the poor from the non-poor, as well as for comparison of poverty over time, among individuals, group or nations (United Nations, 2001; Ajakaiye & Adeyeye, 2002)

Consequently, there is no single universally accepted measure or indicator of poverty. Rather, a number of measures have been identified which seek to explain the complex multidimensional nature of poverty either in its absolute connotation or relative definition. Ajakaiye and Adeyeye (2002) identified
seven measures of absolute poverty and two measures of relative poverty. These are: the headcount ratios/incidence of poverty, the poverty gap/income shortfall, composite poverty measures, the physical quality of life index (PQLI), the augmented physical quality of life index (APQLI), and the human development index (HDI). For the relative poverty measures, they identified average income and the number or population below the poverty line. Other poverty measures include living standards and poverty lines indices; some of these measures are explained below;

i. Poverty Lines

A poverty line can be defined as the monetary cost to a given person, at a given place and time, of a reference level of welfare (Ajakaiye & Adeyeye, 2002). According to Morduch (2005), a poverty line specifies the income or level of spending required to purchase a bundle of essential goods such as: food, clothing, shelter, water, electricity, schooling and reliable healthcare. This measure of poverty allows for easy identification of the poor and the non-poor. For instance, an individual is considered poor if his income or expenditure is below the poverty line. This delineation brings clarity and focus to policy making and analysis as well as allows experts to count the poor easily, target resources and monitor progress against a clear benchmark. An example of a poverty line is the $1/$2 a day per capita poverty line adopted by the United Nations and World Bank for international comparisons. Accordingly, people living on less than $1 a day are said to be in “extreme poverty” while those living on less than $2 a day are said to be in poverty (Morduch, 2005, Dada, 2005). According to UNCTAD (2012) there are three main methods for constructing the poverty line, namely: the food energy intake method, cost of basic need method and the international poverty line method.

ii. Food Energy Intake Method (FEI)

FEI is based on the relationship between food energy and income/expenditure. It is based on the assumption that food energy intake rises with increasing income but at a slower pace, as exemplified in figure 2.2. The figure
demonstrates the fact that given a level of required food energy intake, the poverty line level of expenditure can be estimated using the function. However, both the value of purchased goods and the imputed value of consumption from housed production must be taken into consideration. The FEI can also be used to demarcate food poverty from the non-food poverty.

Figure 2.2: Food Energy Function
Source: UNCTAD, (2012)

However, FEI has a number of limitations including: its dependence on other factors other than income, such as taste, activity level, availability of publicly provided goods and the prices of food and non-food items. Changes in any of these factors can lead to a change in the curve and hence to false indications about changes in poverty. In view of these drawbacks, it is recommended that FEI should only be considered if data availability prevents the use of other methods (UNCTAD, 2012).

iii. Cost of Basic Needs (CBNs) Method

The poverty line using CBNs is calculated as the cost of a basket of food and non-food goods which satisfies basic needs (UNCTAD, 2012). Although CBNs require more data on prices as well as on consumption, it is preferred to the food energy intake
iv. **International Poverty Line (IPL)**

International poverty lines are used to compare poverty internationally as different from the FEI and CBNs which are a country’s specific methods based on country-prices and preferences. International poverty lines in existence are $1-a day poverty line, the $2-a-day poverty line and, in 2005, a $1.25-a-day poverty line was introduced. The IPL can be adjusted to local currencies using the purchasing Power parity (PPP). The IPL are not suitable for country level or within country studies unless with the PPP exchange rate adjustment (UNCTAD, 2012).

v. **Per Capita Expenditure**

Olaniyan (2000) studying the role of household endowment in determining poverty in Nigeria, adopted *per capita expenditure* as a measure of welfare. According to him, his choice was informed by the superiority of PCE over income as shown in prior studies. Income as a measure of welfare, especially in Sub-Saharan Africa (SSA) is prone to many flaws including but not limited to the fact that income varies from year to year and from season to season depending on farm production and prices. He reported that the use of PCE is to follow standard practice as other studies such as World Bank 1996 and Federal Office of Statistics (FOS) 1999 also uses PCE for measuring poverty.

vi. **Head Count Ratios/Incidence of Poverty**

Under this measure, poverty is expressed in a single index (H), which is the ratio of the number of poor to total population or better still, the percentage of the number of individual or household whose income are not equal to the poverty line to the total number of individuals or households (Osinubi, 2003). It is considered the simplest and best known poverty measure, as it identifies the share of the population whose income is less than the poverty line (Morduch, 2005). If H represents the head count, G the number of the poor and N the total sample population, then the proportion of the population with income below the poverty line is given mathematically as follows:
\[ H = \frac{G}{N} \]  

Ajakaiye and Adeyeye (2002) assert that the criticism of the headcount ratio is focused on only the number of the poor and neglects or is insensitive to the severity of poverty and to changes below the poverty line. In other words, the measure tends to treat all the poor equally, whereas not all the poor are equally poor.

vii. **The Income-Gap Ratio (IGR)/Income short fall (ISF)**

This is the difference between the poverty line and the mean income of the poor, expressed as a ratio of the poverty line (World Bank, 1993; Osinubi, 2003). It measures the amount of money it would take to raise the income of the average poor person up to the poverty line. The deviation of the poor’s incomes from the poverty line defines the depth or severity of their poverty. IGR provides a statement of the level of income transferred to the poor (Ajakaiye & Adeyeye, 2002).

viii. **The Sen Index**

This index is named after Sen (1976). It is a composite index comprising the headcount index, the income gap and the Gini Coefficient.

Sen Poverty index (S) is expressed as:

\[ S = H \left[ I + (1 - I)Gp \right] \]  

Where

\[ S = \text{Sen Poverty Index (S)} \]
\[ H = \frac{q}{n}; \text{ headcount ratio} \]
\[ I = \text{the average income shortfall as a percentage of the poverty line} \]
\[ Gp = \text{Gini coefficient among the poor and ranges between 0 and 1 (} 0 \leq Gp \leq 1 \) \]

S is an increasing function of the headcount index and an increasing function of the income shortfall. Given that the Gp ranges from zero to one, S is also an increasing function of Gp as shown below:
\[ \frac{dS}{dH} > 0, \quad \frac{dS}{dl} > 0, \quad \frac{dS}{dGp} > 0 \]

The index indicates that an efficient way to reduce poverty is to help the least needy first and the neediest last. A major limitation of the Sen Index is that it is more responsive to improvements in the headcount than it is to reduction in the income gap or to improvements in the distribution of income among the poor (Ajakaiye & Adeyeye, 2002).

ix. **The Physical Quality of Life Index (PQLI)**

The PQLI which is attributed to Morris (1979) is focused on social development. ‘PQLI measures how well societies satisfy certain specific life-serving social characteristic or achieved well-being’. It is a composite index comprising three indicators namely; infant mortality, life expectancy and basic literacy. It can be expressed mathematically as

\[ PQLI = f(IM, LE, Lit) \]  

Where IM is infant mortality index; LE = life expectancy index and Lit = literacy index. The indices formed from these three indicators are summed up and the average gives the PQLI (physical quality of life index) (Ajakaiye & Adeyeye, 2002)

\[ PQLI = \frac{(IM + LE + Lit)}{3} \]  

x. **The Human Development Index (HDI)**

HDI was developed in 1990 by the United Nations Development Programme (UNDP). It is said to be the most recent composite index that incorporates income and non-income factors, namely, longevity, knowledge and income (Ajakaiye & Adeyeye, 2002). Longevity is measured by life expectancy at birth (LE), knowledge is measured in terms of Adult literacy (Lit), (the combined...
primary, secondary and tertiary gross enrolment ratio); while income is measured by Per Capita Income (PCI) (i.e. GDP per capita at purchasing power parity).

$$\text{HDI} = f(\text{LE}, \text{Lit}, \text{PCI})$$

These three indicators—life expectancy, literacy and the logarithm of real GDP per capita—are specified at the national level as components of the index. Thinkers Forum International (2006) reported that although HDI has some inherent limitations, it is a standard measure of well-being and has been a useful tool in measuring poverty, since its development. Other strongpoints for HDI include the fact that it is a globally recognised measure of poverty; it is readily available since it is computed and put out annually for each country by UNDP. More so, it is considered an adequate quantitative and qualitative measure of poverty (UNSD, 2005).

2.2.10 Poverty Incidence in Nigeria: 1980–2010

Although poverty is a global phenomenon, it is more pronounced in developing countries especially Sub-Saharan African countries than elsewhere in the world (World Bank as cited in Ikwuba, 2011). In Nigeria, the poverty situation has for a fairly long time been a cause for concern to the government (Nwaobi, 2002). It is pervasive, with no geographical boundary. It is visible in the North, South, East and West as well as the rural and urban areas of the country, though the rural dwellers are the worst victims (Osinubi, 2003; Ikwuba, 2011). According to Osinubi, (2003) poverty is the most pathetic feature of the Nigerian society because majority of her citizens are living in a state of destitution. Table 2.1 clearly shows that the poverty percentage has been on a steady increase from 27.2% in 1980 to 77% in 2009. In 2010 the poor percentage dropped from 77% in 2009 to 69%, and increased again to 71% in 2011. The table also shows that the number and proportion of the population living below the poverty line (the number of people who are poor) in Nigeria have been on a steady rise since 1980. This indicates an off-track performance from the MDG of reducing by
half extreme poverty and hunger by the year 2015. It also indicates that unless something drastic is done; the realisation of MDGs and Vision 20:2020 are not in view.

**Table 2.1: Trend in Poverty Level in Nigeria: 1980-2010**

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Poverty Incidence %</th>
<th>Population in Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>65m</td>
<td>27.2</td>
<td>17.7m</td>
</tr>
<tr>
<td>1985</td>
<td>75m</td>
<td>46.3</td>
<td>34.7m</td>
</tr>
<tr>
<td>1990</td>
<td>97m</td>
<td>43.8</td>
<td>42.5m</td>
</tr>
<tr>
<td>1995</td>
<td>110m</td>
<td>59</td>
<td>64.9m</td>
</tr>
<tr>
<td>2000</td>
<td>125m</td>
<td>70</td>
<td>87.5m</td>
</tr>
<tr>
<td>2005</td>
<td>141m</td>
<td>77</td>
<td>108.6m</td>
</tr>
<tr>
<td>2010</td>
<td>163m</td>
<td>69</td>
<td>112.5m</td>
</tr>
<tr>
<td>2011</td>
<td>168m</td>
<td>71</td>
<td>119.3m</td>
</tr>
</tbody>
</table>


Furthermore, the harmonised Nigeria living standard survey (HNLSS) 2009/2010 revealed the following poverty lines as at 2010 in local currency denomination; Absolute Poverty line of N54, 401.16, Food Poverty line of N39, 759.49, Relative Poverty line of N66, 802.20 and a Dollar-per-day Poverty line of N54, 750 (Kale, 2012). It should be noted that while the absolute poverty line considers both the food expenditure and non-food expenditure using the per capita expenditure approach, the food poverty line is an aspect of absolute poverty measure and considers only food expenditure for the affected households. Under the relative poverty approach, a person is considered poor if his per capita expenditure is less than N66, 802.20, otherwise he is non-poor. A dollar-per-day poverty line considers all individuals whose expenditure per day is less than a dollar per day using the exchange rate of Naira to Dollar in 2009/2010 as poor. The subjective Poverty measure is the perception of the citizenry as to who is poor and who is not. It is neither related to Per Capita Expenditure of household nor the country adult – equivalent scale. From the survey result, the core poor is 46.7 percent, moderate poor is 47.2 percent while the non-poor is 6.1 percent (Kale, 2012). The HNLSS also revealed that Gini Coefficient (Inequality Measurement) was 0.4296 in 2004 and 0.4470 in 2010.
indicating that inequality increased by 4.1 percent nationally. The Gini Coefficient measures the inequality in income or expenditure or better still, it explain the spread of income or expenditure but cannot explains increase or decrease of individuals or persons in poverty (Kale, 2012).

Analyses of the incidence of poverty by zones using the different poverty lines (table 2.2) show that for the food poverty measure, the North West (NW) is the poorest zone in Nigeria while South West (SW) is the least poor. On the basis of Absolut Poverty, the NW with 70% poor population was poorest and SW with poor percentage of 49.8% is least poor. For relative poverty and Dollar-per-day poverty, the NW with poor percentage of 77.7 and 70.4 respectively still remains the poorest while the NW also retained its position as the least poor zone in the country.

Table 2.2: Incidence of Poverty by Zones using different poverty measures (%)

<table>
<thead>
<tr>
<th>Zone</th>
<th>Food Poor</th>
<th>Absolute Poor</th>
<th>Relative Poor</th>
<th>Dollar Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Central</td>
<td>38.6</td>
<td>59.5</td>
<td>67.5</td>
<td>59.7</td>
</tr>
<tr>
<td>North East</td>
<td>51.5</td>
<td>69.0</td>
<td>76.3</td>
<td>69.1</td>
</tr>
<tr>
<td>North West</td>
<td>51.8</td>
<td>70.0</td>
<td>77.7</td>
<td>70.4</td>
</tr>
<tr>
<td>South East</td>
<td>41.0</td>
<td>58.7</td>
<td>67.0</td>
<td>59.2</td>
</tr>
<tr>
<td>South-South</td>
<td>35.5</td>
<td>55.9</td>
<td>63.8</td>
<td>56.1</td>
</tr>
<tr>
<td>South west</td>
<td>25.4</td>
<td>49.8</td>
<td>59.1</td>
<td>50.1</td>
</tr>
</tbody>
</table>

Source: Kale (2012)

HNLSS further analysed and distributed relative poverty into extremely poor, moderately poor and non-poor in Nigeria from 1980-2010 as shown in table 2.3. The table shows that within the period considered, the percentage of moderately poor and extremely poor increased from 26% to 69% while the percentage of the non-poor plummeted from 72.8% to 31%
Table 2.3: Relative Poverty: Non-poor, Moderate poor and the extremely Poor, 1980 - 2010

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-poor</th>
<th>Moderately poor</th>
<th>Extremely poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>72.8</td>
<td>21.0</td>
<td>6.2</td>
</tr>
<tr>
<td>1985</td>
<td>53.7</td>
<td>34.2</td>
<td>12.1</td>
</tr>
<tr>
<td>1992</td>
<td>57.3</td>
<td>28.9</td>
<td>13.9</td>
</tr>
<tr>
<td>1996</td>
<td>34.4</td>
<td>36.3</td>
<td>29.3</td>
</tr>
<tr>
<td>2004</td>
<td>43.3</td>
<td>32.4</td>
<td>22.0</td>
</tr>
<tr>
<td>2010</td>
<td>31.0</td>
<td>30.3</td>
<td>38.7</td>
</tr>
</tbody>
</table>

Source: Kale, (2012)

2.2.11: Poverty in Nigeria Compared with poverty in selected countries in Sub-Sahara Africa

Furthermore, poverty situation in Nigeria is better appreciated when compared with other countries of the world, especially in Sub-Sahara Africa. Figure 2.3 compares the poverty headcount index at $1.25 a day of twenty one countries in Sub-Sahara Africa including Nigeria. From the chart, Nigeria with a poverty index of 64.4 as at 2004 is one of the poorest countries in Africa, only above Burundi (81.3%), Malawi (73.9%), Madagascar (67.8%) and Tanzania (67.%) for all the countries considered. The chart revealed that Gabon (4.8%), South Africa (17.4%), Kenya (19.7%), Cote d’Ivoire (23.8%) and Ghana (30%) are among the countries with the lowest level of poverty in Sub-Sahara Africa.

Although, the data used in the figure 2.3 presented in appendix 5 were obtained from countries surveys conducted at different time (2000-2009), the revelation from it need not be down played. The implication of this statistic among others, is the fact that Nigeria status as the giant of Africa is relegated to just been the most populous country in Africa (Oseni, Oyetunji, Ogunlade and Sanni, 2012)
2.2.12 Efforts towards Poverty Reduction in Nigeria

Although the issue of poverty reduction gained prominence in the 1980s, poverty reduction-related programmes in Nigeria can be traced to about a decade after independence (Obadan, 2001; Igwumike, 2001; Ikwuba, 2011). By the end of 1998, there were not less than sixteen poverty reduction institutions in the country (Obadan, 2001). By poverty reduction we mean the deliberate measures adopted by government to significantly reduce the percentage of the population described as poor. According to Dada (2005), poverty reduction is the lifting of the poor out of poverty either through reliance on direct or indirect measures. Direct measures relate to the redistribution mechanism such as budgetary allocation etc., while the indirect measures relate to reduction of poverty engendered by economic growth.

In Nigeria, the earliest of these efforts at poverty reduction were the introduction of the National Accelerated Food Production Programmes (NAFPP) and the Nigerian Agricultural and Cooperative Bank (NACB) by the
then military Head of State, General Yakubu Gowon in 1972. Both NAFPP and NACB were devoted entirely to providing funding for agriculture. Unfortunately, nothing substantial was achieved from these programmes; they were mere waste of resources (Olisa & Obibuaku, 1992 in Ikwuba, 2011). In 1976 the then military Head of State, General Olusegun Obasanjo, motivated by the widespread hunger in the nation, introduced Operation Feed the Nation (OFN). The aim of OFN was among other things, to enhance agricultural development and productivity by boosting the supply of inputs such as fertilizers, improved seeds, pesticides, credit facilities etc. to farmers. Two institutions were established in addition to NACB to give impetus to Obasanjo’s OFN. These were the Agricultural Development Project (ADP) in each state of the Federation and the River Basin Development Authority (RBDA). Like the previous programmes, OFN was reported to have failed because it was directed by the bureaucratic bourgeoisie for their own selfish interest, and only succeeded in creating awareness of food shortage (Ikwuba, 2011),

In 1980, the OFN was replaced with the Green Revolution (GR) by the then President Shehu Shagari. The main aim of GR was to curtail food importation by increasing food production, boost exports of agricultural products by encouraging big farming as well as ensure rural development (Ikwuba, 2011). In order to facilitate the achievement of the GR, the institutional structures set up by the earlier administrator namely, NACB, ADP and RBDA, were utilised. Again, GR like the ones before it ended in 1983 without any positive impact on the rural poor. Central Bank of Nigeria (CBN) (1998) in Ogwumike, (2001) attributed the failure of both the OFN and GR to three factors namely: lack of political will, policy instability and insufficient involvement of beneficiaries in the programmes. It is also opined that the Green Revolution failed because many senior civil servants, military officers and high profile businessmen high-jacked the process for their own selfish interest. They turned themselves into big time ‘ghost’ farmers, distributors of inputs (such as fertilizers) and acquired large hectares of land for speculative purposes and as a conduit for their corrupt practices (Ikwuba, 2011). In 1984, General Mohamed Buhari introduced the
“Go Back to Land” programme which was short-lived and fizzled away in the same year (Ikwuba, 2011).

In 1986, during the regime of General Ibrahim Babangida, Nigeria adopted the IMF-led Structural Adjustment Programme (SAP), and established the National Directorate of Employment (NDE) as well as the Directorate of Food, Roads and Rural Infrastructures (DFRRI) (Ogwumike, 2001). According to Obadan (2001), SAP brought out more forcefully the need for policies and programmes to alleviate poverty and provide safety nets for the poor. And that although SAP brought some salutary effects on economic growth, it lacked emphasis on development, hence heightened socio-economic problems such as income inequality, unequal access to food, shelter, education, health and other necessities of life. The summary is that SAP aggravated the incidence of poverty among Nigerians and worsened their living conditions (Obadan, 2001; Ogwumike, 2001).

The Directorate of Food, Roads and Rural Infrastructure (DFRRI) was also created by the Babangida administration. DFRRI was a multi-sectoral programme with emphasis on the reduction of rural poverty and enhancement of the quality of rural life. The focus of the government under DFFRI was on rural roads, rural water supply and agriculture. Even though the programme was well designed, it was highly politicised and bedevilled with corruption, hence it could not achieve the desired objectives (Olisa & Obibuaku, 1992 in Ikwuba, 2011). The establishment of the National Directorate of Employment (NDE) serves as the main organ of employment creation during the Babangida administration or the SAP era (Ogwumike, 2001). Accordingly, NDE has two main objectives and four adjunct institutions to facilitate its mandate. The objectives were; to design and implement programmes to combat mass unemployment; and to articulate policies aimed at developing work programmes with labour intensive potentials. The four programmes under NDE were: the Vocational Skill Development Programme (VSD), the Special Public Work Programme (SPW), the Small Scale Enterprises Programme (SSE) and the Agricultural Employment Programme (AE) (Ogwumike, 2001). Available
evidence indicates that NDE has made remarkable progress in fulfilling its mandate. For instance, between 1987 and 1996, 766,783 persons were trained under the National Open Apprenticeship Scheme (NOAS) and 154,910 persons were gainfully employed under the Special Public Works Programme (SPW) (CBN annual report, 1996 in Ogwumike, 2001). Nevertheless, NDE has not been able to cope with the employment needs of the increasing number of applicants in the country because of inadequate funding (Ogwumike, 2001).

During the same regime, the wife of the then President, Mrs Maryam Babangida, established the Better Life for Rural Women (BLP) with the aim of caring for the rural poor. Still, BLRW was reported to have been hi-jacked by the ruling class who turned it into a huge business venture; hence, it did not significantly benefit the rural poor. BLRW was replaced by the Family Support Programme (FSP) and the Family Advancement Programme (FAP) established by the General Sani Abacha administration. These new programmes adopted the objectives of the Better Life Programme and ended up with no significant impact on the poor. Ogwumike (2001) asserted that like BLP, both FSP and FAP were well focused on the rural areas and on the agricultural sector, they were poorly executed; hence they could not benefit many of the poor in several communities. In fact, the programmes were perceived as taking the Nigerian poor for a ride (Maduagwu, 2007)

Another development worth mentioning in the journey of poverty reduction in Nigeria is Vision 2010. This was an initiative of the former head of state, General Sani Abacha in 1995. The document, which was created by a 248-member committee, was conceptualised to hopefully guide the country out of poverty and to bring about significant improvement in our economy. Some of the intentions of Vision 2010 were: better educated population, decreased dependency on oil, reduction in unemployment through job creation, stable democracy and reduction in corruption among others. Among the measures set out to address those concerns where increased private sector participation to enhance competition and a plan to appropriate over one quarter of the government’s budget to education. However, the implementation of the
blueprint of Vision 2010 was said to be difficult due principally to policy inconsistency or lack of continuity in governance as well as policy indiscipline.

At the inception of democracy in 1999, the government embarked on the Poverty Reduction Programme (PAP), which was aimed at job creation. By the end of 2000, many Nigerians were yet to feel the impact of PAP. According to Ogwumike, (2001), PAP failed because of the inability to identify the poor and the nature of their poverty among others. In 2001, the civilian regime of President Olusegun Obasanjo established the National Poverty Eradication Programme (NAPEP). NAPEP adopted a four-prong strategy for achieving its mandate. These were: Youth Empowerment Scheme (YES), Rural Infrastructural Development Scheme (RIDS), Social Welfare Service Scheme (SWSS) and National Resources Development Scheme (NRDS). These programmes, although said to be comprehensive and well-articulated have not been able to make a dent on poverty since then because of inefficient approach and poor implementation (Ikwuba, 2011).

Furthermore, and in order to leverage on her membership of the United Nations and to benefit from the global strategy in the fight against poverty, Nigeria keyed into the Millennium Development Goals (MDGs) and subsequently produced a policy document called the National Economic Empowerment and Development Strategy (NEEDS) in 2003. The Millennium Development Goals (MDGs) comprise a set of eight time-bound goals and associated targets to be achieved by 2015. These goals and targets are to

i. eradicate extreme poverty and hunger, with a target to halve the proportion of people living on less than one US dollar per day between 1990 and 2015
ii. achieve universal primary education with the target to ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling;
iii. promote gender equality and empower women with the target to eliminate gender disparity in primary and secondary education.
iv. reduce child mortality with the target to reduce by two-third, the under-five mortality rate between 1990 and 2015;
v. improve maternal health with the target to reduce by three quarters, the maternal mortality rate between 1990 and 2015;

vi. combat HIV/AIDS, malaria and other disease, with the target to halt and begin to reverse the spread of HIV/AIDS by 2015;

vii. ensure environmental sustainability; with the target to integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources; halve by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation and by 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers; and

viii. develop a global partnership for development, with the target to develop an open rule-based non-disciplinary trading and financial system; address the special needs of the least developed countries (United Nations, 2011)

NEEDS was Nigeria’s home-grown poverty reduction strategy intended to facilitate the achievement of the MDGs. Specifically, NEEDS has the following actionable goals: wealth creation, employment generation, poverty reduction and value re-orientation. NEEDS as a national policy, was intended to meet some of the goals of the MDGs, especially poverty reduction. In assessing the performance of MDGs and NEEDs in Nigeria, especially as it relates to poverty reduction, it was submitted that MDGs have performed below expectation (Anger, 2010). The implication is that the MDGs’ goals and targets for 2015 may be a mirage unless drastic measures are taken.

Other very recent home grown poverty reduction programmes that deserve brief attention in this work include: the Seven-Point Agenda (SPA) of President Yar’Adua and the Transformation Agenda (TRANSA) of President Jonathan.
i. **The Seven Point Agenda (SPA)**

The seven-point agenda (SPA) was not only President Umaru Musa Yar’Adua’s election covenant with the people of Nigeria, but it was also a policy package contemplated for the transformation of the entire economy. SPA, as its name suggests, hinges on seven sectors of the economy as the engine room for the total emancipation of the Nigerian economy. These sectors are: transportation, power and energy, food security, national security, Niger-Delta and energy security, education and human development, land tenure reforms and home ownership and wealth creation (Osanyituyi, 2007). According to the Nigeria High Commission (2009), SPA was properly conceptualized, comprehensively articulated and the implementation strategy adequately laid out to ensure the realisation of Vision 20:2020. Unfortunately, SPA was short-lived in view of the demise of the progenitor.

ii. **The Transformation Agenda (TA)**

In 2011, upon assumption of office, President Goodluck Ebele Jonathan unveiled a new policy package tagged the Transformation Agenda. It represents a five (5)-year development plan, 2011-2015, which invariably coincided with his four-year term in office. The transformation Agenda is being midwifed by a 28-man Economic Management Team with the President and the Vice president as the Chairman and Vice chairman respectively, while the Minister of Finance, Dr Ngozi Okonjo Iweala, is the Coordinator. The Transformation Agenda proposes to reposition the economy by addressing the critical issues of poverty, unemployment, insecurity and most particularly, the diversification of the entire economy from total dependence on oil to a significant reliance on non-oil driven
The Minister of Trade and Investment, Olusegun Aganga, added that the Transformation Agenda revolves around good governance, power, security and development of the non-oil sector such as manufacturing and solid mineral, investment in infrastructure, education and anti-corruption crusade (IT and Telecom Digest, 7 February, 2012, as cited by Gyong, 2012)

The details of the Transformation Agenda were provided by the Honourable Minister and Deputy Chairman of the National Planning Commission. According to him, the Transformation agenda is focused on three (3) key areas, namely: inclusive non-inflationary growth, employment generation and poverty alleviation and value re-orientation. It will also address some other key areas such as good governance, the provision of infrastructure and human capital development.

In short, the Transformation Agenda seeks to hopefully transform Nigeria socio-economic cum political landscape into a catalyst for growth and national development. But whether the policy thrust of the Transformation Agenda will be achieved by 2015 depends entirely on the sincerity of government and the integrity of the operators. According to Gyong (2012), the appointment of the minister of finance, a reputable economist, as the coordinating minister indicates the centrality of the economy as the driving force in the success of the Transformation Agenda. He added that from all intents and purposes, the Transformation Agenda is largely in pursuance of collective national goals and aspirations towards driving Nigeria towards the speedy fulfilment of Vision 20:2020.
In summary, the anti-poverty policies had been too numerous and inconsistent, and this in part can explain the disappointing outcomes in the past three decades with respect to poverty incidence. Although, Obadan (2001) observed that some of the poverty-reducing efforts of government yielded some positive results, especially in the areas of agriculture, primary health care, education enrolment, mass transit programme and financial sector services through the People’s Bank of Nigeria and the Community Banks.

Generally, however, the poverty-reducing efforts of government notwithstanding, the poverty situation in Nigeria has deteriorated to a crisis level where seven out of every ten Nigerians are poor and majority of the people cannot find food to eat (NEEDS, 2004; Ikwuba, 2011). A recent report from the National Bureau of Statistics (NBS) shows that 112.519 million Nigerians or 69% live in relative poverty while 99.284 million or 60.9% live in absolute poverty (Onuba, 2012). These unimpressive statistics to a great extent indicate that those strategies were ineffective. A number of factors have been attributed to the failures of the past poverty-related programmes and efforts of government. These include: severe budget management problems, lack of accountability and transparency and lack of targeting mechanisms for the poor. Others are political and policy instability, poor coordination, lack of consultation and participation of the beneficiaries in the formulation and implementation of the programmes (Obadan, 2001). This view was also shared by Ikwuba (2011), who emphatically asserted that the failure of the past poverty-reducing efforts was because they were all initiated by government and then passed down to the people (top-down approach) without due consultation,
participation or involvement by the poor in the programme initiative, execution, coordination and implementation. She therefore recommended a bottom-up approach to poverty reduction in Nigeria as a way forward.

2.2.13 Relationship between Public Budgeting and Poverty Reduction

The conceptual nexus between public budgeting and poverty reduction can be gleaned from the pivotal role of government budget in an economy. First, and as Hyde (1992) noted, a budget is the government’s most important document that includes four interconnected dimensions namely, as a political instrument, administrative instrument, an economic instrument and an accounting instrument (as cited in Nguemegne, 2007). For instance, as a political instrument, it directs the allocation of public resources among the social and economic need of the government for the purpose of fulfilling national and political promises. Also, Denhardt (1995, as cited in Nguemegne, 2007) asserted that the budget is not only a primary expression of government’s priorities; it is also an instrument of fiscal policy. As a principal fiscal policy instrument, it is used to encourage high employment, growth, stability and prosperity in an economy. As an administrative instrument, the budget directs the affairs and operations of government, while from the accounting point, the budget serves as an instrument that ensures accountability among others.

It is clear from the foregoing that, from whatever field budgeting is viewed, it aids the achievement of government’s operational goals, and poverty reduction remains a common goal of any government to its citizens, especially in developing countries where the incidence of poverty is escalating. Again, talking about government’s priorities, it is almost unequivocal that the issue of poverty reduction ranks top in many national, regional and global agenda. For example the Millennium Development Goals (MDGs) provide one example of global organisation with poverty reduction as it top priority agenda, while
NEEDS, Seven-Point Agenda as well as Transformation Agenda are examples of Nigerian National Development Plan with poverty reduction among the top priority programmes (Osanyintuyi, 2007).

However, a budget that will deliver economic value to the nation and reduce poverty must not only be effectively prepared, it must also be efficiently implemented. It is in the light of this that Nguemegne, (2007) asserted:

“A budgeting process that respects the principle of effectiveness and efficiency, even though it would not achieve economic development, often assimilated to physical development, would at least improve the quality of life of the citizens and communities, which is the ultimate goal of every nation” (Nguemegne, 2007)

Figure 2.4 provides a pictorial relationship between public budgeting and poverty reduction. The figure showed a two-stage link from budget process to budget management and then to poverty reduction.

The budget process as explained earlier refers to the series of tangible stages of activities to be carried out from inception to completion of the budget’s cycle. Although the number of stages in the process could vary depending on the perception of the author, a four-stage process was adopted in this model, namely, formulation, enactment, implementation and audit.
Budget management on the other hand, refers to the ingredients that need to be in place and operational for the budget to deliver the expected outcome. These ingredients include: discipline, efficiency, effectiveness, transparency. It should be noted however, that while the stages in the process occur one at a time, all the sound budget management ingredients should be operational at each stage of the process. For instance, at the formulation stage, there must be discipline, efficiency, effectiveness as well as transparency, and the same should apply to budget enactment, budget execution as well as budget evaluation/audit. More so, our conceptual budget-poverty model portrays the fact that the output/outcome of government’s budgetary operations (process and management) is poverty reduction. In other words, the model indicates that if the four budget process stages are properly conducted, intermingled and blended with the ingredients of sound budget management, poverty will be
reduced in both its incidence and severity. This is in consonance with the opinion that the ultimate goal of budgeting is to improve the lives of the people (Osanyituyi, 2007). It is in fact the main thrust of this study. Better still it is the researcher’s view of how to ‘budget away poverty’ (BAP) in Nigeria.

Poverty reduction was operationally classified into four, namely, absolute poverty, relative poverty, subjective poverty and dollar-per-day poverty in tandem with the four poverty measures used by the Nigeria Bureau of Statistics (NBS) in the Harmonized Nigeria Living Standard Survey (HNLSS) 2009/2010 (Kale, 2012). The conceptual explanations of the four stages of the budget process, the five elements of sound budget management as well as the four poverty measures had been given in the previous sections. However, it was needful to adumbrate on the five elements of sound budgeting in relation to poverty reduction.

2.1.14: Allocative Efficiency of the Budget Process (Budget Effectiveness) and Poverty Reduction

The theoretical link between budget allocation and poverty reduction can be gleaned from the public choice theory, which clearly explained that the budgetary process provides a mechanism for allocating resources among many competing forces. In fact, the core of a budgeting process is the allocation of limited resources among competing demands to meet the needs of governments and other public organisations (Allen, 2004; Nguemegne, 2007). Given this assertion, improvement in the living condition of citizens, including poverty reduction, cannot be wished away, as it constitutes one of the biggest needs of the governments of many countries today, developed and developing. This therefore places a demand for efficiency on budgetary allocations. According to Usman (2010), it is efficient or meaningful budgetary allocation to sectors of the economy that could bring government closer to the people and, by extension, reduce poverty. Allocative efficiency of the budgetary process means that the resources of the government are channel led to areas or sectors of the
economy that will facilitate the achievement of government’s macroeconomic needs in consonance with citizen priorities. In the words of Gupta, Clements, Guen-Sui & Leruth (2001) budgetary allocation to key sectors of the economy has positive effects that can enhance equity and ultimately reduce poverty (Usman, 2010).

Budgetary estimates can be allocated to two broad areas: capital and recurrent expenditure. Whereas capital allocation is meant to add to or increase the capital stock in an economy, recurrent allocation is for non-asset expenditure of government. In other words, ‘capital expenditure is paying for non-financial assets used in the production process for more than one year, while recurrent expenditure is payments for non-repayable transactions within one year. These two broad classifications of government expenditure can further be decomposed into four, namely: administrative expenditure, economic services, social services and transfers. Administrative expenditure relates to expenditure on general administration, national assembly, defence and internal security; Economic services are expenditure on the productive sector of the economy. These include expenditure on agriculture, construction, transport and communication as well as expenditure on other economic services. Social services expenditure includes: education, health and other community services, while transfers include public debt repayments as well as pension and gratuities (Central Bank of Nigeria, 2012). Generally, government’s budgetary allocations are undoubtedly one of the most used sources of capital for development in Nigeria (Kwanashie, 2013). This, by implication, presupposes that sufficient and effective budgetary allocation can go a long way to fast-track economic growth and development including poverty reduction.
2.2.15: Operational Efficiency of the Budgetary Process and Poverty Reduction

It is not just enough to allocate resources efficiently; the allocated resources have to be administered efficiently as well if the objective of the budget has to be attained. This is the whole concept of budget operational efficiency. More formally, budget operational efficiency connotes the degree to which the budgetary resources are utilised to meet societal needs. In other words, it is the capacity to use budget input to generate budget output and outcomes. It is an element of performance based budgeting, which entails budgeting for result (Allen, 2004). However, budgeting for results require that governments must also manage for results. That is, they must organise administrative operations and deliver services to optimise the outputs that agencies produce (Allen, 2004).

One way by which the efficiency of budget administration is measured is through the debt profile of a nation. This is because, budget inefficiency creates a fiscal gap which is most times financed by borrowing (Usman, 2010). In Nigeria, the external debt outstanding rose from US$13.1m in 1964 to an unbearable level of US$36 billion in 2004 before the debt relief in 2006, (Debt Management Office, 2005). Six years after the debt relief, the debt profile of Nigeria now stands at over US$ 44 billion for both domestic and external (Ndubuisi, 2012). Public debt and its associated repayments drain a nation of resources that would have otherwise been used to address infrastructural and productive ends. For instance, Nigeria’s 2012 budget allocated N600 billion for debt servicing; this is higher than the allocation to key agencies of government combined, namely: Education: N400.15 billion; Agriculture, N78.98billion; Transport, N54.83billion; Communication, N18, 31billion and Land and Housing, N26.49billion (Jonathan, 2011).

Consequently, if the opinion of Lumina, (2008) that heavy debt burden exacerbates poverty in low income countries and is a significant obstacle to poverty reduction goal is anything to go by, then, there will be no surprise as to
why Nigeria’s poverty is on the increase in spite of rising government budgetary estimates.

2.2.16: Budget Discipline and Poverty Reduction

Budget discipline is another tenet of sound budgeting, and is closely related to both allocative efficiency and operational efficiency, the distinguishing factor being its demand for strict adherence to rules and numbers. In plain terms, budget discipline refers to the degree of adherence to rules and limits in the preparation and implementation of budgets (Olaoye, 2010). It covers three main areas; i) adherence to stated budgeting policies without wavering; ii) adherence to budget calendar in development, approval implementation and monitoring; iii) adherence to approved estimate in appropriation Act (Omolehinwa 2001 as cited by Oloaye, 2010). These three dimensions of budget discipline (policy discipline, timing discipline and numerical discipline) have implications for the preparation and implementation of the budget, as well as the outcome of the budget process. Discipline brings sanity into the budgetary system and provides a mechanism for ensuring that budgets achieve their stated objectives including poverty reduction. On the other hand, without discipline, resources are most likely bound to be wasted, creating fiscal gaps which put an economy under pressure to borrow. In the words of Ogbulu and Torbira (2012:181);

Allocational efficiency is achieved when the budgetary operations through its resource allocation role succeeds in resolving financial imbalance that exists between the revenue and expenditure side of the national budget

It is discipline that resolves the imbalance in the budgetary system. Budget discipline is not only a fundamental tenet of sound public financial management but also a crucial requirement for enabling government to perform its duties and create a stable economic framework that engenders prosperity (Remi, 2009; Swan, 2011). This presupposes that national prosperity is a function of fiscal or budgetary rigours whether the country is a developing or developed nation. It is
therefore not surprising why all European Union (EU) countries have agreed to operate within a range of fiscal rules (Remi, 2008). To this extent, therefore, a budgeting system that allows persistence deficit is an indication of budget indiscipline, unless the deficit is a planned one for the purpose of stabilising the economy during recession

As Olaoye (2010) observed, from whichever angle one looks at the subject of budget discipline, Nigeria still has a long way to go. This observation is hinged on the premise that budgetary process in the last three decades was always distorted by budget indiscipline, as manifested in the forms of unsustainable extra budgetary expenditure, unfavourable budget variances and lack of budget integrity, all of which translate to a weak method of delivering public good to citizens, among others (Aruwa, 2004; Olomola, 2006(a)(b); Abe, 2009; Olaoye, 2010). This again theoretically affirms the reason for the abysmal performance of Nigeria’s budgets and the worsened poverty level.

2.2.17: The Relationship between Budget Reforms and Poverty Reduction in Nigeria

The need for reforms at anytime and anywhere is motivated by the acknowledgement of the fact that budgetary organization (institution, process and management) influence budgetary results. In other words, budgetary reforms are seen as necessary conditions for sustainable budgetary outcomes (Brumby, 1998). Budget reforms involve making changes to the ways and manner in which the budget is formulated, implemented and evaluated for the purpose of facilitating effectiveness, efficiency and economy (Allen 1998 cited in World Bank 2001). It is about restructuring the process and/or management of a budgeting system in order to improve its feasibility as a fiscal policy vehicle. This suggests that budget reforms are only necessary to the extent that they facilitate significant improvement in the quality of budget management. If that is the case, then, budget reform is secondarily related to poverty reduction.
In Nigeria, the budgetary reforms embarked upon from the inception of democracy in 1999, centred on five planks, namely, administrative procedures, budget preparation, management of government spending, budget implementation and budget monitoring/evaluation (Olomola, 2006; GIFMIS, 2011). These five planks resonated with both the four phases of the budget cycle (formulation, enactment, execution and evaluation) and the five major elements of budget management (efficiency, effectiveness, discipline, transparency and accountability). This conceptual connection is depicted in figure 2.5. The figure demonstrates a direct relationship among the three budget constructs (Reforms, process and management) but an indirect relationship between budget reforms and poverty reduction. The thick arrows represent direct relationships or feed-forwards, while the thin arrows represent feedbacks. The implication exemplified in this model is that budget reforms instigate changes in the process as well as the management of the budget in order to improve its workability as an economic management tool. Budget process and management invariably exert direct impact on poverty. Weaknesses in the process and/or management constitute feedbacks, which are used to reform the reforms. This makes the budgetary reforms a continuous process, as noted by Brumby (1998). It is also in conformity with the theoretical postulates by institutional economists that institutional reforms are a necessary condition for achieving durable budgetary outcomes; or that the “rule of the game” does shape the nature of decisions taken.
Hence, changing the rule of the game can help in reducing the likelihood of systematic biases for poor budget/fiscal outturns (Brumby, 1998). This implies that appropriate and effective reforms of the institutions of budgetary process and management mean shaping the rules of the game which invariably have far reaching implications on the budgetary outturn. And since the ultimate aim of any budget is to achieve national prosperity and or citizen welfare, it can therefore be loosely inferred that budget reform has a secondary influence on poverty reduction.
2.3 Empirical Framework of the Study

In this section, prior studies where reviewed covering two related topics: the relationship between public budgeting and economic growth and development and the relationship between public budgeting and poverty reduction.

2.3.1 Public Budgeting and Economic Growth and Development

There is no consensus in the literature on the impact of public spending on economic growth, leading to a divide among policy makers as to whether increase in government expenditure hinders or helps economic growth (Mitchell, 2005; Rajkumar & Swaroop, 2008). While some studies have favoured smaller government (i.e. reduction in public expenditure), others support bigger government (i.e. increase in government expenditure). Advocates of bigger government argue that government programmes provide valuable “public goods” such as education and infrastructure, and that increase in government spending can bolster economic growth by putting money into people’s pockets. On the other hand, proponents of smaller government contend that higher spending undermines economic growth by transferring additional resources from the productive sector of the economy to government which uses them less efficiently (Mitchell, 2005). Some of the studies with these outcomes will be examined:

Davarajan, Swaroop and Zou (1996) used data from 43 developing countries over 20 years to investigate the effect of public expenditure composition on economic growth and found that an increase in the share of current expenditure has positive and statistically significant growth effects and that the relationship between the capital component of public expenditure and per-capital growth is negative. They concluded that “productive expenditure, when used in excess, could become unproductive”. The revelations from this study suggest that developing countries have been misallocating public expenditures in favour of capital expenditures at the expense of current expenditures, hence their underperformances in terms of economic growth. This finding is most inconsistent with conventional wisdom or the popular belief that it is capital
expenditure such as infrastructure, roads, power, etc. that powers an economy for growth. In Nigeria, the government has often been criticised for making inadequate capital expenditure provision in the budget. Pevcin, (2003) investigated the relationship between government spending and economic growth in twelve European countries during the period 1951-1995, using a panel data regression analysis, and found a clearly observable negative relationship between the size of government and economic growth; a result which according to him was consistent with the findings of prior studies (Barro, 1991; Engen & Skinner, 1992; Hansson & Henrekson, 1994; Gwartney, Holcombe & Lawson, 1998; Fölster & Henrekson; 2001; Dar & AmirKhalkhali, 2002 all in Pevcin, 2003).

Mitchell (2005) evaluated the impact of government spending on the economic performance of America, using theoretical arguments and reviews of international evidence. His conclusion was that a growing government is contrary to America’s economic interests because the various methods of financing government (taxes; borrowing and printing of money) have harmful effects on the economy. Besides, the very nature of government spending is said to be economically destructive, regardless of how it is financed. He highlighted a number of reasons for the negative relationship between the size of government and economic growth. These include: extraction cost, displacement cost, the negative multiplier cost and the behavioural cost. Others are the behavioural penalty cost, the market distortion cost, the inefficiency cost as well as the stagnated cost associated with the inherent inflexibility of government programmes. A comparison of some economic indices of Europe and America further augmented the notion that government spending retards economic performance. For instance, it is reported that European government spending is one third higher than that of the US government, but the performance of the US in terms of Per capita income, real economic growth, job creation and standard of living are higher than most of EU countries (Mitchell, 2005).

Rajkumar and Swaroop (2008) studied the nexus between public spending, governance and outcome with the objective of explaining the surprising result
obtained from other studies that public spending often does not yield the expected improvement in economic outcomes. Using data from a cross-section of countries covering 1990, 1997 and 2003, they found that public health spending has a stronger negative impact on child mortality in countries that have good governance. Their study also revealed that increasing public spending on primary education is likely to be more effective in raising primary education attainment in countries with good governance. This implication on public budgeting is that increasing public spending on health and education is unlikely to lead to better outcomes if countries have poor governance. In other words, in the absence of better governance, the policy option of increasing public spending may not translate into the expected achievement of better economic outcomes.

Maku (2009), examined the link between government spending and economic growth in Nigeria using 30 years’ time series data (1977-2006). The study applied the Ram (1986) regression model, the cointegration technique as well as the error correction model to analyse the data. The study concluded that government expenditure and private investment have no significant influence on economic growth in Nigeria; and that real GDP, private investment; human capital investment, government investment and consumption spending have not maintained a uniform pattern since 1977 to 2006 as a result of persistent random shock effect on the time series. The study also found that the rate of government expenditure to real GDP has been rising since the Structural Adjustment Programme (SAP) without a significant contribution towards economic growth in Nigeria. From this study, it can be deduced that the low influence of government expenditure on economic growth is not the inadequacy of expenditure but rather on the extent of efficiency and effectiveness of such expenditure.

Abu and Usman (2010) investigated the effect of government expenditure on economic growth using disaggregated analysis and found that government’s total capital expenditure, total recurrent expenditure and expenditure on education have a negative effect on economic growth. They also found on the
contrary that expenditure on transport/communications and expenditure on health result in increase in economic growth. Implying that for the economy to grow, government’s capital expenditure, total recurrent expenditure and expenditure on education have to be reduced while expenditure on transport/communication and expenditure on health should be increased. The confusion with this finding is that increase in health expenditure as well as expenditure on transport and communication will ultimately translate into increase in total capital expenditures. Does it mean that the positive effect of an increase in the component of capital expenditures on the economy will be eroded by the negative effect of the total capital expenditure? The authors’ recommendations that government should increase both capital and recurrent expenditures (including expenditures on Education, transport/communications and health), are consistent with the view that the increase in the component of total expenditure, have the same effect on economic growth. They also recommended that whether the expenditure will lead to growth or not depend on the discipline exercised in the management of public resources.

Olopade and Olopade (2010) studied the impact of government expenditure on economic growth and development in Nigeria using both trend analyses and simple regression for the period 1990 to 2004. Their findings were that monetary rather than fiscal policy exerts a greater impact on economic activities in Nigeria and that the emphasis on fiscal actions by the government has led to greater distortion in the Nigerian economy. Olayide and Ikpi (2010) used a log linear regression model to evaluate the relationship and impact of the political system, budget performance on economic growth in Nigeria, between 1970 and 2004. Their findings were substantially in favour of government expenditure as a determinant of economic growth and development. Specifically, they found that recurrent expenditures on administration and economic services as well as capital expenditures on transfers impact positively on economic growth in Nigeria. This result is to some extent a deviation from the conclusion in most of the literature, especially those in the developed world which had condemned public expenditure as irrelevant in determining economic growth. Accordingly,
they recommended the reduction in the budgetary allocation to the unproductive sector in favour of the productive sector.

Aruwa (2010) empirically examined the relationship between government revenue, government expenditure and economic growth with the aim of testing the validity of Wagner’s Law and the revenue-spend theory of Friedman (1978) on the Nigerian case. Utilising the conventional Vector Auto-regression (VAR) framework, Johansson’s (1987) co-integration test and the Augmented Dickney-Fuller (ADF) test on a 30 years’ time series data of the federal Government of Nigeria (1979-2008), he confirmed the existence of a long-run relationship between government expenditure and RGDP, and public expenditure and revenue for the Nigerian case. The implication of this Wagnerian confirmation is that public expenditure is relegated to a passive role and revenue continues to drive public expenditure growth pattern in Nigeria with attendant fiscal stocks. Stabilisation of public expenditure and the need to pursue productive spending as well as the diversification of the revenue base of the economy were strongly recommended.

2.3.2 Public Budgeting and Poverty Reduction

Although the link between budgets and poverty reduction has been described as weak in some regions and non-existent in others, several conclusions can be inferred from related studies. Generally speaking, the budget as a whole affects directly or indirectly the lives of the poor, with some specific safety nets more closely associated with their daily activities (Lucien, 2002). In support of this view, Overseas Development Institute (ODI) (2004) concluded that budget, and how public funds are raised, allocated and managed, and are the main avenues through which governments channels resources for carrying out their functions, including poverty reduction. These views are in congruence with the view that the budget is the most rational, most acceptable and legal medium for raising and allocating resources to implement government programmes. The following quotation not only depicts the relevance of budgets in poverty reduction but also indicates that the poverty crises in many countries relate to poor or ineffective
budgeting. Fozzard, Holmes, Klugman and Withers (2001) asserted that the practice of public expenditure management in many countries is an obstacle to the achievement of poverty reduction objectives. They added that fragmented budgets and an exclusive focus on inputs are among the factors that have undermined the ability of budget systems to discipline policy making and to facilitate performance feedback that would improve outcomes.

In support of the above view, Oduro (2001) opined that public expenditure can have a mitigating effect on poverty through the provision of infrastructure and services to the poor, creating the conditions that will enhance the ability of the poor to accumulate assets, facilitating the creation of institutions that will reduce the incidence of risks facing the poor and reduce the impact of negative shocks through the provision of safety nets among others. Taking the case of Ghana, he specifically asserted that public sector spending is an important component of the Ghanaian poverty reduction strategy. He, however warned that public expenditure programmes for poverty reduction must include a strategy on how finances will be generated to fund the programmes in order to prevent the emergence of large budget deficits that will create economic instability and dampen economic growth. He added that any poverty reduction package must be accompanied with an increase in economic growth as a core component.

More specifically, Olaniyan (2002) examined empirically the role of household physical and human assets endowments in determining poverty in Nigeria using data from the national consumer surveys of 1985, 1992 and 1996. He found education as a significant determinant of rural and urban poverty. The implication of his empirical outcome is that if expenditure on education is increased, there will be a likelihood of significantly reducing poverty both in the rural and urban areas in Nigeria, all things being equal. Lucien (2002) concluded that there is a link between public budgeting, economic growth and the level of poverty. In his paper on sound budget execution for poverty reduction, he contended that efficient and effective public spending programmes are critical to the promotion of economic growth and equitable access to
economic opportunities. It was also his opinion that if a budget is well planned and implemented, it will engender technical and allocative efficiency as well as equity. In the same vein, a weak and poorly implemented public budget only translates to high level of poverty. While all the aspects of the budget should be vital to poverty alleviation, Lucien emphasised budget implementation, since a best design budget can be undetermined by shortcomings in the actual spending of funds. Similarly, the Ghana-Canada Parliamentary Support project (2002), identified some of the key elements in any successful poverty reduction strategy to include among others, executive restrain in expenditure or financial discipline, parliament-based budget expertise and agricultural development.

In the same vein, Fan, Huong and Long (2004) studied government spending and poverty reduction in Vietnam and opined that government spending reaches the poor through many different ways, including spending on agriculture, infrastructure and education. Accordingly, government fiscal spending in agricultural research could improve agricultural productivity and increase rural wages which in turn reduces rural poverty. Also, government spending in infrastructure and education may promote growth through increase in employment and wages, thereby contributing to poverty reduction.

In Indonesia, Birowo (2004) studied the relationship between government expenditure and poverty rate. Adopting both qualitative and quantitative methodology, and analysing data using Ordinary Least Square regression, he found the relationship between budget growth and poverty to be positive and insignificant. Also, his study found out that only education expenditure exhibited a stable negative relationship with poverty rate.

Wilhelm and Fiestas (2005) while exploring the link between public spending and poverty reduction; identified two main ways by which budgeting can affect growth; through raising the overall growth performance of the economy and through increase in the chances of the poor to contribute to the growth process by strengthening human capabilities and reducing transaction costs. These two ways can influence the poverty level. However, growth focus expenditure
affects the poor indirectly through the trickle-down effect. They emphasize the critical challenge of striking the right balance between spending that focuses primarily on growth and spending that aims at reducing poverty. Their study reveals the main findings in literature using different econometric and statistical methods, that expenditure on agriculture, education and infrastructure has a positive effect on poverty reduction, with agriculture yielding the highest return. This, to a great extent, explains the poverty situation in Nigeria, with the concentration in oil at the expense of other sectors, especially agriculture.

In a collaborative project between the International Food Policy Research Institute and the Arab Planning Institute in Kuwait, Chemingui (2007) assessed the impact of an increase in public spending in priority areas on economic growth and poverty reduction in Yemen. The study builds a dynamic Computable General Equilibrium model (DCGEM) to provide a baseline scenario of changes in the economy and poverty level in Yemen during the period 1998-2016. It also compared alternative scenarios to isolate the specific impact of several policies on poverty. The scenarios assume an increase in public spending devoted to three priority areas, namely, agriculture, education, and health, which was considered to affect the economy through an increase in sectoral or economy-wide technical factor productivity. The study found that targeted budgeting which increased amounts of public spending towards education and health services will generate more economic growth and poverty reduction than increasing public spending solely on the agricultural sector. It was also found that when an oil sector is a prominent part of the economy, as in Yemen, additional public spending on health and education does not improve productivity in the oil sector, and hence, may not have significant impact on poverty reduction. The implication is that spending on agriculture becomes the most important channel for poverty reduction and economic growth.

In a study of the link between public spending, governance and outcomes, Rajkumar and Swaroop (2008) found that public spending most times does not yield the expected improvement in outcome. They attributed this seeming
deviation to the quality of governance, explaining that public spending on health and education for instance can lower child mortality rates and increase education attainment more in countries with good governance, but in poorly governed countries such expenditure has virtually no impact on health and education outcomes. The reason for this is because poor governance is likely to engender inefficiency and ineffectiveness in the management of funds as well as indiscipline and corruption which are among the factors that stifled poverty reduction efforts in any society. The implication of this finding is that while public spending is important for the poverty reduction effort, the quality of governance determines the impact of such expenditure.

Bloj (2009), studied the budgeting process and the implications on social policies and poverty reduction, and opined that the recent tendencies in developing countries towards results –oriented budgeting approach is in order. The reason is that, this new management approach is believed to be directly connected with poverty reduction through the Medium Term Expenditure Framework (MTEF). It was however recommended that for this new budgeting approach to have the required impact on poverty and inequity, certain conditions must be in place. These are: a) the reinforcement of an appropriate distribution of expenditure competencies and functions between the central government and sub-national agencies in order to avoid overlapping, competition, or expenditure unbundling; (b) the adoption of horizontal coordination between regional and local governments tending to maximize advantages and “good practices;” (c) the implementation of expenditure assessment and control mechanisms; and (d) the reinforcement of the broadening of transparency, temporal horizons and budget sustainability. In a study on public sector spending and rural poverty reduction in the south eastern states of Nigeria, Akpan and Orok (2009) using descriptive technique and the non-parametric statistic, on a 26 year-federal-government data (1980-2005), found among others that budgetary provision for the poverty reduction programme have been unsatisfactory and ineffective and that actual release of even the allocations are grossly delayed. This, according to them, had not only
affected the implementation of the poverty reduction programmes of government but had translated to underdevelopment and high incidence of poverty in the country. This finding suggests that government expenditure or budget is a significant determinant of poverty reduction. The implication is that an increase in the provision or allocation to poverty reduction programmes of government coupled with sound management and efficient project implantation could mitigate the poverty crises in the Nigeria.

Also, Anger (2010) in crafting a way out of the poverty crises in Nigeria, advocated increase in budgetary allocation for the provision of social services that are beneficial to the poor, fostering efficient macro-economic and sectorial policies and the provision of an enabling environment to facilitate the private sector economic framework. This recommendation, to say the least, emphasises the relevance of budgetary allocation or better still, the role of public expenditure on poverty reduction. It can also be deduced from Anger’s recommendations that any expenditure that has direct bearing on poverty reduction must relate to social services (e.g. Education, Health, etc.) and infrastructures that will enable the private sector to thrive (e.g. roads, Power etc.).

From the above empirical studies, it is almost consensual that there is a link between public budget management and poverty reduction and that effective budget management could be a potent strategy for economic growth and for mitigating poverty incidences. However, most of the prior studies were either done outside the Nigerian environment, hence did not reflect the Nigerian experience (Lucien, 2002; Fan et al, 2004; ODI, 2004; Birowo, 2004; Wilhelm and Fiestas, 2005; Roskumar & Swaroop, 2008; Bloj, 2009;), or were too narrow in scope or methodology, and so could not capture national data and hence cannot be generalised nationally (Akpan & Orok, 2009; Anger, 2010). More specifically, Anger (2010) advocated the increase in budgetary allocation as a way out of the Nigerian poverty crises, without any empirical analyses to support. Besides, none of the prior studies reviewed, nor any other study known to the researcher, that had specifically decomposed the elements of sound public
budgeting (efficiency, effectiveness and discipline) and their interactions with poverty reduction in Nigeria. It is these lacunas that this study was therefore conceptualised to cover as well as expand the literature both in scope and methodology.

2.4: Theoretical Framework of the Study

Fozzard (2001) reported that after over 60 years of searching for a comprehensive theory of budgeting that would resolve the basic budgeting problems, no such theory exists and that it is unlikely that such a theory can ever be formulated. According to him, this search has been thwarted by a problem identified by Key (1940), namely, the impossibility of defining a comprehensive utility function or decision making mechanism that can satisfactorily reconcile the competing claims of different interests for resources across the whole public sector. In the words of the Wildavsky, cited in Hogye (1998),

...a normative theory of budgeting would be a comprehensive and specific political theory detailing what the government’s action ought to be at a particular time. Given that the budget represents the outcome of political struggle, a normative theory of budgeting suggests the elimination of any such conflict over the government’s role in society. Such a theory, therefore, is utopian in the fullest sense of the word: Its creation and acceptance would mean the end of politics (Hogye, 1998:8)

The summary of the above is that the search for a grand theory of budgeting is still on going. According to Premchand (1984), all the approaches to public expenditure management and budgeting have not succeeded in providing a comprehensive theory of public expenditure. Nevertheless, considerable progress had been made in the development of analytical techniques that can support the appraisal of public expenditure decisions and explain the budgetary process (Hogye, 1998; Fozzard, 2001). It was also acknowledged that individual techniques do not provide a satisfactory basis for resource allocation decisions, rather a combination of these techniques so that spending decisions are subjected to the analysis of the underlying rational for public intervention, the
relative cost benefits of alternative interventions and the distributional impact of spending (Pradhan, 1996).

In the light of the limitation noted above, this study considers three theories relevant in explaining the relationship between public budgeting and poverty reduction. These are; the Public Choice Theory (PCT), Trickle-Down Theory (TDT) and the Open System Theory (OST). While the first (PCT) is a positive theory, the last two (TDT and OST) are normative theories.

2.4.1 Public Choice Theory (PCT)

This is a theory developed by public choice economists to explain the behaviour of decision makers including government (Stephan, 1995). In other words, PCT pertains to the economic study of non-market decision-making, especially the application of economic analyses to public policy-making (Kumar, 2012). The underlying assumption of public choice theory, according to Fozzard (2001), is that decision makers (politician or bureaucrats) are self-interestedly rational, in the sense of optimising their choices and using the available information to their best advantage. That is why Paul Star in Felkins (1999) averred that the name “public choice” is ill-named or a misnomer, because the only choices it recognises are essentially private. According to the theory, decision makers—whether voters, politicians, legislators, executives, bureaucrats or government—pursue their personal interest under the garb of public interest (Fozzard, 2001; Kumar, 2012).

More so, Downs (1957) cited in Fozzard (2001), opined that the politician’s interest is to maximise political power and retain office, thus, they cannot be expected to act or behave in the broad public interest, but will, instead, try to make themselves popular, hence, strengthen their power base and improve their prospects for re-election. For this reason, the politicians will most likely advocate for short-term projects that can generate immediate pay-offs over longer-term projects with a higher return. Furthermore, politicians, especially in a representative democracy, will seek to advance the interests of their proximate
constituencies without regard to the consequences for the broader public. This they do by securing funding for programmes that benefit their constituents from the common pool of general taxation, so that the costs of programmes benefiting a few are borne by all (Fozzard, 2001). The politicians transform the economic basis of costs and benefits into political costs and benefits. This is referred to as the “pork barrel projects”, that is, projects that are financed from the common pool or general taxation but whose benefits are exclusively or disproportionately for a particular constituency (Weingast, Shepsle and Johnson, 1981 in Fozzard, 2001). These self-seeking or egoistic tendencies could explain in part the wide gap in wealth distribution and economic infrastructures in many countries including Nigeria. Similarly, bureaucrats are also seen by public choice theorists as profit or rent-seekers. In this context, the budget maximizing bureaucrat will tend to oversupply goods and services, so as to increase their budget allocation, and will allocate these resources to serve institutional and personal interests. Resources may, for example, be retained by central agencies rather than distributed to field departments. Similarly, allocations for staff and running costs are likely to absorb a substantial part of the budget, since these directly benefit bureaucrats, to the detriment of service delivery.

A crucial insight of the public choice theory, according to Poterba, (1998), is that resources allocation and reallocation is the outcome of a political process. The implication is that any budgetary policy discussion that will be economically efficient must consider the political feasibility of that policy. And because both the politician and the bureaucrats are selfish and self-seeking, the budgetary processes may never benefit the poor. The PCT therefore recognises the need to correct the failures in the market mechanisms, hence, places both the moral and legal obligation on the government to suggest remedies (Kumar, 2012). It also follows from the public choice perspective that all the stages of budgeting- formulation, approval, execution and audit will be hi-jacked for selfish interest. Accordingly, allocation will be done selfishly by the politician and execution of the budget will be carried out selfishly by the bureaucrat. The
implications of the public choice model run counter to the cannons of public expenditure, especially the cannon of maximum benefits. The ultimate results will be indiscipline, inefficiencies, and inequities and more poverty in the land.

2.4.2 Trickle-Down Theory (TDT)

The trickle-down theory (TDT) stems from the belief that the accumulation of wealth by the rich is good for the poor since some of the increased wealth of the rich will trickle down to the poor (Aghion & Bolton, 1997). More formally, it advocates that the economic benefits of any policy will flow from the macro level (government) to the micro level (household). This implies that an expansion of an economy is likely to benefit everyone in the society in line with the analogy that “a rising tide raises all ships” (American Business, 2010). It follows, therefore, that the efforts by government to stimulate economic growth are good for society even though such effort may increase government expenditure. Thus, increase in government expenditure on social/economic development such as roads, water, education and subsidies in the manufacturing of some essential commodities will be used to reduce poverty. According to Akpan (2006), the proponents of the trickling down theory opine that there is a transmission mechanism between some macroeconomic variables and the incidence of poverty. Therefore, the relationship between budgeting and poverty reduction can be fitted into this theory. This is because the budgetary allocations made to MDAs are expected to deliver outputs and outcomes to a greater percentage of the citizens. For instance, allocation to agriculture is expected to increase the production of food in the country and hence reduce hunger, expenditure on education is expected to reduce illiteracy, and expenditure on health is expected to reduce child and infant mortality rate while expenditure on transport is expected to reduce the number of road accidents caused by bad roads, to mention just a few. The combined effects of all these expenditures are expected to have an impact on the citizens by bringing about the reduction in the level and incidence of poverty. The trickle-down effect can be represented pictorially as shown in Fig 2.6.
2.2.3. The Systems Theory

A system had been viewed as a set of interrelated and interdependent parts which, through interactions, function as a whole (Agbonifoh, Agbadudu & Iyayi 2005). Every system is either a part of a larger system and/or may contain other systems. A good example of a system, with subsystems is the human body containing the respiratory system; the digestive system etc. According to the General Systems Theory (GST) on which the system approach is based, all scientific phenomena can be examined as a system (Agbonifoh, et al, 2005). To that end, the general system concept can be applied to the study and management of organisations, be it private or public. Accordingly, an organisation can be viewed as a system consisting of various subsystems, namely, production system, marketing system, accounting system, etc. These subsystems themselves can be broken further into smaller subsystems. For
example, the accounting system of an organisation can be broken down into financial accounting system, management accounting system, auditing system; public sector accounting system etc. Again, the management accounting and the public sector accounting systems encompass budgeting as a sub-system. The relationship and interactions between the subsystems are fundamental to the functioning of the entire system. In an organisation, these linking processes include communication, social interaction, decision making and distribution of authority, as well as the development of organisational roles for people and establishment and agreement on goals (Agbonifoh, et al, 2005). It is this linking process that integrates the diverse goals of the different subsystems of an organisation to form a common organisational goal by means of decision making involving the affected subsystems.

There are two variants or models of the system theory: the open system and the closed system. The closed system as the name implies is closed to the environment and hence does not receive input from the environment. It is entirely explainable form within and relates to the kind of system found in the natural sciences. In the social sciences or better still in all social systems, however, the environmental factors play a key role, which makes the open system model appropriate. To this end, the six basic elements of the General Systems Theory namely: the open system of an organisation, entropy and negentropy, input-process-output, differentiation and integration, feedback and equifinality, are relevant in explaining most social systems including the budgeting system (Agbonifoh, et al, 2005).

**Budgeting as a System**

The principles of the general systems theory can be applied to the budgeting system and its relationship with poverty reduction. According to Siswana (2007), budgeting as a system means a set of units with a relationship among each other.

It looks at the process of implementing a particular budget, the process, institutional structures, competing norms and values, actors and their relationships among each other all play a role in producing output (Lee &
Johnson, 1998 in Siswana, 2007). The “input-process-output” principle of an open system is the stronghold of the relationship between effective budgeting and poverty reduction in the public sector; it relates to the view that a system is a set of parts co-ordinated to accomplish a set of goals. The demand of a system approach is that activities of the component parts or sub-system should be directed towards meeting the overall objectives of the system and that before any changes are made on the part the effect of the change on the whole should be considered.

In the first place, poverty reduction is considered an outcome of the budgetary processes. This means the ultimate impact of all government activities and expenditures (output) should deliver value to the average citizens from where the resources in the form of taxes and labour (input) are obtained. The process or the transformation stage is the interaction between the budgetary process, which is expected to be efficient and effective so as to guarantee the delivery of the outputs and outcomes envisaged. This interconnectedness between the components of the system approach as it relates to budgeting is represented in Figure 2.7

Figure 2.7: The Input-Process-Output System of Budgeting

Source: Developed by the Researcher (2013)
Siswana (2007) opined that for the budgeting system to deliver as expected, the process must promote efficiency, effectiveness and economy (the three Es). This is the responsibility of the managerial leaders, he added. According to him, it is through the application of performance-based budgeting, otherwise known as the result-oriented budgeting system or outcome-oriented budgeting system, that these 3Es can be actualised. Using the South African experience, Siswana demonstrated the relationship between and among the efficiency, effectiveness and economy. In her opinion the three Es take place within the context of the New Performance Management (NPM) approach and is supported by the South African constitution. Like South Africa, the Nigeria constitution also supports these 3Es in the management of the economy. Section 16 of the 1999 Constitution specifically empowers the state to manage the resources of the nation efficiently, effectively, equitably and economically. This implies that managers in the public service deliver as planned and in time (efficiently), make reasonable options regarding spending on the basis of value for money and within the legal framework or do more with less (economy) and make sure that outputs produced by the transformation process have an impact on the public (effectiveness) (Siswana, 2007). Interestingly this is the preoccupation of this thesis.

![Diagram of Efficiency, Effectiveness and Economy (3Es)](source: adapted from Siswana (2007:110))
Figure 2.8 suggests that an MDA has aims and objectives for which resources and other inputs are required to deliver the output. More importantly, the output delivered should produce an outcome, and in the context of this study the outcome is poverty reduction. However, a series of activities and events from objectives and outcome must be carried out efficiently effectively and economically.
CHAPTER THREE

RESEARCH METHODS

3.1 Introduction

This chapter discusses the methodology adopted in this study. It is organised into six (6) sections; section 3.1 discusses the research design followed by the target population of the study in section 3.2. The sample size and sampling technique, data gathering methods as well as the problems encountered in gathering data are examined in sections 3.3, 3.4 and 3.5 respectively. Section 3.6 is the final section of this chapter comprising the methods of data analyses, instruments for data analyses, operationalization of variables as well as the specification of models used in the study.

3.2 Research Design

This study applied the explanatory research design. The explanatory research design seeks to establish relationships between variables through the collection of quantitative data, in-depth study of the phenomena and statistical analysis of data to draw conclusions and make recommendations (Osaze & Izedonmi, 2008; Otokiti, 2010).

3.3 The Population of the Study

The population of this study was defined in two parts: population based on primary data and population based on secondary data. For the purpose of primary data collection, the entire population of Nigeria constitutes the population of this study. This was given as about one hundred and sixty (163) million people as at 2010 (Kale 2012). For the purpose of secondary data collection, the entire public sector constitutes the population of this study. Public sector refers to organisations that are not privately owned and operated but which are operated or established by government on behalf of the public
(Adams, 2005). It includes organizations that exist as part of government machinery for implementing policy decisions and delivering services that are of value to citizens (Suleiman, 2009). Accordingly, ministries, departments and agencies (MDAs) of the federal, state and local governments are components of the public sector and form part of this sampled population.

3.4 Sample Size and Sampling Technique Primary Data

400 copies of the questionnaire were administered to two sample groups [government agencies (GAs) and the general public (GP)] to elicit responses regarding the major problems militating against budget practice in Nigeria as well as their possible remedies. Both the sample size and the sample groups were purposively selected. However, the copies of the questionnaire were randomly administered.

Purposive sampling technique is said to be appropriate if a subset of population is to be studied on the basis of the researcher’s knowledge of the elements or attributes in the sub-set that are relevant to the objective and purpose of the study (Agbonifoh & Yomere, 1999; Osuala, 2005). Under the purposive sampling design, the researcher decides what needs to be known, and sets out to find people who can provide the information by virtue of their knowledge or experience (Bernard 2002 cited in Tongco 2007; Lewis & Sheppard 2006 cited in Tongco 2007). According to Palys (2009), there are several purposive sampling alternatives, namely, stakeholder sampling, extreme/deviant case sampling, typical case sampling, paradigmatic case sampling, maximum variation sampling and criterion sampling. Others are: theory-guided sampling, critical case sampling, disconfirming/negative case sampling and expert sampling. However, the choice of any of the alternatives depends on what exactly needs to be accomplished. To this end, the stakeholder’s version of the purposive sampling was adopted for this aspect of the primary data collection. The reason is that the stakeholder’s purposive sampling strategy is useful in the context of evaluation research and policy analysis. It involves identifying the major stakeholders who are involved in designing, giving, receiving, or
administering the programme or service being evaluated, and who might otherwise be affected by it (Palys, 2009).

Consequently, the following government agencies were considered because of their role in the preparation and implementation of the budget; the Budget Office of the Federation (BOF), Office of the Accountant General of the Federation (AGF), the Debt Management Office (DMO), and the Central Bank of Nigeria (CBN). Also, the General Public group were represented by some organised Non-Governmental Organisations (NGOs) believed to possess the information that could assist in addressing the envisioned objectives of this study. The selected NGOs include: Nigeria Labour Congress (NLC), Nigeria Bar Association (NBA), Nigeria Union of Journalists (NUJ), Nigeria Union of Teachers (NUT) and Agents of Change (AOC).

Although two groups, (GA and GP), were identified and used for the primary data, constitutionally, the budget is expected to benefit all citizens directly or indirectly. Out of the 400 copies of the questionnaire administered, 169 copies were duly completed and returned from the two groups (75 from GA, 94 from GP) and all were used for analysis. Although a response rate of 42.25% appeared low, yet because of the characteristics of the sampled groups and the nature of the research objective which the survey questionnaire was used to address, it was considered adequate. Besides, the Institute of Citizens-Centred Service (ICCS), (2012) averred that while a higher response rate is often better, there is no acceptable response rate. They added that the representativeness of the views or opinions is more important than the response rate. In other words, if the views of the respondents are not significantly different from those that have not responded, then a low response rate may not be considered as bias.

3.5 Sample Size and Sampling Technique for Secondary Data

Nigeria is a federal system where all the three tiers of government perform the functions of allocation, distribution and stabilization of the economy. The
federal government is, however, more heavily engaged in economic stabilisation and redistribution than the other two levels. This informed the choice and focus of this study on the federal government data and national poverty statistics. Also, the fact that the federal government data covers the entire economy is additional attraction for this choice. Accordingly, Ministries, Departments and Agencies (MDAs) were selected on the bases of their involvement in the national budget preparation, review or audit, as well as the potentials to have national data, especially data relating to poverty profile and other economic performance indicators (such as National Debt profile etc.) To that end, the following MDAs in Abuja were considered and visited for the purpose of obtaining secondary data: Federal Ministry of Finance (FMOF); the Office of the Accountant General; the Office of the Auditor-General; Debt Management Office (DMO); National Bureau of Statistics (NBS); and the Central Bank of Nigeria (CBN).

More so, a time horizon of 31 years (1980-2010) was considered for the purpose of gathering data relating to the specific attributes of the dependent variable (poverty reduction) and the independent variable (public budgeting). This period was selected because of the observation that the issue of poverty reduction became more prevalent in 1980 after the collapse of the oil prices and the general mismanagement of foreign exchange earnings witnessed during the oil boom era (Obi, 2007; Abdulazeez, 2010).

3.6 Data Gathering Method

This section unveils the data gathering method of this study. The section covers the sources of data, instrument of data collection, validity and reliability of the instrument as well as the administration of the instrument.

3.6.1 Sources of Data

This study employed both primary and secondary sources of data collection. The secondary data were extracted from published documents including: budget
speeches, annual appropriation acts, and budget performance reports, the annual audited accounts of the federal government, CBN Statistical bulletin, CBN annual report and accounts, National Bureau of Statistics reports, Debt management report and other documents from the World Bank and International Monetary Funds (IMF).

The primary data was sourced from the administration of questionnaire to two groups, namely, selected agencies of government directly involved in the preparation, implementation and auditing of the budget and the general public including the Civil Society Organisations (CSOs) and Non-Governmental Organisations (NGOs).

3.6.2 Instruments of Data Collection

The instrument for the collection of primary data was a structured questionnaire with four sections as described in section 3.5.3 (see appendix 11).

3.6.3 Description of Survey Questionnaire

The questionnaire used in obtaining primary data was structured and divided into four sections. Section ‘A’ contained six items relating to the respondent’s personal data, which included respondent’s gender, office affiliation, highest qualification, length of service, discipline as well as professional affiliation. Sections B to D, cover areas relevant for the achievement of the research objectives and addressing the research questions. It contained 24 questions in all; 20 closed ended questions, 2 questions that required the respondents to rank and 2 open ended questions. The close ended questions were designed on a five-point Likert scale. Specifically, section B covers ten items on the attributes of sound budget management, section C covers the problems of budgeting in Nigeria and section D covers suggested remedies to the budgeting problems in Nigeria. The two ranking questions require the respondents to rank the factors listed in the questions using a scale of 1-5. The open ended question, on the
other hand, afforded the respondents the latitude to respond to the issue, based on their knowledge and expertise.

### 3.6.4 Validity and Reliability of Instruments

Miller (1995) has opined that reliability and validity are the two most important and fundamental characteristics of any measurement procedure/instrument. Consequently, any research outcome will be only as good as the reliability and validity ascribed to the instruments used in generating such a result. To that end, this study carried out both validity and reliability checks.

A validity test was necessary to ensure that our instrument and data collected measure what they purport to measure. In that regard, we employed both the face validity and sampling validity. The face validity was attested to when an individual reviewing the instrument (especially an expert in the field), concludes that it measures the characteristic or trait of interest (Miller, 1995). Sampling validity tries to establish the extent to which the selected sample is adequate or is representative of the population of study (Agbonifoh & Yomere, 1999).

For secondary data, the validity of the secondary instruments was assured by ensuring that the sources of data were from government institutions and other credible non-governmental institutions only. The study also utilizes only national data relating to budget information and poverty indices, as these captured the entire economy. More so, both the time and geographical coverage were purposively and carefully selected to ensure that sampling validity is not vitiated. For the primary data, the instrument was a structured questionnaire, which was reviewed by the researcher’s supervisor, co-supervisor as well as other senior academics. On the basis of their review, their recommendations were incorporated into the questionnaire and some questions were changed.

The reliability of an instrument, on the other hand relates to the degree to which a measuring instrument produces consistent outcomes when it is repeated
(Agbonifoh & Yomere, 1999). For the secondary data, the stability and or consistency was guaranteed by the fact that the documents and data were sourced from publicly available sources, hence, can be retrieved at any time without any fear of losing their value. However, as advocated by Mc-Cloughan (2001), there was need to compare the secondary information and data with the information and data employed by reputable institutions and sources. To that end, the data obtained from CBN were compared with the data from the National Bureau of Statistics (NBS), as well as the data from the Accountant-General’s Office and vice-versa. Again, data from government institutions were compared with the figures from the World Bank and International Monetary funds (where such data were available).

For the survey data, the reliability of the instrument was determined using the Cronbach’s Alpha Coefficient (CAC). The CAC is the most common measure of internal consistency. It proceeds by associating each measurement item against each other and obtaining for all paired association the mean intercorrelation (Asika, 2004). Cronbach’s alpha values range between 0 and 1, 0 indicates low reliability while 1 indicates high reliability. This coefficient provides an indication of the average correlation among the items of the scale in a data set. Although a value of 0.7 is recommended for a scale to be considered reliable, yet a value of 0.5 for a scale of five items would not be said to have violated the reliability criteria, since CAC is very sensitive to the number of items in the scale (Pallant, 2011). In this study, the CAC for the three data sets for which reliability test was conducted were about 0.7, 0.5 and 0.6 for the first (ten items), second (five items) and third (five items) respectively. The detailed result is in Chapter Four of this thesis.

3.6.3 Actual Field Work and Administration of the Instrument

The field work of this study was carried out in the Federal Capital Territory, Abuja. For the purpose of collecting secondary data, the researcher visited the Central Bank of Nigeria, the National Bureau of Statistics; the Library Department of the National Assembly, the Debt Management Office as well as
the Office of the Accountant-General of the Federation. The documents obtained from these offices enabled a direct extraction of the data relating to the attributes of public budgeting, economic performance indices and poverty indices used for analysis in chapter four.

Primary data were obtained through the administration of 400 copies of the questionnaire to four agencies of government (CBN, DMO, AGO, BOF) and five Non-governmental organisations (NBA, NLC, AOC, NUJ and NUT) all in Abuja. The researcher and three research assistants directly administered the questionnaire to the respondents. Before engaging the research assistants, they were first orientated on the objectives and rationale of the exercise. Agreements were also reached on their roles, the retrieval method as well as how the retrieved questionnaire should be transferred to the researcher.

3.7 Data Analysis Framework

In this section, the following issues were discussed: the method of data analysis, the instruments of data analysis, operationalization of variables and the specification of the model used in the analysis.

3.7.1 Method of Data Analysis

The data collected in this study were analysed using a combination of both parametric and non-parametric techniques. The descriptive analysis of the data collected was first done using tables, graphs and other summary statistic. This was to enable a description of the characteristics of the sample as well as check if any of the variables violated any of the assumptions underlying the statistical technique used to address the research questions. The preliminary analyses conducted in this study include: descriptive statistics (which reveals the mean, median, maximum minimum and standard deviation of the variables for the period under consideration), test for normality, outliers, multicollinearity and singularity as well as stationarity.
The second stage of data analyses was the inferential statistic. For the secondary data, the following techniques were engaged: Partial Correlation (PC), Multivariate Regression (MVR) analysis (i.e. the Ordinary Least Square Variant), Johansen Cointegration test and the Paired Sample T-test (PST). For hypotheses 1, 2 and 3, the PC, OLS and Johansen cointegration technique were employed. PC and OLS were used to gauge the short term relationship between the dependent and independent variables while the long-term relationship of the variables were determined using the Johansen cointegration test. Furthermore, the Partial correlation (PC) technique was applied to explore the strength and direction of the relationship between the variables under consideration. It was preferred to the Pearson moment correlation because it helps to control for any possible effect of other confounding variable so as to allow for a more accurate picture of the relationship between the predictor and the criterion variables of interest (Spiegel & Stephens, 2008; Pollant, 2011). OLS was used to measure the predictive ability of a set of independent variables on continuous dependent variable. It was also preferred in order to avoid bias as well as obtain the appropriate association of values measured (Akpan, 2009). More so, it was necessary to test for the long-run relationship between the incident of poverty and the attributes of sound budgeting; hence, the cointegration regression was employed. The Johansen approach was adopted since it is viewed to perform better than other approaches (Koop, 2010). The Paired Sample T-test (PST) was used for hypothesis four to measure the impact of budgetary reforms on budget discipline and poverty alleviation. This is because the PST is appropriate when the outcome of interest is the changes in scores for the same subject at two different times (Pollant, 2011).

The data obtained from the primary source were used to address the fifth objective of this study. First, percentages were computed for the purpose of identifying the most influential problems and the best solution to tackle the identified problems. However, the Mann Whitney U Test (MWT) was used to compare the perceptions of government agencies with that of general public (proxied by selected non-government organisations), on the subject-matter. A MWT is a non-parametric equivalent of an Independent-Sampled t-test used to
compare the score of two groups when the assumption of normality is vitiated (Williams, Sweeney & Anderson, 2006; Spiegel & Stephens 2008)

3.7.2 Instrument of Data Analyses

The data for the dependent and independent variables were extracted from primary and secondary sources and transformed into the required form with the aid of Microsoft Excel 2010. The transformed data were further scrutinized and analyzed using the E-Views statistical package.

3.7.3 Operationalization of Variables

There are two main constructs in this study, namely, public budgeting and poverty reduction. Poverty reduction represents the dependent variable while public budgeting is the independent variable. In order to be able to measure these constructs, it was necessary to define them operationally

3.7.3.1: The Independent Variable – Public Budgeting

Public Budgeting was decomposed into five of its characteristic components, namely, effectiveness, efficiency, discipline, transparency and accountability as depicted in the budget-poverty model (BPM) presented in Chapter Two of this thesis. The BPM also demonstrate that the quality of budget reforms is expected to influence the quality of budget management and impact on the budget outcomes including poverty reduction. Therefore, four attributes namely, effectiveness, efficiency, discipline and budget reforms were adopted to represent public budgeting. The reason is because they are the most common attributes of sound budget management identified in the literature (World Bank, 2001; Olomola, 2006). They are further defined below:

**Budget Discipline:** Budget discipline has three dimensions, namely, timing discipline (that is, the adherence to budget time table or calendar), policy discipline (that is, adherence to budget policies) and numerical discipline. This study focuses on the numerical discipline, which connotes the degree to which
budgetary estimates are respected or adhered to. It also includes ensuring a favourable variance in case of deviation form plan. It is calculated as budgeted amount divided by actual amount

\[ \text{BDISC} = \frac{\text{BA}}{\text{AA}}; \]

Where BDISC is budget discipline, BA is budgeted amount and AA is actual amount (Omolehinwa, 2001; Olaoye, 2010). Discipline is achieved when BDISC \( \geq 1 \); but when BDISC < 1, it is indiscipline.

**Budget Efficiency or operational efficiency** refers to the extent to which government meets its agenda or budgetary objectives at minimum cost. It can be measured by national debt level (NDL), a nation’s external debt level (EDL) or the debt service level. It is a measure of the debt burden of a nation. The lower the debt burden of a nation, the more efficient its budgetary management, and the better the poverty reduction agenda (Ajisafe, Nassar, Fatokun, Soile & Gidado, 2006; Debt Management Office (DMO), 2008). In this study, operational efficiency of the budgetary process was proxied by the ratio of external debt to export (EDExp) and total debt service (TDSERV)

\[ \text{EDExp} = \frac{\text{Total External Debt Outstanding}}{\text{Total Export}} \]

\[ \text{TDSERV} = \text{Total amount paid per year (principal and interest, i.e. annual debt repayment)} \]

**Budget Effectiveness or Allocative Efficiency**: This connotes the level or degree of coherence of budgetary allocation to government priorities as well as reallocation from lesser to higher priority and from less effective to more effective programmes. For the purpose of this study, poverty reduction projects are of higher priority, hence allocation to ministries, departments and agencies with direct bearing on the poor were considered. Consequently, budgetary allocations to four key sectors of the Nigeria economy in line with the recommendation of Usman (2010) were selected. These are: Agriculture (BAAGR), Education (BAEDU), Health (BAHLT), Transport and Communication (BATCOM).
**Budget Reforms:** Budget reforms involve making changes to the way and manner the budget is formulated, presented, implemented, monitored and evaluated for the purpose of facilitating effectiveness, efficiency and economy (Allen 1998 cited in World Bank 2001). In Nigeria, between 1980 and 2010 a number of reforms aimed at strengthening our budget process were introduced. Some of these reforms are: the Structural Adjustment Programme (SAP) introduced in 1986, the Central Bank of Nigeria Act (CBNA) introduced in 2004, the Medium Term Expenditure Framework (MTEF) introduced in 2005, the Fiscal Responsibility Act (FRA) introduced in 2007, and the Public Procurement Act (PPA) in 2007. However, in this study, MTEF and FRA were selected on the bases of their relevance to both process and management of budget. Hence, their impacts on the effectiveness of the budgetary process and on poverty reduction were assessed using “pre-test/post-test” analysis.

### 3.7.3.2: The Dependent Variable - Poverty Reduction.

Poverty is a multidimensional concept which manifests in so many ways, including: hopelessness, helplessness, powerlessness, voicelessness, dependence, lack of opportunities, lack of self-confidence and lack of self-respect, among others (Overseas Development Institute (ODI), 2009). Most of these manifestations are difficult to assign values to. Hence, rather than decompose poverty into its characteristic features or manifestations, an identification of the type of poverty or better still, the measure of poverty was preferred. Another difficulty was in choosing the categorisation of the measure of poverty to adopt, since many exist in the literature. For instance, Ajakaiye and Adeyeye (2002) considered four main approaches for measuring poverty. These are: the living standard approach, the poverty line approach, the objective poverty approach and the subjective poverty approach. In the same vein, ODI, (2009) advanced that poverty can be measured using any of the following four approaches, namely: income/consumption approach, basic needs approach, capabilities approach and human development approach. Also, National Bureau of Statistics (NBS) identified at least five approaches for the measurement of
poverty, namely, relative poverty, absolute poverty, dollar-per-day poverty, subjective poverty and the Gini Coefficient (Kale, 2012). The Gini Coefficient (GC) is a critical measure of poverty in terms of inequality. It explains the spread of income or expenditure but does not explain the increase or decrease of individuals or persons in poverty. In Nigeria, between 2004 (GC of 0.4296) and 2010 (GC of 0.4470), the Gini coefficient indicated that inequality increase by 4.1 percent nationally (Kale, 2012).

Even though there are many measures of poverty measurement, different countries have the latitude to use one or more of these measures to calculate poverty. In Nigeria, the relative poverty method is adopted as the official measure of poverty (Kale, 2012). Relative poverty separates the poor from the non-poor in a given society on the basis of their living standards. It is computed as the sum of the household expenditure deflated by Consumer Price Index (CPI). According to the National Bureau of Statistics (NBS), the objective of deflating the figures obtained was to correct for seasonal and regional variations of the expenditure data items. Households with expenditure greater than two-thirds of the Total Household Per Capita expenditure are NON-POOR whereas those below it are POOR. Consequently, N66, 802.20 per annum was established as the relative poverty line as at the last Harmonised, Nigeria Living Standard Survey (HNLSS) conducted by NBS in 2010. Accordingly, all persons whose per capita expenditure is less than N66, 802.20 per annum are considered to be poor while those above the stated amount are considered to be non-poor.

Further decomposition of the above measures of poverty gave rise to the following poverty indicators: Headcount Ratio or Incidence of Poverty, Poverty Gap, Sen Index, physical quality of Life index and the Human development Index. Poverty incidence (POI) refers to the proportion of the population for whom income/consumption falls below the relative poverty line in a given population (Akpan & Orok, 2009, Kale, 2012). The headcount ratio or the poverty incidence (POI) was the specific poverty indicator adopted for this study. This was because this poverty measure was found to be in common use especially in measuring poverty over a long time, since other measures and

Mathematically, the headcount index or poverty incidence can be computed as follows;

\[ P = \frac{k}{N} \]  

Where \( P \) = the poverty head count  
\( k \) = the number of poor people  
\( N \) = the total population

The Headcount Index data computed by Nigeria Bureau of Statistics (NBS) (2012) were obtained and utilised in this study.

3.7.4 Model Specification

The specification of the models used in this study was based on both the trickledown theory and open-system view of budgeting. This is because macro-economic policies- (monetary and fiscal) including budgeting, are expected to have the ultimate impact on citizens in terms of enhancing their welfares, which is the doctrine, propagated by the proponents of the trickle-down theory (Akpan, 2006). Similarly, budgeting is viewed as an open system, which takes input from the environment and transforms them into output and outcomes (Siswana, 2007). Poverty reduction is one of the expected outcomes of a budgetary process. On the basis of these two theories, poverty reduction is one of the main goals of government developmental effort as engrained in the Millennium Development Goal (MDG), National Economic Empowerment and Development Strategy (NEEDS), VISION 20:2020 and the Annual Appropriation Act. Therefore, sound budgeting (allocative efficiency, operational efficiency, budget discipline, and budgetary reforms) should ultimately bolster poverty reduction. This is the basis of the definitional models specified in this study. Specifically, for Hypotheses 1, 2 and 3, both the
Ordinary Least Square (OLS) Regression and the Johansen Cointegration regression were employed, while the Paired Sample T-test and the Mann-Whitney U Test were utilised for hypotheses four and five respectively.

However, in all cases, before carrying out the specified advanced analyses, preliminary analyses were conducted to check for violation or otherwise of the assumptions of the statistical and econometric techniques used. This was to keep in touch with more recent studies like Salawu, Ayanwale, and Ajobo (2004), Osinubi and Olaleru (2006), Olayiwola and Okodua (2009), Ngbede, Ochoche and Olatunji (2009), Usman, (2010), Abu and Usman, (2010), Oladipo and Akinbola (2011),

The models are specified below:

**Model 1: Budgetary Allocation and Poverty Reduction**

Here we attempt to estimate the extent of coherence between budgetary allocation and poverty reduction programmes of government. It has been theorised that the allocation of the budget is a key instrument for governments to promote economic growth and reduce absolute poverty (Wilhelm & Fiestas, 2005). In Nigeria, government places a lot of premium on agriculture, education, transport and health sectors, because of the belief that these sectors affect the poor and are key sectors in the poverty reduction crusade (Akpan, 2006; Usman, 2010). To that end, these four sectors were selected for a two-stage analysis. First, the trend of budgetary allocation to four sectors (Agriculture, (AGR); Education (EDU); Health (HLT), Transport/communication (TCOM) were established. Then the relationship and impact of the allocation on poverty reduction was determined; using the following model:

**Model One ‘A’**

POI = f(BAAGR, BAEDU, BAHLT, BATCOM, INF) 3.2

The above equation can be expressed in explicit form (see equation 2) while assuming linearity of the variables under consideration.
POI = α_0 + α_1 BAAGR + α_2 BAEDU + α_3 BAHLT + α_4 BATCOM + α_5 INF + ε \quad \text{---3.3}

However, equation (2) could not survive the preliminary diagnosis, since some variables violated the normality and stationarity; hence it was transformed into other forms of variables as recommended by Gujarati (2004). The equation was therefore expressed as a log-linear model as shown in equation (3)

\[ LPOI = \alpha_0 + \alpha_1 LPBAAGR + \alpha_2 LPBAEDU + \alpha_3 LPBAHLT + \alpha_4 LPBATCOM + \alpha_5 LPINF + \varepsilon \quad \text{---3.4} \]

Where
LPOI = Poverty Index/incidence
LPBAAGR = Proportion of Allocations to Agriculture
LPBAEDU = Proportion of Allocation to Education
LPBAHLT = Proportion of Allocation to Health
LPBATCOM = Proportion of Allocation to Transport and Communication
LPINF = Inflation Rate
ε = stochastic error term
α_0 represents the intercept
α_1, α_2, …, α_5 = the parameter to be estimated

It was expected a priori that LPBAAGR, LPBAEDU, LPBAHLT, LPBATCOM would bear an inverse relationship with LPOI. This is because increase in expenditure of these sectors is expected to translate to the reduction in the percentage of the poor. Similarly, the control variable, LINF was expected to bear a direct relationship with POI as persistent inflation erodes the value of money, thereby worsening the welfare situation and increase poverty.

Therefore the signs expected in the coefficient of the regression are as follows;

\[ \alpha_1, \alpha_2, \alpha_3, \alpha_4 < 0 \text{ and } \alpha_5 > 0 \]
Model One ‘B’

\[ LPOI = \beta_0 + \beta_1 LPBAKS + \beta_2 LRGDPCCP + \beta_3 LPINF + \epsilon \]

Model one B was used to complement model one A. It combines the four main independent variables of model one ‘A’ to form a new variable called PBAKS (Proportion of Budgetary Allocation to Key Sectors), then added inflation (LINF) and RGDPPCP (the proportion of Real GDP Per Capita) as control Variables. The rationale was to determine the combined effect of budget allocated to these sectors on poverty reduction in Nigeria.

The *a priori* expectation was that RGDPPCP and LPBAKS will be negatively signed and statistically significant, while the sign of LPINF was expected to bear a direct relationship with LPOL.

This is shown symbolically below:

\[ \beta_1, \beta_2, < 0 \text{ and } \beta_3 > 0 \]

Model 2: The impact of Budget Discipline and Debt Burden on Poverty Reduction in Nigeria

Model 2 was used to address hypotheses two and three of this study. Hypothesis two relates to budget discipline measured by the ratio of budgeted amount over the actual amount, while hypothesis three relates to the implication of operational efficiency of the federal government budget measured by the burden of public debt on poverty incidence in Nigeria. Debt burden was measured by the ratio of external debt to export and total debt serviced in tandem with the
position of World Bank (1997) cited in Hassan and Khan (2007) and corroborated by Akpan (2006). To that end we specify this model as:

$$POI = f(BDISC, EDExp, INF, TDSERV)$$

This can be expressed in explicit form as follows;

$$POI = \Psi_0 + \Psi_1 BDISC + \Psi_2 EDExp + \Psi_3 INF + \Psi_4 TDSERV + \varepsilon$$

Where

POI = Poverty Index/Indices

BDISC = Budget Discipline,

EDExp = External Debt to Export Ratio

INF = Inflation Rate

TDSERV = Total Debt Service

$\Psi_0$ = Represents the intercept

$\Psi_1 = \Psi_4$ - the parameter estimates or the coefficient

$\varepsilon$ = the stochastic or error term

It was expected, a priori, that BDISC will bear an inverse relationship with POI since discipline in the management of resources reduces waste, catalyses growth which is expected to trickle down to the poor. The impact of debt on poverty reduction is that when external debt to export ratio and the total debt serviced increase, poverty is expected to increase since the implication is that much resources have been committed to external debt servicing which consequently reduces the proportion meant for the provision of social infrastructure, such as roads, education, health etc. which jointly and or severally improves service delivery (Akpan, 2006).

The following signs are therefore expected of the coefficient of the independent variables:

$\Psi_1 < 0$; $\Psi_2, \Psi_3$, and $\Psi_4 > 0$
However, for the purpose of passing the data diagnosis for the assumptions of parametric statistics and stationarity of time series, equation (6) was re-stated in the log transformation of INF and TDSERV to obtained equation (7) below:

\[ POI = \Psi_0 + \Psi_1 BDISC + \Psi_2 EDExp + \Psi_3 LINF + \Psi_4 LTDSERV + \epsilon \ldots 3.8 \]

Where: LINF is the log of inflation rate and LTDSERV is the log of annual total debt repayment. All other variables remain as in equation (6) above.

The \textit{a priori} expectations also remain as stated in equation (6)

**Hypothesis 4: Impact of Budget Reform (MTEF and FRA) on Poverty Reduction**

A matched sample t-statistic was employed for this analysis using the pre-test/post-test design. The level of budget discipline and poverty profile before and after the reforms (MTEF and FRA) allowed for the determination of the impact of these reforms using the formula below:

\[ t = \frac{\bar{D}}{S_D^2} \sqrt{n} \]

Where; \( \bar{D} \) is the mean of difference of mean, \( n \) is the number of sample and \( S_D^2 \) is the variance of the difference of scores and is given by

\[ S_D^2 = \frac{\sum (D - \bar{D})^2}{n-1} \]

**Research Question 5 (Objective 5) Budgeting Problems in Nigeria and their suggested Remedies**

Research question 5 and objective 5 were more explorative than analytical, since it seeks to identify the key problems of budgeting in Nigeria and how to address them, hence, it was not hypothesised. However, simple frequency distribution and percentage analysis were utilised in identifying the problems and suggested solutions from the copies of questionnaire returned. The study
also employed the use of Mann Whitney U Test to compare the perception and scores of the two sampled groups in order to find out if their perceptions of the problems and solutions differ significantly.

Mann Whitney U Test is a nonparametric alternative to the Independent-samples t-test. It is used to test for the differences between two independent groups on a continuous measure (Pollant, 2011). Also, unlike the t-test that compares means, MW test compares medians after converting the scores into ranks, which makes actual distribution of the scores immaterial.
CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction
This chapter captures the presentation and analyses of both primary and secondary data. Secondary data were presented and analysed first before the presentation and analyses of the primary data. The reason was that secondary data are the main thrust of this study and was used in testing four out of the five hypotheses presented, while primary data play a supportive but important role and was used to address the fifth objective of this study. However, for both primary and secondary data, the presentation was made using tables and charts, while the analysis involves both descriptive and inferential statistics. Generally, the chapter was organised into five major sections, namely: introduction, data presentation, preliminary data analysis, inferential data analysis and hypothesis testing.

4.2 Data Presentation – Secondary Data
The data for this study representing the dependent variable, the independent variables as well as the control variables are presented in the appendix section of this thesis. Among the data presented are a profile of poverty incidence in Nigeria (POI) which is the dependent variable, trend in budgetary expenditure (TBEXP), Proportion of budgetary allocations to education (PBAEDU), agriculture (PBAAGR), health, (PBAHLTH) and transport and communication (PBATCOM). Others are, the indexes of budget discipline (BDISC), a snapshot of government debt profile, including a profile of domestic debts (DOMD), external debts (EXTD), and total debts serviced (TDSERV) as well as the ratio of debts serviced to exports (TDS/Exp) and the ratio of total external debts to exports (ED/Exp).
The functional classification of governments’ total actual expenditure is also presented in graphs. The classification includes administration (ADMIN), economics (ECONS), socials (SOCIALS) and transfers (TRANSFERS).

4.3 Preliminary Data Analysis-Secondary Data

Under this section, the characteristic features of the variables used in this study were explored and described. This was done using descriptive statistics, presented in tables, graphs and charts.

4.3.1 Descriptive Statistic of Poverty Index and other Economic Indices in this Study

Table 4.1 shows the descriptive statistics of poverty incidence (POI), Real Gross Domestic Product Per Capita (RGDPPC), Growth in Real GDP (GRGDP) and Inflation (INF).

<table>
<thead>
<tr>
<th></th>
<th>POI</th>
<th>RGDPPC</th>
<th>GRGDP</th>
<th>INF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>54.25806</td>
<td>2930.764</td>
<td>3.542581</td>
<td>20.90323</td>
</tr>
<tr>
<td>Median</td>
<td>54.00000</td>
<td>2635.108</td>
<td>4.200000</td>
<td>13.90000</td>
</tr>
<tr>
<td>Maximum</td>
<td>88.00000</td>
<td>4895.377</td>
<td>10.60000</td>
<td>72.80000</td>
</tr>
<tr>
<td>Minimum</td>
<td>27.00000</td>
<td>417.6166</td>
<td>-13.13000</td>
<td>5.400000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>15.25913</td>
<td>922.0959</td>
<td>5.026649</td>
<td>17.82166</td>
</tr>
<tr>
<td>Observations</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Field Work (2013)

The statistics reveal that the average poverty index (POI) in Nigeria within the period under consideration is 54.3% with a standard deviation of 15.3%. It also shows that POI grew from a minimum of 27% to a maximum of 88% within the last three decades. The trend of aggregate poverty as depicted by the line graph (figure 4.1) shows that the incidence of poverty increased somewhat steadily from 1980 (27%) until 2002 when poverty index reached its apex of 88%. However, between 2002 and 2004, there was a sharp decline in poverty percentage from 88 to about 54%. This rate was sustained up to 2006, and by
2007 to 2010 the upward movement in the poverty trend resumed from 54% to about 70% in 2010.

![Figure 4.1: Trend of Poverty Incidence (POI) in Nigeria (1980-2010)](image)

**Source:** Field work (2013)

Also, the statistics show that the minimum and maximum RGDPPC in Nigeria for the period under consideration were respectively N417.6166 and N4895.377, while the mean and standard deviation were respectively N2930.764 and N922.0959.

![Figure 4.2: Trend of RGDP and RGDPPC (1980-2010)](image)

**Source:** Field Work (2013)
The trend of RGDPPC shows steady increases in absolute terms for the period considered after a sharp take-off from 1980 to 1981. This was probably due to adjustment in the computation of data. Incidentally, economic growth indicators (RGDPPC) and poverty indicator (POI) manifest similar observable trends and direction (figure 4.1 and 4.2) contrary to conventional wisdom and our expectation. The likely explanation is that Nigeria’s economic growth is not an inclusive growth.

The rate of inflation (INF) in the past three decades has also shown some interesting characteristics. The minimum and maximum inflation rates during the period are 5.4% and 73% respectively, while the mean rate is about 21% with a standard deviation of 17.8%. The trend of inflation in the country as depicted by the line graph (figure 4.3) indicates that inflation had been irregular and unpredictable with the highest rate recorded in 1995.

Figure 4.3: Trend of Inflation (1980-2010)

Source: Field Work (2013)
4.3.2 Descriptive Statistic of Budgetary Allocation to Key sectors of the Economy

Table 4.2 and figure 4.4 gives a brief and interesting insight into the trend of budgetary allocation to four key sectors of the Nigerian economy, namely: Agriculture (BAAGR), Education (BAEDU), Health (BAHLT) and Transport and Communication (BATCOM).

Table 4.2: Descriptive Statistic of Budgetary Expenditure and Allocation to Four Key Sectors of the Economy (1980-2010)

<table>
<thead>
<tr>
<th></th>
<th>BAAGR</th>
<th>BAEDU</th>
<th>BAHLT</th>
<th>BATCOM</th>
<th>TBEXP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>29769.60</td>
<td>55889.60</td>
<td>33664.81</td>
<td>21130.58</td>
<td>672286.4</td>
</tr>
<tr>
<td>Median</td>
<td>5574.000</td>
<td>12728.70</td>
<td>4851.500</td>
<td>4690.300</td>
<td>153495.6</td>
</tr>
<tr>
<td>Maximum</td>
<td>176549.1</td>
<td>271251.3</td>
<td>164915.0</td>
<td>183157.9</td>
<td>3381000.</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>48890.83</td>
<td>79320.60</td>
<td>51610.65</td>
<td>38813.61</td>
<td>912923.4</td>
</tr>
<tr>
<td>Observations</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Field Study (2013)

Table 4.2 reveals that the minimum allocations to these four sectors are N0.285b, N0.654b, N0.190b and N0.304b respectively out of a total minimum budgetary expenditure of N11.081b. The maximum budgetary allocations within the period were N176.5b, N271.3b, N164.9b and N183.2b respectively out of a total maximum budgetary estimate of N3.4trillion. Table 4.2 also shows that the average allocations during the period under consideration are N29.8b, N55.9b, N33.7b and N21.1b for BAAGR, BAEDU, BAHLT, and BATCOM respectively. Figure 4.4 reveals that the aggregate total allocation to these four sectors for 31 years (1980-2010) was 21%, made up of agriculture 5%, education 8%, health 5% and transport and communication 3%.
4.3.3: Descriptive Statistics of Actual Government Expenditure Classified by Function

A descriptive summary of actual government expenditure is shown in table 4.3 and 4.4 as well as figure 4.5, 4.6 and 4.7. Table 4.3 reveals that the mean actual government expenditure in 31 years (1980-2010) is N809.9 billion comprising of N262.0b for administration, N189.9b for economic services, N115.9b for social services and N242.1b for Statutory transfers. The maximum actual expenditure within the period under consideration is N3.99trillion while the minimum is N9.64 billion. However, the percentage analysis of government’s actual expenditure as depicted in figure 4.6 reveals that within the period under review, the government spent 32% on administration (ADMIN), 30% on statutory transfers (TRANSFERS), 24% of economic services (ECONS) and 14% on socials and community services (SOCIALS). This functional distribution of government expenditure suggests that government priority within this period was more on ADMIN and TRANSFERS and less on ECONS and SOCIALS.
Table 4.3: Descriptive Statistics of Actual Government Expenditure

<table>
<thead>
<tr>
<th>Category</th>
<th>ADIM</th>
<th>ECONS</th>
<th>SOCIALS</th>
<th>TRANSFERS</th>
<th>TAEXP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>262010.4</td>
<td>189889.2</td>
<td>115888.9</td>
<td>242147.8</td>
<td>809936.2</td>
</tr>
<tr>
<td>Median</td>
<td>42095.70</td>
<td>49067.10</td>
<td>23036.40</td>
<td>117706.2</td>
<td>248768.1</td>
</tr>
<tr>
<td>Maximum</td>
<td>1531649.</td>
<td>825241.3</td>
<td>698339.8</td>
<td>938018.1</td>
<td>3993249.</td>
</tr>
<tr>
<td>Minimum</td>
<td>1362.760</td>
<td>867.5000</td>
<td>591.9900</td>
<td>3863.200</td>
<td>9636.500</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>399575.0</td>
<td>255713.9</td>
<td>178104.9</td>
<td>288802.2</td>
<td>1100132.</td>
</tr>
<tr>
<td>Observations</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Field Study (2013)

However, the value of this functional analysis will be better appreciated if their sectorial make-ups are known. For instance, administration expenditure (ADMIN) consists of general administration expenditure, defence expenditure, internal security expenditure and national assembly expenditure; TRANSFERS consist of public debt services, pension and gratuities, contingencies/subventions and other CFR charges. Economic Services (ECONS) are expenditure on agriculture, construction, transport and communication as well as expenditure on other economic services. Social and Community Services (SOCIALS) are expenditure on education, health and other social and community services (CBN Statistical Bulletin, 2011).

Figure 4.5: Functional Classification of Government’s Actual Expenditure (1980-2010)

Source: Field Work (2013)
The line graph (figure 4.6) further exemplified the trend of sectorial priority in federal government expenditure. The point very clear from the graph, is that ADMIN and TRANSFERS dominated federal government expenditure except for 1997, 1998 and 1999 where the expenditure on economic services took the lead.

![Graph showing trends in government expenditure by function](image)

**Figure 4.6: Trend Line of actual government Expenditure by Function**

**Source: Field Work (2013)**

In the same vein, an analysis of government’s actual recurrent expenditure (table 4.4 and figure 4.7) shows that for 31 years, only 15% of total recurrent expenditure was made on four key sectors of Nigeria’s economy, namely, agriculture (AREAGR) 4%, education (AREEDU) 7%, health (AREHLT) 2% and transport and communication (ARETCOM) 2%, while 85% was spent on other sectors (figure 4.8). This statistic is an additional pointer to where government places her priority and also corroborates the functional analysis of government’s actual expenditure shown in figure 4.6. It is clear from table 4.4 that the maximum and minimum recurrent expenditures during the period under review were N3.11trillion and N4.75billion respectively. The mean recurrent expenditure was N547.83billion with a standard deviation of N798.78. For the agricultural sector, the mean recurrent expenditure is N9.6b, with a standard
deviation of N16.6b, while the maximum and minimum recurrent expenditure are respectively N65.4b and N12.8m. In the education sector, the statistics show that the mean expenditure in 31 years was N40.77 billion with a standard deviation of N55.2b. The maximum and minimum recurrent expenditure were N170.8 billion and N155.8 million respectively.

For the health sector, the recurrent expenditure analysis shows that the maximum expenditure is N99.1 billion; the minimum is N41.3 million while the mean expenditure was N21.8 billion with a standard deviation of N32.5 billion.

Table 4.4: **Descriptive Statistic Recurrent Expenditure on key sectors**

<table>
<thead>
<tr>
<th></th>
<th>AREAGR</th>
<th>AREEDU</th>
<th>AREHLT</th>
<th>ARETCOM</th>
<th>TREXP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>9569.165</td>
<td>40767.03</td>
<td>21799.04</td>
<td>11909.55</td>
<td>547827.8</td>
</tr>
<tr>
<td>Median</td>
<td>1592.560</td>
<td>9746.400</td>
<td>3320.700</td>
<td>1579.110</td>
<td>127629.8</td>
</tr>
<tr>
<td>Maximum</td>
<td>65399.01</td>
<td>170770.6</td>
<td>99119.92</td>
<td>90027.93</td>
<td>3109379.</td>
</tr>
<tr>
<td>Minimum</td>
<td>12.77000</td>
<td>155.8100</td>
<td>41.31000</td>
<td>27.30000</td>
<td>4750.800</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>16628.40</td>
<td>55158.09</td>
<td>32493.47</td>
<td>21591.42</td>
<td>798776.0</td>
</tr>
<tr>
<td>Observations</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)

Also, the analysis of the recurrent expenditure on the transport and communication sectors shows that the mean expenditure was N11.9 billion with a standard deviation of N21.5 billion while the maximum and minimum were respectively N90.0 billion and N27.3 million.

Figure 4.7: **Actual Recurrent Expenditure on Some Selected Sectors (1980-2010)**

Source: Field Study (2013)
4.3.4 Descriptive Analyses of Budgetary Performance Indicators

Table 4.5 shows the frequency statistics of some budgetary performance indices, namely, budget discipline (BDISC), budget variance (BVAR) and actual deficit/surplus (ADEF/SURP). From the table, numerical budget discipline was demonstrated in 9 years out of the 31 years period considered, representing 29% while indiscipline in expenditure manifested in the remaining 22 years representing 71%. It is important to remind us at this point that numerical discipline connotes the ratio of budgeted expenditure to actual expenditure. In other words, it is the ability and or capacity of the government to stay within the budget. To this end, this statistic suggests that, for majority of the years the government spent more than what was budgeted except for 9 years where the actual expenditure was either approximately equal to or lower than the budget.

Table 4.5: Frequency Statistic of some Budgetary Performance Indicators

<table>
<thead>
<tr>
<th></th>
<th>BDISC</th>
<th></th>
<th>BVAR</th>
<th></th>
<th>ADEFSURP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discipline</td>
<td>Indiscipline</td>
<td>Favourable</td>
<td>Adverse</td>
<td>Surplus</td>
<td>Deficit</td>
</tr>
<tr>
<td>Frequency</td>
<td>7</td>
<td>24</td>
<td>7</td>
<td>24</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>Percentage</td>
<td>22.4%</td>
<td>77.4%</td>
<td>22.6%</td>
<td>77.4%</td>
<td>3.2</td>
<td>96.8</td>
</tr>
<tr>
<td>Observation</td>
<td>31</td>
<td></td>
<td>31</td>
<td></td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Total (%)</td>
<td>100%</td>
<td></td>
<td>100%</td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Work (2013)

Figure 4.8: Frequency of Budget Discipline
Source: Field Survey (2013)
The trend of numerical discipline shown graphically in figure 4.9 further explains the trend of budget discipline in Nigeria. It can be observed that most of the marks fall below 1, which indicates indiscipline. The graph depicts discipline between 1980 up to 1985, but fell into indiscipline in 1986 until 2010 except for 2002 where numerical discipline was observed again. It should be noted that 1986 was the year of the adoption of the Structural Adjustment Programme (SAP) with its attendant high demand for the expansion of social infrastructure and productive capacity that was expected to engender growth and poverty reduction (Iyoha, 2002). This explains why BDISC plummeted in 1986 and worsened in the years of transition 1999 - Further more evidence of indiscipline in Nigeria’s budgetary operation can be gleaned from the pictorial comparison between actual and budgeted expenditure shown in figure 4.9. The figure exemplified and amplified the fact that from the 1980s to date, actual expenditure is almost always at the top of budgeted estimates. This trend could be explained substantially as a manifestation of poor budget planning or outright indiscipline actuated by mismanagement.

![Figure 4.9: Trend of Budget Discipline](image)

Source: Field Survey (2013)
Other budget performance indices used to explain the spending culture of government are budget variance (BVAR) and actual deficit/surplus (ADEF/SURP). Table 4.5 shows that budget variance (BVAR) for the 31 years under consideration followed the same frequency as BDISC, with 7 years favourable variance and 24 years of adverse variances. For the actual deficit or surplus during the period, the table shows that 30 out of the 31 years, the government’s actual expenditure exceeded actual revenues. Figure 4.11 reveals the downward trend in both BVAR and ADEF/SURP.
4.3.5. Descriptive Analysis of Public Debt Indices in Nigeria (1980-2010)

Table 4.6 shows the descriptive statistics of some public debt indices, namely, total debt (TDEBT), external debt (EXTD), domestic debts (DOMD), total debt service (TDSERV), the ratio of external debt to export (EDEXP) and the ratio of total debt service to export (TDSEXP).

**Table 4.6: Descriptive statistics of Nigeria Debt indices**

<table>
<thead>
<tr>
<th></th>
<th>TDEBT</th>
<th>EXTD</th>
<th>DOMD</th>
<th>TDSERV</th>
<th>EDEXP</th>
<th>TDSEXP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1910059.</td>
<td>1067495.</td>
<td>842564.8</td>
<td>116267.6</td>
<td>1.608710</td>
<td>0.115161</td>
</tr>
<tr>
<td>Median</td>
<td>1056396.</td>
<td>544264.1</td>
<td>419975.6</td>
<td>51058.40</td>
<td>1.450000</td>
<td>0.090000</td>
</tr>
<tr>
<td>Maximum</td>
<td>6189035.</td>
<td>4890270.</td>
<td>4551822.</td>
<td>415621.7</td>
<td>4.650000</td>
<td>0.370000</td>
</tr>
<tr>
<td>Minimum</td>
<td>10082.40</td>
<td>1866.800</td>
<td>8215.600</td>
<td>256.9500</td>
<td>0.050000</td>
<td>0.020000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>2005150.</td>
<td>1440051.</td>
<td>1118044.</td>
<td>141210.4</td>
<td>1.370656</td>
<td>0.087555</td>
</tr>
<tr>
<td>Observations</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>31</td>
</tr>
</tbody>
</table>

**Source: Field Work (2013)**

From the table, the minimum debt outstanding for the 31 years of this study was N10.1 billion while the maximum total debt outstanding for the period was N6.2 trillion. The mean total debt in the period was N1.9 trillion with a standard deviation of N2.0 trillion. For both external debt (EXTD) and domestic debt (DOMD), the table shows the means as N1.1 trillion with a standard deviation of N1.4 trillion and N842.6 billion with a standard deviation of N1.1 trillion respectively. The maximum and minimum debt outstanding for both the EXTD and DOMD were N4.9 trillion (N1.4 trillion) and N4.6 trillion (N8.2 billion) respectively.

The graphical analysis of EXTD and DOMD shown in figure 4.10 shows that from 1997, EXTD manifested unusual increase and rose to its record high of N4.9 trillion in 2004 before it plummeted to about N451.5 billion in 2006, probably due to debt relief from the Paris Club granted to the country. This has however begun to rise again as the EXTD outstanding as at the end of 2010 was N590.4 billion. Within the period, DOMD had maintained steady increases from N8billion in 1980 to N4.6 trillion in 2010. In summary, the percentage distribution of total debts for the period of 31 years shows that about 54% of total debts were external while 44% were domestic (figure 4.12).
Again, it can be observed from figure 4.12 that TDSERV (total debt service) during the period grew from N256.95 million to N415.6 billion, although with an unpredictable rate. The mean total debt service in three decades was N116.3 billion with a standard deviation of N141.2 billion.

![Percentage Distribution of Total Debt (1980-2010)](image)

**Figure 4.12: Graphical Presentation of Debt Indices (1980-2010)**

**Source:** Field Work (2013)

Furthermore, the ratio of total debt service to export during the period of study shows a maximum of 0.4 and minimum of 0.02, while the ratio of external debt to export shows a maximum of 4.7 and a minimum of 0.05 with a mean of 1.6. These statistics are further explained by the trend graph in figure 4.10d demonstrate the fact that external debts is more related to export than total debts.

**4.4: Inferential Data Analysis- Secondary Data**

In this section, the data in this study were subjected to inferential statistical analyses. The objective was to discover the strength and direction of the relationships between the dependent variable (Poverty Index) and the independent variables considered in this work. Specifically, the analyses conducted in this section include: correlation analyses, partial correlation analysis and Ordinary Least Square (OLS) regression analyses. The co-integration regression test was conducted to gauge the long-run relationship
between the explained and explanatory variables in models one and two. The analyses were guided by the two definitional models and other analytical framework specified in Chapter Three, in order to allow for a coherent thought-flow.

However, the characteristics of all the variables used in this study were first diagnosed in terms of normality, outliers, multicollinearity, autocorrelation and stationarity. This was to ensure that the data were not contaminated and our analysis and its interpretation were valid and reliable. According to Ganger and Newbold (1974), cited in Birowo (2011), the violation of this precondition by a data set in a model might produce a spurious regression result. A spurious regression usually has a $R^2$ and a $t$-statistics that appear to be significant but the results are without any economic meaning.

### 4.4.1: Normality Test of Variables

To test for the normality of the distribution of variables, the Kolmogorov-Smirnov test, the histogram as well as the normal probability plots were employed. According to the rule of the thumb, a non-significant Kolmogorov-Smirnov coefficient (sig. value of more than 0.05) indicates normality, while a significant K-S coefficient is an indication of the violation of the normality assumption (Pollant, 2011). The Histogram reveals the actual shape of the distribution of scores for which a curve can be fitted. If the curve fitted on the histogram appears normal, then the distribution is normal. Also, the Normal Q-Q plot was used to lend support to the result of the histogram. In this plot, the observed value for each score is plotted against the expected value from the normal distribution. If a straight line fits the data reasonably well, then, it can be concluded that the values are normally distributed (Gujarati, 2004; Pollant, 2011).

Table 4.7 shows the result of the Kolmogorov-Smirnov (K-S) tests before transformation (A) and after transformation (B). The table reveals that before transformation only two variables, namely, BDISC, and EDEXP, passed the
normality test, since their K-S coefficients had sig. values greater than the 0.05 benchmark. All other variables namely: POI, INF, BAEDU, BAAGR, BAHLT, BATCOM, TBEXP, TDSERV and RGDPPC had statistically significant K-S coefficients (sig value less than 0.05); hence, they fell short of the normality assumption.

Table 4.7: Tests of Normality

<table>
<thead>
<tr>
<th>A</th>
<th>Kolmogorov-Smirnov (a) Before Transformation</th>
<th>B</th>
<th>Kolmogorov-Smirnov (a) After Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
<td>Sig.</td>
</tr>
<tr>
<td>POI</td>
<td>.164</td>
<td>31</td>
<td>.032</td>
</tr>
<tr>
<td>INF</td>
<td>.241</td>
<td>31</td>
<td>.000</td>
</tr>
<tr>
<td>BAEDU</td>
<td>.273</td>
<td>31</td>
<td>.000</td>
</tr>
<tr>
<td>BAAGR</td>
<td>.288</td>
<td>31</td>
<td>.000</td>
</tr>
<tr>
<td>BAHLT</td>
<td>.295</td>
<td>31</td>
<td>.000</td>
</tr>
<tr>
<td>BATCOM</td>
<td>.296</td>
<td>31</td>
<td>.000</td>
</tr>
<tr>
<td>TBEXP</td>
<td>.276</td>
<td>31</td>
<td>.000</td>
</tr>
<tr>
<td>BDISC</td>
<td>.150</td>
<td>31</td>
<td>.072</td>
</tr>
<tr>
<td>TDSERV</td>
<td>.245</td>
<td>31</td>
<td>.000</td>
</tr>
<tr>
<td>EDExp</td>
<td>.127</td>
<td>31</td>
<td>.200(*)</td>
</tr>
<tr>
<td>RGDPPC</td>
<td>.260</td>
<td>31</td>
<td>.000</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance.
  a Lilliefors Significance Correction

Source: Field Work (2013)

However, upon inspection of the histogram and the Normal probability plot (Normal Q-Q plot) shown in appendix 2, POI, appeared to be reasonably normally distributed as its normal Q-Q plot indicated that the values are approximately well fitted on a straight line. But variables that manifested gross violation of the normality assumptions were transformed into either their logarithmic form or proportions. This is in consonance with the recommendation in literature that data having linearity and normality problems require to be transformed through logging, quadratic form, cubic, square root or other forms of data (Gujarati, 2004).

The right side of table 4.7 shows the K-S normality test for the transformed variables. It was observed that all the variables except LPBATCOM have K-S coefficients that are not significant, indicating that they are normally distributed. Again, upon inspection of the histogram and the normal Q-Q plot of
LPBATCOM, it shows that the values are reasonably normally distributed. Hence, further transformation was not considered necessary.

4.4.2: Testing for Outliers
In testing for outliers (i.e. values that are substantially higher or lower than other values in the data set), the box plots technique was employed. The values considered as outliers appear as little circle outside the box, with ID numbers attached to them. Extreme points are indicated with an asterisk (*). Figure 4.13 show the box plots for all variables. The result revealed that outliers were identified only in BDISC (ID numbers 1, 5 representing 1.76 and 1.61 respectively), but no extreme values existed.

Figure 4.13: Box Plot test for Outliers

Source: Field Work (2013)

Although no extreme outliers were reported by the boxplots, it was still necessary to investigate the outlying values if they were errors or genuine. To that end, all the values were found to be genuine. In order to detect whether the outliers will distort the result of the analysis significantly or not, the mean and the 5% trimmed mean of the affected variable (BDISC) were compared. If the trimmed mean and mean are very different, it indicates that the outliers will have high impact or influence on the data set and thus can distort the result of the inferential analyses. If, on the other hand, the two means are not very different, it indicates that the outlying values do not have much impact on the
data set and will not significantly affect the result of the analyses (Pallant, 2011). Table 4.8 shows that the mean and 5% trimmed mean of BDISC are not very far apart, indicating that the outliers do not have strong influence on the data set, and as such will not significantly distort the result of the inferential analyses.

Table 4.8: Comparing the mean and trimmed mean of variable with outliers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>5% Trimmed Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDISC</td>
<td>0.8618</td>
<td>0.8388</td>
</tr>
</tbody>
</table>

Source: Field Study (2013)

4.4.3: Test of Multicollinearity and Singularity

The independent assumption of parametric techniques demands that the variables in any particular model are free from multicollinearity and singularity. Multicollinearity is said to exists when two independent variables are highly correlated, while singularity exist when one independent variable is actually a combination of other independent variables (Pollant, 2011). It has been theorised that as the degree of multicollinearity increases, the regression model estimates of the coefficients become unstable, the standard errors for the coefficients can get wildly inflated and the $R^2$ can be misleadingly very high even when the ‘T’ statistics of some of the coefficients are statistically insignificant (Guajarati, 2004, Birowo, 2011).

In order to diagnose the threat of multicollinearity of independent variables, this study engages the Tolerance Value (TV), the Variance Inflation Factor (VIF) and the Coefficient of correlation ‘R’. The TV is an indicator of how much of the variability of the specific independent variable is not explained by the other independent variables in the model. If the TV is very small, may be less than 0.10, it indicates that the correlation of an independent variable with other independent variables is very high, suggesting the possibility of multicollinearity. VIF on the other hand is an inverse or the reciprocal of TV.
Traditionally, multicollinearity does not constitute a problem when the VIF does not exceed 10 (Pollant, 2011). If the ‘R’ is applied, multicollinearity is a potential problem if the absolute value of the sample correlation coefficient ‘R’ exceeds 0.7 for any two of the independent variables (Williams, Sweeney and Anderson, 2006), while Pollant (2011) recommended that ‘R’ must be 0.9 and above for multicollinearity to constitute a problem.

Tables 4.9 and 4.10 show the results of the TV and VIF for model 1, model 2 respectively.

**Table 4.9: Collinearity Statistics of Model One (a)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>Variance Inflation Factor (VIF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINF</td>
<td>.959</td>
<td>1.043</td>
</tr>
<tr>
<td>LPBAEDU</td>
<td>.531</td>
<td>1.884</td>
</tr>
<tr>
<td>LPBAAGR</td>
<td>.635</td>
<td>1.576</td>
</tr>
<tr>
<td>LPBAHLT</td>
<td>.522</td>
<td>1.916</td>
</tr>
<tr>
<td>LPBATCOM</td>
<td>.658</td>
<td>1.519</td>
</tr>
</tbody>
</table>

Source: Field Work (2013)

In Table 4.9, all the variables used in model one have their tolerance values more than 0.10 and VIFs well below 10 indicating low correlation among the variables. Thus, multicollinearity does not constitute a potential problem for model one.

Similarly, Table 4.10 reveals that model 2 does not suffer from the multicollinearity problem. This is because the tolerance values (TV) of all the variables are well above the 0.10 benchmark and their variance inflation factors (VIF) are far below 10.

**Table 4.10: Collinearity Statistics of Model Two**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>Variance Inflation Factor (VIF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINF</td>
<td>.923</td>
<td>1.084</td>
</tr>
<tr>
<td>LTDSERV</td>
<td>.719</td>
<td>1.391</td>
</tr>
<tr>
<td>LBDISC</td>
<td>.772</td>
<td>1.296</td>
</tr>
<tr>
<td>LEDEXP</td>
<td>.752</td>
<td>1.329</td>
</tr>
</tbody>
</table>

Source: Field Work (2013)
4.4.4 Correlation Analysis

Correlation is employed in this section to numerically quantify the strength and direction of the relationship that exists between the predictor variable (Poverty Incidence POI) and the explanatory variables namely budgetary allocations, budget discipline and debt burden corresponding to models one and two. Partial correlation (although an extension of the Pearson Moment Correlation) was preferred in this study. The reason is that, Partial Correlation measures the relationship between two variables while controlling other intervening variables. In other words, it statistically removes the influence of other confounding variables, thus allowing for a cleaner picture and statistically more accurate and actual relationship between the variables of interest (Pollant, 2011)

4.4.4.1 Partial Correlation Analysis: Model One ‘A’

Table 4.11 presents the partial correlation matrix of model one; That is the relationships in terms of strength and direction between budget allocations to agriculture (LPBAAGR), education (LPBAEDU), health (LPBAHLT), transport and communication (LPBATCOM) and the dependent variable poverty incidence (POI). The result indicates that the relationships between three explanatory variables (LPBAAGR, LPBAEDU and LPBATCOM) and the incidence of poverty (POI) are negative but not significant, while LPBAHLT bears a positive and significant relationship with POI. More explicitly, the result reveals that the proportion of budget allocated to agriculture (PBAAGR) (R = -0.0127, Sig. = 0.9500), the proportion of budget allocated to education (PBAEDU) (R = -0.645, Sig. = 0.7491) and the proportion of budget allocated to transport and communication (PBATCOM) (R = -0.1452, Sig. = 0.4700) are inversely associated with the incidence of poverty in Nigeria. Although, their coefficients are not statistically significant, their directions are in consonance with our a priori expectation. The implication of these observed directions, judging from their negative signs, is that increase in budgetary allocation to these key sectors can lower the rate of poverty in Nigeria.
Table 4.11: Partial Correlation Matrix for Model One

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LINF</td>
<td>0.0663</td>
<td>0.0463</td>
<td>0.0044</td>
<td>0.0021</td>
<td>0.7426</td>
</tr>
<tr>
<td>LPBAAGR</td>
<td>-0.0127</td>
<td>-0.0088</td>
<td>0.0002</td>
<td>0.0001</td>
<td>0.9500</td>
</tr>
<tr>
<td>LPBAEDU</td>
<td>-0.0645</td>
<td>-0.0451</td>
<td>0.0042</td>
<td>0.0020</td>
<td>0.7491</td>
</tr>
<tr>
<td>LPBAHLT</td>
<td>0.6026</td>
<td>0.5266</td>
<td>0.3631</td>
<td>0.2773</td>
<td>0.0009</td>
</tr>
<tr>
<td>LPBATCOM</td>
<td>-0.1452</td>
<td>-0.1023</td>
<td>0.0211</td>
<td>0.0105</td>
<td>0.4700</td>
</tr>
</tbody>
</table>

Source: Field Work (2013)

Also, Table 4.11 reveal that both the proportion of budget allocated to health (LPBAHLT) ($R = -0.6026$, Sig. = 0.0009), and inflation rate (LINF) ($R = 0.0663$, Sig. = 0.7426) are directly associated with poverty reduction in Nigeria. While the sign of LINF was expected, the direction of LPBAHLT contravenes our a priori expectation. Expenditure on health is expected to reduce ill-health and mortality and increase wellness, vitality and longevity which should translate into the prosperity of the people and nation. But for the period under consideration, the reverse has been the case. The likely explanation to this, is that allocation to health have not been channelled to achieve the purpose for which it was meant, hence, it is moving in the same direction with poverty. Inflation on the other hand, theoretically has a direct relationship with the poverty rate. This is because inflation posed additional burden on the disposable income of individuals and communities and reduced their purchasing power.

4.4.5.2: Partial Correlation Analysis for Model One ‘B’

Model one ‘B’ combines the four sectorial allocation variables, namely, agriculture, (PBAAGR), education (PBAEDU), health (PBAHLT) and transport and communication (PBATCOM) into one Variable (PBAKS). This is to enable the assessment of the relationship between the proportion of budget allocated to these key sectors of the economy and the dependent variable poverty rate (POI).
Table 4.12 shows the partial correlation result for model one ‘B’. The result indicates that LPBAKS is negatively associated with LPOI. Although the coefficient (-0.0768 or 7%) is not statistically significant, judging from its sig value (0.06920) which is greater than 0.05, the direction of this relationship is of practical significance. It implies that increase in the proportion of budgetary allocations to agriculture, education, health and transport and communication will lead to a decrease in the incidence of poverty in an insignificant rate.

The coefficients of LRGDPPCP and LINF are 0.5686 and -0.0890 respectively, indicating that LRGDPPCP is positively related with LPOI, while LINF is negatively related with LPOI contrary to our a priori expectation.

Table 4.12: Partial Correlation Model One ‘B’

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LPBAKS</td>
<td>-0.0768</td>
<td>-0.0632</td>
<td>0.0059</td>
<td>0.0040</td>
<td>0.6920</td>
</tr>
<tr>
<td>LRGDPPCP</td>
<td>0.5686</td>
<td>0.5665</td>
<td>0.3233</td>
<td>0.3210</td>
<td>0.0013</td>
</tr>
<tr>
<td>LINF</td>
<td>-0.0890</td>
<td>-0.0732</td>
<td>0.0079</td>
<td>0.0054</td>
<td>0.6462</td>
</tr>
</tbody>
</table>

Source: Field Work (2013)

4.4.4.3: Partial Correlation Analysis: Model Two

Model two combines the variables in hypothesis two (budget discipline) and hypothesis three (budget efficiency) as they relate and influence the poverty rate in Nigeria. The partial correlation result is presented in Table 4.13. The result reveals that all the explanatory variables except the inflation rate (LINF) have positive relationship with poverty rate in Nigeria, although not statistically significant except for LITDSERV whose coefficient (R = 0.7305) is significant even a 1% level. Specifically, the correlation between budget discipline (BDISC) and poverty incidence (LPOI) show an R = 0.1748 and a Sig. value of 0.3735, indicating an insignificant positive association. Although the coefficient
is not significant statistically, the direction of this association is a contravention of our expectation, but it is a true reflection of the nature of budget discipline in Nigeria as exemplified by the descriptive statistics shown in Table 4.5 and Figure 4.9. The descriptive statistics reveals that for 24 years (77%) out of the 31 years considered, budget indiscipline was operated while discipline was only operated for 7 years (23%). To this extent, this result can be reinterpreted to read that budget indiscipline moved in the same direction with the poverty rate.

Table 4.13: Partial Correlation Matrix for Model Two

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BDISC</td>
<td>0.1748</td>
<td>0.1116</td>
<td>0.0306</td>
<td>0.0125</td>
<td>0.3735</td>
</tr>
<tr>
<td>EDExp</td>
<td>0.1746</td>
<td>0.1114</td>
<td>0.0305</td>
<td>0.0124</td>
<td>0.3742</td>
</tr>
<tr>
<td>LINF</td>
<td>-0.1995</td>
<td>-0.1279</td>
<td>0.0398</td>
<td>0.0164</td>
<td>0.3088</td>
</tr>
<tr>
<td>LTDSERV</td>
<td>0.7305</td>
<td>0.6723</td>
<td>0.5337</td>
<td>0.4520</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Field Work (2013)

For external debt to export ratio (EDExp) and total debt serviced (LTDSERV), the direction are as expected; however, only LTDSERV is statistically significant. These indicate that increase in debt will also increase the rate of poverty in the country. The theoretical explanation to this symbiotic association is that external debt and its attendant repayments deplete national resources especially when they are not channelled into viable and value-based projects. EDExp is not significant because it is a ratio of external debt to exports, and export reduces the burden of debt, especially when export is used to net-out the debt. The control variable, which is the inflation rate (LINF), bears an unexpectedly negative relationship with POI, although not significant at 1%, 5% and even 10% levels.
4.4.6: Ordinary Least Square (OLS) Regression Analyses

In order to further examine the relationships between the attributes of public budget (allocations, discipline and efficiency) and the incidence of poverty in Nigeria, the OLS regression was employed. Although OLS is based on correlation, it allows for a more sophisticated exploration of the interrelationship among a set of variables, which make it ideal for the investigation of more complex real-life, rather than laboratory-based research (Gujarati, 2004; Pollant, 2011). Tables 4.14, 4.15 and 4.16 present the results of model one ‘A’, model one ‘B’ and model two respectively.

4.4.6.1 OLS Regression: Model One ‘A’

In model one, specified in Chapter Three and re-stated below, we seek to measure the predictable power of the proportion of budgetary allocations to selected sectors of the economy, namely; agriculture, education, health and transport and communication on poverty rate measured by the poverty index (POI). The original model is restated in its log-linear form, in line with prior studies that applied the log-linear model to investigate closely related variables.

\[
LPOI = \alpha_0 + \alpha_1 LPBAAGR + \alpha_2 LPBAEDU + \alpha_3 LPBAHLT + \alpha_4 LPBATCOM + \alpha_5 LINF + \epsilon
\]

Besides, a log linear form allows a direct estimation and interpretation of the coefficient of the model (Akpan, 2006). Also, if the multiple regression restrictions are met and the structural stability of the data set is guaranteed, both a linear model and the log-linear model produce similar results (Gujarati, 2004).

The regression result of model one (Table 4.14) shows \( R^2 \) of 0.5136 and an adjusted \( R^2 \) of 0.4163, indicating that about 42% of the variance in the dependent variable (poverty incidence-POI) is accounted for by the explanatory variables in this model, namely LPBAAGR, LPBAEDU, LPBAHLT, LPBATCOM and LINF. In other words, about 42% of the variability in the incidence of poverty (POI) is determined by the model variables. This also
indicates that the model is statistically significant in explaining the endogenous variable as exemplified by the F statistic which is significant at 1% level (F = 5.28, P-value = 0.0019)

Specifically, the result indicates that LPBAAGR, LPBAEDU and LPBATCOM have negative effect on the incidence of poverty, while LPBAHLT and LINF are directly associated with the incidence of poverty (POI). The coefficients indicate that a 100% increase in budgetary allocation to agriculture (LPBAAGR), education (LPBAEDU) and transport and communication (LPBATCOM) will reduce the poverty rate (POI) by about 0.53%, 3.2% and 5.5% respectively. On the other hand, a 100% increase in budgetary allocation to health (LPBAHLT) will explode the poverty rate by about 39.2%, while a 100% increase in inflation rate (LINF) will increase poverty by about 2%.

Table 4.14: Least Square Regression Result for Model One ‘A’

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>1.29882189</td>
<td>5</td>
<td>.259764378</td>
<td>F( 5, 25) = 5.28</td>
</tr>
<tr>
<td>Residual</td>
<td>1.22991754</td>
<td>25</td>
<td>.049196702</td>
<td>Prob &gt; F = 0.0019</td>
</tr>
<tr>
<td>Total</td>
<td>2.52879343</td>
<td>30</td>
<td>.084291314</td>
<td>Adj R-squared = 0.4163</td>
</tr>
</tbody>
</table>

| LPOI | Coef. | Std. Err. | t | P>|t| | [95% Conf. Interval] |
|------|-------|-----------|---|-----------|----------------------|
| LINF | 0.0181289 | 0.0545872 | 0.33 | 0.743 | -.0942956 .1305534 |
| LPBAAGR | -0.0053496 | 0.0843825 | -0.06 | 0.950 | -.236372 .092163 |
| LPBAEDU | -0.0320806 | 0.0991928 | -0.32 | 0.749 | -.236372 .1722107 |
| LPBAHLT | 0.0548904 | 0.0748259 | 0.73 | 0.470 | -.2089972 .0992163 |
| LPBATCOM | 0.0387984 | 0.2159879 | 17.68 | 0.000 | 3.373149 4.26282 |

Source: Field Work (2013)

Although only the coefficient of LPBAHLT is statistically significant at 1%, 5% and even 10% levels, the direction of the relationships is of practical significance. More plainly, the revelation of the signs is that increase in budgetary allocation to agriculture, education and transport and communications has the capacity to slow down the incidence of poverty in Nigeria. However, that can only happen if allocations are properly managed and
monitored to ensure that resources are not misspent. For allocation to health, the
direction is a violation of a priori expectation. Expenditure on the health sector
is expected to increase the wellness of citizens which should translate into
prosperity for the people. But the reverse is the case as exemplified by this
result, and then it suggests that something is practically wrong that needs to be
investigated. Nevertheless, this result is in consonance with prior studies,
particularly Akpan (2006)

4.4.6.2 OLS Regression: Model One ‘B’

Model one ‘B’ is an adjunct model to model one ‘A’. It combines the four main
independent variables of model one ‘A’ to form a new variable called PBAKS
(Proportion of Budgetary Allocation to Key sectors), then added inflation
(LINF) and RGDPPCP as control Variables. The rationale was to determine the
combined effect of budget allocated to these sectors on poverty reduction in
Nigeria. The model is re stated below;

\[ LPOI = \beta_0 + \beta_1 LPBAKS + \beta_2 LRGDPPCP + \beta_3 LINF + \varepsilon \]

From the OLS result (Table 4.15), the relationship between LPBAKS and LPOI
is negative and insignificant since only about 6% change in LPOI will be
acted by a 100% change in LPBAKS, hence the ‘t’ value is less than 2 (-
0.40; p-value 0.692). This is a further confirmation of the partial correlation
result discussed in the previous section. The relationships between LPOI and
the control variables (LRGDPPCP and LINF) also confirm the result of the
partial correlation and negate our a priori expectation.

Meanwhile, the adjusted coefficient of determination of the model (Adj.R²)
indicates that about 25% of the variation in the dependent variable (LPOI) is
explained by the combined effect of the explanatory variables. The model is
also significant at 5% (F-value = 4.40, Prob.= 0.0121).
### Table 4.15: Least Square Regression Result For Model One ‘B’

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>8.30192475</td>
<td>3</td>
<td>.276730825</td>
<td>Prob &gt; F = 0.0121</td>
</tr>
<tr>
<td>Residual</td>
<td>1.69854695</td>
<td>27</td>
<td>.062909146</td>
<td>R-squared = 0.3283</td>
</tr>
<tr>
<td>Total</td>
<td>2.52873943</td>
<td>30</td>
<td>.084291314</td>
<td>Adj R-squared = 0.2537</td>
</tr>
</tbody>
</table>

### Table 4.16: Least Square Regression Result for Model Two

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>4.40</td>
<td>4</td>
<td>1.08567825</td>
<td>F(  4,    26) = 9.96</td>
</tr>
<tr>
<td>Residual</td>
<td>.967825</td>
<td>26</td>
<td>.037462346</td>
<td>Prob &gt; F = 0.0001</td>
</tr>
<tr>
<td>Total</td>
<td>6.967825</td>
<td>30</td>
<td>.232.841183</td>
<td>R-squared = 0.6050</td>
</tr>
</tbody>
</table>

### 4.4.6.3: OLS Regression: Model Two

Model two measures the influence of budget performance indicators on the poverty rate in Nigeria. These performance indices include: budget discipline (BDISC), external debt to export ratio (EDEexp) and total debt service (TDSERV), while inflation (INF) serves as a control variable. Again, model two includes log transformation of total debt service and inflation due to the non-normality of their absolute values. The model is restated as follows;

\[ POI = \Psi_0 + \Psi_1 BDISC + \Psi_2 EDEexp + \Psi_3 INF + \Psi_4 TDSERV + \varepsilon \]
Table 4.16 presents the regression result for model two. The result indicates that the model accounts for about 54.4% of the variation in the regressand judging from the adjusted R², leaving about 45.6% of the variation to be explained by variables not captured in this model. Also, the F statistic of 9.96 with its associated P-value of 0.0001 indicates the fitness of the model in explaining poverty incidence in Nigeria with 99% confidence.

With respect to the individual regressors, the result shows that all the regressors except LINF are positively associated with the dependent variable - Poverty index. Specifically, it reveals that a unit change in budget discipline (BDISC), will lead to a more than proportionate change in poverty incidence but in the same direction (coefficient = 6.904746). Although, the coefficient is not statistically significant judging from its t value of 0.91 and p-value of 0.374, it direction is not in tandem with our a priori expectation. Again, as already noted in the section on partial correlation, the result is a true reflection of reality. This is because, predominantly, budget numerical indiscipline has become a norm instead of an exception in Nigeria. To that extent, it will not be out of place to state that budget indiscipline is positively related with poverty incidence.

For the variables representing budget efficiency measures, which are; total debt service (LTDSERV) and external debt to export ratio (EDExp), their coefficient are expectedly positively signed, confirming that there exist a symbiotic relationship between debt and poverty rate. However, only LTDSERV indicate significant influence on poverty. External debt to export ratio is not significant, possibly because export which is the denominator may have deflated its influence on poverty. Nevertheless, the direction of budget efficiency measures has economic implications. Among others, it suggests that a reduction in public debts will invariably lead to a reduction in poverty rate in the country and vice-versa. Inflation rate which is the control variable in this model bears a negative but insignificant effect on poverty. This is not in agreement with our
expectation; it however indicates that inflation is not a determinant of poverty in Nigeria.

**4.4.7 Cointegration Regression Analysis**

Having explored the short-run relationships between poverty incidence and the attributes of public sector budget, using both partial correlation and standard OLS regression analysis, it was germane to also investigate the long-run effects of those exogenous variables on the endogenous variable. To this end, the cointegration test was conducted. The cointegration test was used to investigate the existence of a long run equilibrium relationship(s) among the variables in the two models. The Johansen cointegration approach was preferred, since it is adjudged to perform better than other techniques (Koop, 2009). Also, the Johansen test is said to be very sensitive to the lag length employed in the Vector Error Correction Model (VECM); including too many lags will increase the coefficient standard errors since the additional parameters will simply use up available degrees of freedom, and including too few lags will not remove all the autocorrelation, thus biasing the result (Brooks, 2008 cited in Olayiwola and Okodua, 2010). To this end, considerable time was devoted to the selection of the variables lag lengths by minimizing the Akaike information criterion.

However, as a necessary but not sufficient condition for cointegration, the data set must be at the same order of stationarity. In that respect, the Augmented Dickey Fuller (ADF) Unit Root Test was conducted.

**4.4.7.1: Augmented Dickey Fuller (ADF) Unit Root Test**

As a precursor for conducting a cointegration regression, stationarity characteristics of the time series data were tested. To that end, this study adopted the Augmented Dickey Fuller (ADF) unit root test. The test result is summarised in table 4.17. The result show that six of the variables, tested namely LINF, LPBAAGR, LPBAEDU, LPBATCOM, LBDISC and LTSERV were stationary at level (order 1(0)), while four remaining variables namely LPOI, LRGDPPC, LPBAHLT and LEDEXP were stationary at first difference (order 1(1)). Although in a Cointegration model the problem of spurious regression does not
apply and the coefficient from the regression is the long run multiplier (Koop (2009), the log transformations of all the variables were used to allow for direct interpretation of the result.

Table 4.17: Augmented Dickey Fuller Unit Root Test for Stationarity

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF Test Statistic</th>
<th>Prob.</th>
<th>1%</th>
<th>5%</th>
<th>10%</th>
<th>Order of Stationarity</th>
<th>Sig level</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPOI</td>
<td>-3.138070</td>
<td>0.0360</td>
<td>-3.711457</td>
<td>-2.981038</td>
<td>-2.629906</td>
<td>First Difference</td>
<td>5%</td>
</tr>
<tr>
<td>LRGDPCC</td>
<td>-36.16104</td>
<td>0.0001</td>
<td>-3.679322</td>
<td>-2.967767</td>
<td>-2.622989</td>
<td>First Difference</td>
<td>1%</td>
</tr>
<tr>
<td>LINF</td>
<td>-3.572355</td>
<td>0.0129</td>
<td>-3.679322</td>
<td>-2.967767</td>
<td>-2.622989</td>
<td>Level</td>
<td>5%</td>
</tr>
<tr>
<td>LPBAAGR</td>
<td>-4.712866</td>
<td>0.0007</td>
<td>-3.679322</td>
<td>-2.967767</td>
<td>-2.622989</td>
<td>Level</td>
<td>1%</td>
</tr>
<tr>
<td>LPBAMEDU</td>
<td>-4.150255</td>
<td>0.0030</td>
<td>-3.670170</td>
<td>-2.963972</td>
<td>-2.621007</td>
<td>Level</td>
<td>1%</td>
</tr>
<tr>
<td>LPBAHLT</td>
<td>-5.480400</td>
<td>0.0001</td>
<td>-3.711457</td>
<td>-2.981038</td>
<td>-2.629906</td>
<td>First Difference</td>
<td>1%</td>
</tr>
<tr>
<td>LPBATCOM</td>
<td>-3.006250</td>
<td>0.0000</td>
<td>-3.670170</td>
<td>-2.963972</td>
<td>-2.621007</td>
<td>Level</td>
<td>1%</td>
</tr>
<tr>
<td>LBDISC</td>
<td>-3.269686</td>
<td>0.0256</td>
<td>-3.670170</td>
<td>-2.963972</td>
<td>-2.621007</td>
<td>Level</td>
<td>5%</td>
</tr>
<tr>
<td>LEDEXP</td>
<td>-3.844107</td>
<td>0.0067</td>
<td>-3.679322</td>
<td>-2.967767</td>
<td>-2.622989</td>
<td>First Difference</td>
<td>1%</td>
</tr>
<tr>
<td>LTDSERV</td>
<td>-3.388034</td>
<td>0.0217</td>
<td>-3.737853</td>
<td>-2.991878</td>
<td>-2.635542</td>
<td>Level</td>
<td>5%</td>
</tr>
<tr>
<td>LRGDPCCP</td>
<td>-3.346070</td>
<td>0.0248</td>
<td>-3.769596</td>
<td>-3.004860</td>
<td>-2.642241</td>
<td>First Difference</td>
<td>5%</td>
</tr>
<tr>
<td>LPBAMS</td>
<td>-3.897369</td>
<td>0.0057</td>
<td>-3.670169</td>
<td>-2.963971</td>
<td>-2.621007</td>
<td>Level</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: Field Work (2013)

4.4.7.2: Cointegration Regression: Model One ‘A’

Table 4.18 and Table 4.19 show the result of the Cointegration test for model one ‘A’. The test includes assumptions that allow for linear deterministic trend in data, intercept but no trend in Cointegration equations (CE) and test VAR. These assumptions are in any case consistent with the level that minimises the Akaike information criterion for the selection of the optimal lag interval of (1, 1).
Table 4.18: Unrestricted Cointegration Rank Test for model 1 (Johansen Technique)

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Trace Test</th>
<th>0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized Trace</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>Statistic</td>
<td>Critical Value</td>
</tr>
<tr>
<td>None *</td>
<td>0.841003</td>
<td>135.6966</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.678521</td>
<td>82.36943</td>
</tr>
<tr>
<td>At most 2 *</td>
<td>0.642696</td>
<td>49.45958</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.328581</td>
<td>19.61368</td>
</tr>
</tbody>
</table>

Maximum Eigenvalue

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Max-Eigen</th>
<th>0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized Max-Eigen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>Statistic</td>
<td>Critical Value</td>
</tr>
<tr>
<td>None *</td>
<td>0.841003</td>
<td>53.32717</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.678521</td>
<td>32.90985</td>
</tr>
</tbody>
</table>

Trace test indicate 3 cointegrating equations and Max-eigenvalue test indicate 1 cointegrating equations at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Source: Field Work (2013)

The result reveals three (3) cointegrating equations in the trace test and one (1) cointegrating equation in the Maximum Eigenvalue test (table 4.18), indicating the existence of a long run relationship(s) among the variables.

From the first cointegrating equation normalised at LPOI shown in Table 4.19, the result reveals that all the explanatory variables in this model, namely LPBAAGR, LPBAEDU, LPBAHLT, LPBATCOM and LINF have significant effect on poverty incidence (LPOI) in the long run judging from their t values which are all above 2. However, only the proportion of budgetary allocation to education (LPBAEDU) and inflation rate (LINF) have the expected negative and positive signs respectively.

Table 4.19: Cointegrating coefficients normalized on Poverty Index (POI)

<table>
<thead>
<tr>
<th>coefficient</th>
<th>LPOI</th>
<th>LINF</th>
<th>LPBAAGR</th>
<th>LPBAEDU</th>
<th>LPBAHLT</th>
<th>LPBATCOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand. Error</td>
<td>(0.16006)</td>
<td>(0.30956)</td>
<td>(0.71456)</td>
<td>(0.33832)</td>
<td>(0.18839)</td>
<td></td>
</tr>
<tr>
<td>T-Stat.</td>
<td>4.57986</td>
<td>7.90598</td>
<td>-2.33553</td>
<td>2.23926</td>
<td>2.57211</td>
<td></td>
</tr>
</tbody>
</table>

Cointegrating Equation(s): Log likelihood; -9.514323
Source: Field Work (2013)
Specifically, the result reveals that for every unit increase in budgetary allocation to agriculture (LBAAGGR) health (LBAHLT) and Transport and Communication (LBATCOM), the incidence of poverty will increase by about 2.45, 0.76 and 0.48 respectively. The direction of these relationships violates our a priori expectation and conventional wisdom. Conventionally, increase in allocation to health should reduce illnesses/mortality and increase health/longevity, which should translate to prosperity of a nation via active population. Similarly, expenditure on transportation and communication is expected to increase movement of goods and humans as well as information which has the capacity to facilitate national prosperity. More so, expenditure on agriculture should reduce hunger, which is one of the most notorious manifestations of poverty, hence reduce poverty. But evidence from Nigeria suggests that the reverse is the case.

Nevertheless, the result is in line with the observation of Akpan and Orok (2009) that budgetary allocation in Nigeria has led to high incidence of poverty and underdevelopment. Other studies that find similar results include Akpan (2006), Birowo, (2011) among others. The possible explanation to this statistical outcome is that budgetary allocations to health and transport and communication are not well targeted at the poor or, as World Bank (2004) cited in Wilhelm and Fiestas (2005) observed, “Public spending on health and education is typically enjoyed by the non-poor”. Another reason for this anomaly is that either allocations are inadequate or they are mismanaged.

The result also reveals that in the long run, a unit increase in budgetary allocation to education (LPBAEDU) will reduce the poverty rate by 1.67. In other words, improvement in education has the capacity to slow down the rate of poverty in the long run. The magnitude and direction of this result is of practical significance. This is because education is considered a public good with significant positive externalities, which can be used to redress asset inequality, when provided to children from poor households (Wilhelm & Fiestas, 2005). Similar empirical results were obtained by Datt and Ravallion (2002) Lundberg and Squire (2003) as cited in Wilhelm and Fiestas (2005),
stated that education has a high correlation with both faster growth and lower income inequality. Also, Akpan (2006) found a negative but insignificant relationship between education expenditure and poverty index.

With regard to the inflation rate, it indicates that inflation has a significant positive influence on the poverty rate in the long run. In quantitative terms, the result shows that a unit change in inflation, will increase poverty by about 0.733 \( (t = 4.58) \). Again, and as earlier stated, inflation reduces the purchasing power of citizens’ total disposable income, thereby by reducing their financial capacity.

**4.4.7.3: Cointegration Regression for Model One ‘B’**

Table 4.20 and Table 4.21 present the result of the cointegration test for model one ‘B’. The result includes assumptions of no deterministic trend in data, no trend or intercepts in cointegration equations (CE) and test VAR. Again, they are consistent with the level that minimises the Schwarz information criterion for the selection of the optimal lag interval of (1, 1).

The result shows that both the Trace test and the Maximum Eigenvalue indicate one cointegration equation at 1% and 5% level of significance. This implies in that a long run relationship exists among the variables in the model.

**Table 4.20: Unrestricted Cointegration Rank Test for Model One ‘B’ (Johansen Technique)**

<table>
<thead>
<tr>
<th>Hypothesized</th>
<th>Trace Test</th>
<th>0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of CE(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None *</td>
<td>0.643933</td>
<td>53.80436</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.411159</td>
<td>23.85791</td>
</tr>
</tbody>
</table>

**Maximum Eigenvalue**

<table>
<thead>
<tr>
<th>Hypothesized</th>
<th>Max-Eigen</th>
<th>0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of CE(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None *</td>
<td>0.643933</td>
<td>29.94645</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.411159</td>
<td>15.35839</td>
</tr>
</tbody>
</table>

Trace test indicate 1 cointegrating equations and Max-eigenvalue test indicate 1 cointegrating equations at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values**

Source: Field Work (2013)
Looking at the normalised equation in Table 4.21, it shows that in the long run, all the regressors will have negative effects on LPOI. However, while the magnitudes of LPBAKS and LINF are significant, that of LRGDPPCP is not significant judging from their t-statistics.

<table>
<thead>
<tr>
<th></th>
<th>LPOI</th>
<th>LINF</th>
<th>LPBAKS</th>
<th>LRGDPPCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
<td>1.000000</td>
<td>-0.896523</td>
<td>-1.499277</td>
<td>-0.473248</td>
</tr>
<tr>
<td>Stand. Error</td>
<td>(0.18286)</td>
<td>(0.42655)</td>
<td>(0.54351)</td>
<td></td>
</tr>
<tr>
<td>T-statistic</td>
<td>-4.90273</td>
<td>-3.51487</td>
<td>-0.87072</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Work (2013)

More plainly, the result implies that in the long run, a 100% increase in LPBAKS will reduce LPOI by about 150%. In other words, if the proportion of budgetary allocation to four sectors of the economy (agriculture, education, health and transport and communication) is increased, it will lead to a more than proportionate reduction in the incidence of poverty in Nigeria in the long run.

For the control variables, the result indicates that a 100% increase in LRGDPPCP and LINF, LPOI will reduce by about 47% and 89.56 % respectively.

### 4.4.7.4: Cointegration Regression: Model Two

Model two represents the relationship between budget performance indices and poverty rate. The Cointegration test result presented on Table 4.22 and table 4.23 was based on the same assumptions of model one: allowing for a linear deterministic trend in data, intercept but no trend in cointegration equations (CE) and test VAR. These assumptions are also in line with the level that minimises the Akaike information criterion for the selection of the optimal lag interval of (1, 1).

An inspection of both the Trace test and the Maximum Eigenvalue (Table 4.22) confirms the existence of two (2) counteracting equation in the Trace test, and
one (1) Cointegration equation in the Maximum Eigenvalue at both 1% and 5% levels of significance, indicating the existence of a long-run relationship(s) between poverty rate and budget performance indices.

Table 4.22: Result of the Cointegration Test for model 2 (Johansen Technique)

<table>
<thead>
<tr>
<th>Hypothesized</th>
<th>Trace Test</th>
<th>0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of CE(s)</td>
<td>Eigenvalue</td>
<td>Statistic</td>
</tr>
<tr>
<td>None *</td>
<td>0.796712</td>
<td>121.4709</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.648055</td>
<td>75.27010</td>
</tr>
<tr>
<td>At most 2</td>
<td>0.543790</td>
<td>44.98598</td>
</tr>
</tbody>
</table>

Table 4.22: Result of the Cointegration Test for model 2 (Johansen Technique)

<table>
<thead>
<tr>
<th>Hypothesized</th>
<th>Max-Eigen</th>
<th>0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of CE(s)</td>
<td>Eigenvalue</td>
<td>Statistic</td>
</tr>
<tr>
<td>None *</td>
<td>0.796712</td>
<td>46.20077</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.648055</td>
<td>30.28412</td>
</tr>
</tbody>
</table>

Trace test indicates 2 cointegrating equation while Max-eigenvalue test indicates 1 cointegrating equation at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

The normalized cointegration equation (Table 4.23) indicates that the long run effect of budget discipline (BDISC) on poverty (POI) is negative but not significant as its associated t-value is less than 2 (coef. = -0.123401, t = -1.71511). In other words, a unit increase in LBDISC would in the long run reduce the incidence of poverty (LPOI) by about (0.12). The direction of this association is as expected and of very practical relevance, in view of the Nigeria experience with budget discipline as exemplified by the descriptive statistics (Table 4.5 and Figure 4.9). also, given the fact that in the short run budget discipline move in the same direction, judging from the partial correlation and standard OLS presented earlier (see Tables 4.13 and 4.16).

The practical implication of this long-run relationship is that budget discipline is a near significance measure of poverty. In other words, the increase in budget discipline can slow down the rate of poverty.
Table 4.23: Cointegrating coefficients normalized on Poverty Index (standard error and t-statistics in parentheses)

<table>
<thead>
<tr>
<th></th>
<th>LPOI</th>
<th>LRGDPPC</th>
<th>LINF</th>
<th>LBDISC</th>
<th>LEDEXP</th>
<th>LTDSERV</th>
</tr>
</thead>
<tbody>
<tr>
<td>coefficient</td>
<td>1.000000</td>
<td>1.758748</td>
<td>0.065304</td>
<td>-0.123401</td>
<td>0.158931</td>
<td>-0.211144</td>
</tr>
<tr>
<td>Std Error</td>
<td>(0.22689)</td>
<td>(0.03030)</td>
<td>(0.07195)</td>
<td>(0.02654)</td>
<td>(0.02032)</td>
<td></td>
</tr>
<tr>
<td>t-Stat.</td>
<td>7.75143</td>
<td>2.15496</td>
<td>-1.71511</td>
<td>5.98782</td>
<td>-10.3891</td>
<td></td>
</tr>
</tbody>
</table>

Cointegrating equation(s): Log likelihood: 47.01458
Source: Field Work (2013)

Also the long-run effects of total debt service (LTDSERV) on Poverty rate (POI) is negative and significant judging from its t-value which is greater than 2 (t = 10.3891). It also indicates that for every 100% increase in LTDSERV, poverty will be reduced by about 21%. For LEDEXP, the result shows coefficient of 0.158931 (t = 5.98782), indicating a significant positive association between external debt to export ratio and poverty rate. More clearly, it indicates that a 100% increase or decrease LEDEXP, will also increase or decrease poverty rate by about 16% in the long run. This is in consonance with theory and a priori expectation, since external debt and its attendance interest and capital repayment is a weight on national income and burden on the future generation. This is more so, when the debt is not utilised to productive sector or for capital accumulation.

Furthermore, the result suggests that external debts, when not properly matched by export and not properly utilised can be a burden to a nation, hence exacerbate the poverty crises. Comparing the outcomes of LTDSERV (total debt serviced) and LEDEXP (external debts to export ratio), it suggests that the impact of domestic debt included in the total debt serviced is significant, and would have been the factor that deflated the positive impact of external debts to negative in LTDSERV.

For the control variables in this model namely, RGDPPC and INF, the normalised equation reveals that their long run association with poverty incidence (POI) is significantly positive. More plainly, for every 100% increase in LRGDPPC, POI will increase by about 176% and for every 100 increase in
LINF poverty will increase by about 7%. Whereas the positive sign of INF is expected, the outcome of RGDPPC is a contravention of our a priori expectation. This is because inflation creates an additional burden on the purchasing power hence should have a symbiotic relationship with poverty. On the other hand, the growth of an economy should increase per capita income and reduce poverty. The likely explanation is that the growth rate experience in Nigeria is not an inclusive growth. Additionally, it suggests that a large proportion of national income from where national income per capita is derived is concentrated in the pockets of a small proportion of the population (possibly the non-poor).

4.4.8: Vector Error Correction Model (VECM)

Having confirmed the existence of a long-run relationship between the variables via the cointegration regression analysis in both models one and two, it was apposite to integrate short-run dynamics with the long-run equilibrium. The VECM was adopted to achieve this purpose. More explicitly, VECM measures the speed of adjustment from short-run disequilibrium to long-run equilibrium. It generates the error correction term or factor which is theoretically expected to range from zero to one and negatively signed, to guarantee that equilibrium error correction within the system over time is at least meaningful (Olayiwola & Okodua, 2010). Table 4.24, Table 4.25 and table 4.26 present the VECM results for models one ‘a’, one ‘b’ and two respectively.

Table 4.24: VECM for Model One (A)

<table>
<thead>
<tr>
<th>Variable</th>
<th>D(LPOI)</th>
<th>D(LINF)</th>
<th>D(LPBAAGGR)</th>
<th>D(LPBAEDU)</th>
<th>D(LPBAHLT)</th>
<th>D(LPBATCOM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECM</td>
<td>-0.039374</td>
<td>-0.105459</td>
<td>-0.648138</td>
<td>-0.181401</td>
<td>-0.261312</td>
<td>-0.515672</td>
</tr>
<tr>
<td>Standard Error</td>
<td>(0.01471)</td>
<td>(0.18543)</td>
<td>(0.11321)</td>
<td>(0.05652)</td>
<td>(0.04577)</td>
<td>(0.12873)</td>
</tr>
</tbody>
</table>

Source: Field Work (2013)

From Table 4.24, the ECM (-1) for variables in the model lie within the expected range (0-1) and are correctly signed (-). Their t-statistics are also
significant except for inflation which has a t-value of less than 2. Specifically, the ECM (-1) coefficient of D (LPOI) is -0.039374, indicating that the speed of adjustment is low (4%). In other words, about 4% of the error generated in one period will be corrected in the next period. Similarly, the ECM(-1) coefficients for D(LINF), D(LPBAAGR), D(LPBAEDU), D(PBAHLT) and D(PBATCOM) indicate that their speed of adjustment are 10.5%, 65%, 18%, 26% and 52% respectively.

The ECM result of model one ‘B’ presented in Table 4.35 indicate that two of the variables (D(LPOI) and D(LPBAKS) have the correct negative signs and lie between 0 and 1, while the other two variables (D(LINF) and (D(LRGDPPCP) are wrongly signed.

Table 4.25: VECM for Model One (B)

<table>
<thead>
<tr>
<th>Variable</th>
<th>D(LPOI)</th>
<th>D(LINF)</th>
<th>D(LRGDPPCP)</th>
<th>D(LPBAKS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECM Coef.(1)</td>
<td>-0.004588</td>
<td>0.375584</td>
<td>0.147301</td>
<td>-0.000321</td>
</tr>
<tr>
<td>Standard Error</td>
<td>(0.02099)</td>
<td>(0.21694)</td>
<td>(0.10347)</td>
<td>(7.4E-05)</td>
</tr>
<tr>
<td>T-stat</td>
<td>[-0.21861]</td>
<td>[ 1.73129]</td>
<td>[ 1.42365]</td>
<td>[-4.33285]</td>
</tr>
</tbody>
</table>

Source: Field Work (2013)

The implication is that the speed of adjustment of D(LPOI) is only about 0.5%, indicating that about 0.5% of the error generated in one period will be corrected in the next period. Similarly, the speed of adjustment of D(LPBAKS) is also very low (-0.000321 or 0.0321%) even though it is statistically significant judging from it t-value (-4.33285). This implies that about 0.03% of the error generated in one period will be corrected in the next period.

However, the ECM (-1) for D(LRGDPPCP) and D(LINF) show positive signs, hence do not meet the criterion for VECM. In any case the positive sign indicates that there will be explosion in the next period in any event of disequilibrium.
In Table 4.26, the ECM (-1) coefficient of $D(LPOI)$ lies within the acceptable range of 0 and 1, and has the expected negative sign. The magnitude of the coefficient (-0.367198) indicates that the speed of adjustment is about 37%. This implies that about 37% of the error generated in one period will be corrected in the next period. This is significant, judging from its t-statistic value of -4.87515. Similarly, the ECM (-1) of $D(LINF)$ which is -0.939942 has the expected sign and magnitude. Although it is not significant, since its associated t-value is lower than two, its coefficient indicates that the speed of adjustment is about 94%.

The ECM (-1) coefficients of $D(LRGDPCC)$, $D(LBDISC)$, $D(LEDEXP)$ and $D(LTDSERV)$ are either wrongly signed (+) or are outside the accepted range of between zero and one. Therefore, they do not meet the criterion for ECM. For instance, a positive sign on ECM (-1) implies that there will be an explosion in the next period, in an event of disequilibrium.

### 4.4.9: The Paired Sample T-Test

The paired sample T-test (pre-test/post-test design) was employed to measure the impact of Medium Term Expenditure Framework (MTEF) and Fiscal Responsibility Act (FRA) on Poverty Reduction (POI) and Budget Discipline (BDISC) in Nigeria. With respect to MTEF introduced in 2005, five (5) years before (2000-2004) and five (5) years after (2006-2010) the introduction of MTEF was used in the analysis. The result in Table 4.27 shows a t-value of 1.680 and p-value of 0.168 in pair 1 and t-value of 2.372 with a sig. value of 0.077 in pair 2. These results indicate that there is no statistically significant
difference in the poverty rate as well as in budget discipline five years before and five after the introduction of MTEF in Nigeria. It suggests that the impact of MTEF on budget discipline and poverty reduction had not been significant. However, the mean poverty rate decline in absolute terms from 74.1400 (pre-MTEF) to 60.4000 (post MTEF). This implies that MTEF have had some practical impact on poverty reduction, but the change is not large enough to be considered as been statistically significant. Similarly, BDISC decline absolutely from 1.0058 (Pre-MTEF) to 0.7877 (Post MTEF), implying that they was even more discipline in budgetary operation before MTEF than it is after MTEF. This is because budget discipline is defined as when the ratio of budget to actual is greater than 1 and when this ratio is less than one it is considered indiscipline. It should be recalled that economic managers in Nigeria, like in many countries of the world, had believed that MTEF is the key to achieving budget/fiscal discipline, more strategic prioritisation of resources and better operating efficiencies over the medium term (Pascua, 2005).

Table 4.27: Paired Sample T-Test Result

<table>
<thead>
<tr>
<th></th>
<th>Paired Differences</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error</td>
<td></td>
<td>95% Confidence Interval of the Difference</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lower</td>
<td></td>
<td></td>
<td>Upper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 2</td>
<td>POI before FRA - POI after FRA</td>
<td>-10.400</td>
<td>4.70319</td>
<td>2.715</td>
<td>-22.08</td>
<td>1.283</td>
<td>-3.830</td>
</tr>
<tr>
<td>Pair 3</td>
<td>BDISC before MTEF - BDISC after MTEF</td>
<td>.21808</td>
<td>.20557</td>
<td>.0919</td>
<td>-.0372</td>
<td>.47333</td>
<td>2.372</td>
</tr>
<tr>
<td>Pair 4</td>
<td>BDISC before FRA - BDISC after FRA</td>
<td>.23834</td>
<td>.05622</td>
<td>.0325</td>
<td>.09867</td>
<td>.37801</td>
<td>7.342</td>
</tr>
</tbody>
</table>

Source: Field Work (2013)

On the impact of the Fiscal Responsibility Act (FRA) 2007, the result reveals that there is no difference in the incidence of poverty before and after the enactment of the Fiscal Responsibility Act of 2007, judging from its ‘t’ value which is neither significant at 1% nor at 5% levels (t-value = 3.830 and Sig. Value = 0.062). However, the result reveals that pre FRA BDISC is statistically significantly different from the post FRA BDISC at the 5% level. The paired
sample statistic in Table 4.28 shows that there was more discipline in budgetary operation before FRA than it was after the introduction of FRA, even though the mean BDISC before (0.9604) and after (0.7221) falls in the zone of indiscipline since they are both less than one (1). This is unexpected anyway, since the Fiscal Responsibility Act was conceptualised to among other things instil discipline in the budgetary system. The likely reason for this adverse effect of FRA on poverty is poor implementation or non-implementation of the provision of the Act as well as the paucity of the data used in this study.

### Table 4.28: Paired Samples

<table>
<thead>
<tr>
<th>Pair</th>
<th>BDISC before MTEF</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>POI before MTEF</td>
<td>74.1400</td>
<td>5</td>
<td>12.94905</td>
<td>5.79099</td>
</tr>
<tr>
<td>2</td>
<td>POI after MTEF</td>
<td>60.4000</td>
<td>5</td>
<td>6.65582</td>
<td>2.97658</td>
</tr>
<tr>
<td>3</td>
<td>BDISC before FRA</td>
<td>54.2667</td>
<td>3</td>
<td>.23094</td>
<td>.13333</td>
</tr>
<tr>
<td>4</td>
<td>BDISC after FRA</td>
<td>64.6667</td>
<td>3</td>
<td>4.50925</td>
<td>2.60342</td>
</tr>
<tr>
<td>5</td>
<td>POI before FRA</td>
<td>1.0058</td>
<td>5</td>
<td>.09765</td>
<td>.04367</td>
</tr>
<tr>
<td>6</td>
<td>POI after FRA</td>
<td>.7877</td>
<td>5</td>
<td>.12473</td>
<td>.05578</td>
</tr>
<tr>
<td>7</td>
<td>BDISC before FRA</td>
<td>.9604</td>
<td>3</td>
<td>.04118</td>
<td>.02378</td>
</tr>
<tr>
<td>8</td>
<td>BDISC after FRA</td>
<td>.7221</td>
<td>3</td>
<td>.07802</td>
<td>.04505</td>
</tr>
</tbody>
</table>

**Source:** Field Work (2013)

### 4.4 Presentation of Survey Data

In this section, data obtained by the researcher through the administration of the questionnaire are presented. The section is divided into two parts. The first part presents personal data as contained in the section A of the questionnaire. It includes data relating to gender, office affiliation, highest educational qualification, length of service, affiliated discipline as well as professional affiliations of the respondents. The second part contains the presentation of responses from sections B, C and D of the questionnaire. It includes attributes of sound budget management, problems of public budgeting in Nigeria as well as suggested remedies to Nigeria budgeting problems.
Table 4.29: Response Rate to Questionnaire

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retrieved</td>
<td>169</td>
<td>42.25</td>
<td>42.25</td>
</tr>
<tr>
<td>Not Retrieved</td>
<td>231</td>
<td>57.75</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)

The response rate of the questionnaire presented in Table 4.29 indicates that out of the 400 copies of the questionnaire administered, 169 representing 42.25% were retrieved while 231 representing 57.75% were not retrieved. The implication of this is that the analysis of primary data in this study was based on a 42.25% response rate.

Table 4.30 shows organisations in which the 400 copies of the questionnaire were administered as well as their response rate. It indicates that, for the four government agencies sampled, 50 copies of the questionnaires each were administered to the Budget Office of the Federation (BOF) and Central Bank of Nigeria (CBN), while 30 and 40 copies were administered to the Debt Management Office (DMO) and Accountant General Office (AGO) respectively. The response rate was 44%, 40%, 60% and 37.5% from BOF, CBN, DMO and AGO respectively. For the five (5) non-governmental organisations sampled for this study, 30 copies of the questionnaire were administered to Agents of Change (AOC) while the other four organisations, namely Nigerian Labour Congress (NLC), Nigerian Bar Association (NBA), Nigerian Union of Teachers (NUT) and Nigerian Union of Journalists (NUJ) received 50 each. The retrieval rate was 72%, 34%, 10%, 46% and 43.33% for NLC, NBA, NUT, NUJ and AOC respectively.
Table 4.30: Response Rate by Organisation

<table>
<thead>
<tr>
<th>Organization</th>
<th>Number Administered</th>
<th>Number Retrieved</th>
<th>% Retrieved</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Office of the Federation (BOF)</td>
<td>50</td>
<td>22</td>
<td>44</td>
<td>Government Agency</td>
</tr>
<tr>
<td>Central Bank of Nigeria (CBN)</td>
<td>50</td>
<td>20</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Debt Management Office (DMO)</td>
<td>30</td>
<td>18</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Accountant General Office (AGO)</td>
<td>40</td>
<td>15</td>
<td>37.5</td>
<td></td>
</tr>
<tr>
<td>Nigerian Labour Congress (NLC)</td>
<td>50</td>
<td>36</td>
<td>72</td>
<td>Non-Governmental Organisations (NGO)</td>
</tr>
<tr>
<td>Nigerian Bar Association (NBA)</td>
<td>50</td>
<td>17</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Nigerian Union of Teachers (NUT)</td>
<td>50</td>
<td>5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Nigeria Union of Journalist (NUJ)</td>
<td>50</td>
<td>23</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Agents of Change (AOC)</td>
<td>30</td>
<td>13</td>
<td>43.33</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>169</td>
<td>42.25</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey (2013).

4.4.1 Personal Bio-Data of Respondents

Table 4.31 presents the personal bio-data of the respondents. The table reveals that out of the 169 copies of the questionnaire received, 110 (65.1%) of the recipients were male while 59 (34.9%) constitute the female gender. The preponderance of the male gender can be attributed to the fact that in the organisation sampled the male are more than their female counterpart.

With respect to the organisation of the respondents, the table reveals that 75 respondents representing 44.4% were from government agencies, while 94 representing 55.6% are affiliated with the non-governmental organisations (NGO). Although the response rate form the NGOs was higher than the response rate from the government agencies in absolute terms, the individual organisation’s rate look generally higher among government agencies than NGOs with the exception of NLC (table 4.31)

Table 4.31 also shows that 4 respondents have OND/NCE as their highest academic qualifications, 101 have a first degree and 64 have a master’s degree as their highest educational qualification. The implication of this is that all the respondents are educated. Hence, there is a high likelihood that the respondents understood the issues raised in this study with respect to budgeting in Nigeria.
Table 4.31: Bio-Data of the Respondents

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
<th>CUM. PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENDER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>110</td>
<td>65.1</td>
<td>65.1</td>
</tr>
<tr>
<td>Female</td>
<td>59</td>
<td>34.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td><strong>ORGANISATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Agency</td>
<td>75</td>
<td>44.4</td>
<td>44.4</td>
</tr>
<tr>
<td>Non-Governmental Organisation</td>
<td>94</td>
<td>55.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td><strong>HIGHEST ACADEMIC QUALIFICATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OND/NCE</td>
<td>4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>First Degree</td>
<td>101</td>
<td>59.8</td>
<td>62.1</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>64</td>
<td>37.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td><strong>LENGTH OF SERVICE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2 Yrs</td>
<td>37</td>
<td>21.9</td>
<td>21.9</td>
</tr>
<tr>
<td>3-5 Yrs</td>
<td>36</td>
<td>21.3</td>
<td>43.2</td>
</tr>
<tr>
<td>5-10 Yrs</td>
<td>32</td>
<td>18.9</td>
<td>62.1</td>
</tr>
<tr>
<td>10 Yrs and Above</td>
<td>64</td>
<td>37.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td><strong>AFFILIATED DISCIPLINE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td>34</td>
<td>20.1</td>
<td>20.1</td>
</tr>
<tr>
<td>Economics/Statistics</td>
<td>49</td>
<td>29.0</td>
<td>49.1</td>
</tr>
<tr>
<td>Business Administration</td>
<td>12</td>
<td>7.1</td>
<td>56.2</td>
</tr>
<tr>
<td>Law</td>
<td>18</td>
<td>10.7</td>
<td>66.9</td>
</tr>
<tr>
<td>Public Admin/Pol Science</td>
<td>7</td>
<td>4.1</td>
<td>71.0</td>
</tr>
<tr>
<td>Others</td>
<td>49</td>
<td>29.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td><strong>PROFESSIONAL AFFILIATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICAN/CIBN/other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting/Finance Professional</td>
<td>33</td>
<td>19.5</td>
<td>19.5</td>
</tr>
<tr>
<td>Bodies</td>
<td>23</td>
<td>13.6</td>
<td>33.1</td>
</tr>
<tr>
<td>NES/NSA/Economics Prof. Bodies</td>
<td>16</td>
<td>9.5</td>
<td>42.6</td>
</tr>
<tr>
<td>NBA</td>
<td>97</td>
<td>57.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Others/Non</td>
<td>169</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)

On length of service, majority of the respondents, 132 representing 78.1% have at least three years working experience, while only 37 or 21.9% have below three years’ work experience. This is also an indication that the responses obtained would have come from their experience not just theoretical academic knowledge.

Table 4.31 also shows that with respect to the respondent affiliated discipline. The result indicates that 34 (20.1%) studied Accounting, 49 (29%) studied Economics or Statistics, 12 (7.1%) Business Administration, 18 (10.7%) Law, 7
Public Administration and 49 (29%) studied other courses. The implication of this is that majority of the respondents understood the subject of budgeting, judging from their academic background. This is because most of these disciplines; (accounting, Economic, Business, Law, Public Administration take budgeting as at least a topic in their curriculums. In addition, 73 of the respondents, representing 42.6% belong to professional bodies that consider budgeting very important. These include: Institute of Chartered accountants of Nigeria (ICAN), Chartered Institute of Bankers of Nigerian (CIBN), Nigerian Economic Society (NES), Nigerian Statistical Association (NSA) and Nigeria Bar Association (NBA). However, 97 or 57.4% either belong to other professional bodies not mentioned or are not affiliated to any professional organisation.

4.4.2: Reliability Test

As a harbinger to the analysis of the attributes of sound budget management, the identification of peculiar budgeting problems as well as possible remedies to the budgeting problem in Nigeria, a test of reliability was carried out using the Cronbach’s Alpha coefficient. Cronbach’s Alpha was preferred because it is considered one of the most common indicators of internal consistency (Pollant, 2011)

<table>
<thead>
<tr>
<th>Table 4.32: Reliability Test of Sound Budget Management Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Management Attributes</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Peculiar Problems of Budgeting</td>
</tr>
<tr>
<td>Remedies to Budgeting Problems</td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)

The result shown in Table 4.32 indicates that for the 10 items relating to budget management attributes, their internal consistency was not violated. This is because the Cronbach’s Alpha on this scale is 0.714 with a standardised coefficient of 0.712, which is higher than the 0.70 benchmark for a scale to be
considered reliable. For the peculiar problems of budgeting, and their remedies, the result suggests violation of reliability of the scales, since their Cronbach’s Alpha coefficients are less than 0.7. However, according to Pollant (2011), Cronbach’s alpha are very sensitive to the number of items in the scale, and that it is common to have a coefficient of 0.5 on a scale of five (5) items. On the basis of this assertion, the two scales, namely, the problems of budgeting and the remedies to the budgeting problems, with five items each did not violate the reliability criterion, since their Cronbach’s alpha coefficients are approximately 0.5 each.

4.4.3: Descriptive Statistics of Budget Management Attributes in Nigeria

Table 4.33 captures items in section B of the questionnaire relating to sound budget management in Nigeria. This section of the questionnaire provides support to objective 1, 2, 3 and 4 as well as research questions 1, 2, 3 and 4 of this thesis.

Table 4.33: Descriptive Statistics of Budget Management Attributes in Nigeria

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>NS</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budgetary Allocations are Consistent</td>
<td>13</td>
<td>35</td>
<td>9</td>
<td>88</td>
<td>24</td>
<td>3.44</td>
<td>1.190</td>
</tr>
<tr>
<td>with National Priorities</td>
<td>7.7%</td>
<td>20.7%</td>
<td>5.3%</td>
<td>52.1%</td>
<td>14.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is strict adherence to</td>
<td>47</td>
<td>74</td>
<td>17</td>
<td>28</td>
<td>3</td>
<td>2.21</td>
<td>1.078</td>
</tr>
<tr>
<td>Budgetary Rules and Limits</td>
<td>27.8%</td>
<td>43.8%</td>
<td>10.1%</td>
<td>16.8%</td>
<td>1.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrowing is an unavoidable</td>
<td>72</td>
<td>40</td>
<td>16</td>
<td>31</td>
<td>10</td>
<td>2.21</td>
<td>1.324</td>
</tr>
<tr>
<td>Budget Management</td>
<td>42.6%</td>
<td>23.7%</td>
<td>9.5%</td>
<td>18.3%</td>
<td>5.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budgeting in Nigeria is very</td>
<td>71</td>
<td>51</td>
<td>20</td>
<td>22</td>
<td>5</td>
<td>2.05</td>
<td>1.154</td>
</tr>
<tr>
<td>Transparent</td>
<td>42%</td>
<td>30.2%</td>
<td>11.8%</td>
<td>13%</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budget Information is Published</td>
<td>44</td>
<td>46</td>
<td>38</td>
<td>32</td>
<td>9</td>
<td>2.50</td>
<td>1.216</td>
</tr>
<tr>
<td>Regularly</td>
<td>26%</td>
<td>27.2%</td>
<td>22.5%</td>
<td>18.9%</td>
<td>5.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTEF is Strictly Adhered to</td>
<td>28</td>
<td>46</td>
<td>64</td>
<td>28</td>
<td>3</td>
<td>2.60</td>
<td>1.008</td>
</tr>
<tr>
<td></td>
<td>16.6%</td>
<td>27.2%</td>
<td>37.9%</td>
<td>16.6%</td>
<td>1.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRA’s Provision is Complied with</td>
<td>18</td>
<td>61</td>
<td>42</td>
<td>43</td>
<td>5</td>
<td>2.74</td>
<td>1.048</td>
</tr>
<tr>
<td></td>
<td>10.7%</td>
<td>36.1%</td>
<td>24.9%</td>
<td>25.4%</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timing is a Vital Factor Public</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>69</td>
<td>84</td>
<td>4.36</td>
<td>0.797</td>
</tr>
<tr>
<td>Budgeting</td>
<td>1.2%</td>
<td>2.4%</td>
<td>5.9%</td>
<td>40.8</td>
<td>49.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Budgeting is a Major Channel</td>
<td>4</td>
<td>14</td>
<td>5</td>
<td>78</td>
<td>68</td>
<td>4.14</td>
<td>0.982</td>
</tr>
<tr>
<td>of Economic Transformation</td>
<td>2.4%</td>
<td>8.3%</td>
<td>3%</td>
<td>46.2%</td>
<td>40.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Budgeting had Reduced Poverty in</td>
<td>46</td>
<td>64</td>
<td>33</td>
<td>23</td>
<td>3</td>
<td>2.25</td>
<td>1.057</td>
</tr>
<tr>
<td>Nigeria in the Last Three Decades</td>
<td>27.2%</td>
<td>37.9%</td>
<td>19.5%</td>
<td>13.6%</td>
<td>1.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)
Item 1 in section B of the questionnaire relates to whether budgetary allocations in Nigeria are consistent with national priority and the needs of the citizens. From the result in Table 4.33, 112 respondents representing 66.3% were affirmative, while 48 respondents representing 28.4% either disagreed or strongly disagreed. 9 of the respondents representing 5.3% were not sure. With an arithmetic mean of 3.44 and a standard deviation of 1.190, it means that majority of the respondents were of the view that budgetary allocations are consistent with national priority.

On the issue of adherence to budgetary rules and limits as contained in item 2, most of the respondents 121 or 71.6% deny the fact that there is strict adherence to budgetary rules and limits in Nigeria, 31 respondents or 18.6% are affirmative while 17 or 10.1% were not sure. The mean and standard deviation are respectively 2.21 and 1.078.

Item 3 relates to the issue of borrowing in budget management. 42.6% strongly disagreed, 23.7% disagree, 9.5% were not sure, 18.3% agrees and 5.9% strongly agree. A low arithmetic mean of 2.21 and a standard deviation of 1.324 indicate that an arithmetically significant majority do not believe that borrowing is unavoidable in budget management. To them, there could be a better way or approach of managing a nation’s budget and achieve national objectives without borrowing.

In item four, the opinion of the respondents were sorted regarding the transparency or openness of Nigeria budgeting system. The result reveals that 122 respondents representing 72.2% do not support the fact that the Nigerian budgetary system is very transparent. The remaining respondents, 25 or 16%, were affirmative while 20 or 11.8% were not sure. The mean of 2.05 is very low with a standard deviation of 1.154 indicating disagreement by most respondents that the Nigerian budgetary system is very transparent.

Item five is similar to Item four above and relates to the availability of budgetary information for public analysis. This is also an aspect of budget openness or transparency. The result in Table 4.33 reveals that 44 (26%)
strongly disagree, 46 (27.2%) disagree, 38 (22.5%) were undecided, 32 (18.9%) and 9 (5.3%) agrees and strongly agrees respectively. The low mean response score of 2.50 and standard deviation of 1.216 indicate that majority of the respondents deny the fact that budget information is published regularly. This corroborates the result of item four above of low transparency of the Nigerian budget system.

The result of item six (6) shows that 74 representing 43.8% of the respondents do not support the fact that the provision of the Medium Term Expenditure Framework (MTEF) is strictly adhered to in Nigeria’s budget management. Those in the affirmative were 31 representing 18.4% of the respondent, while 64 or 37.9% remain undecided about the fact. A low mean score of 2.60 and a standard deviation of 1.008 indicate that majority of the respondents are not in agreement with the fact of this item.

Similarly, item seven (7) relates to compliance with the provision of the Fiscal Responsibility Act (FRA). The result shows that 48 (28.4%) are in agreement, 79 (46.8%) deny the fact while 42 are not sure. Again, a low mean score of 2.74 with a standard deviation of 1.048 implies that majority of the respondents are of the opinion that FRA is not complied with in Nigeria’s budget management.

The result of item 8 shows a high mean score of 4.36 with a standard deviation of 0.797. This indicates that a preponderance of the respondents affirms the fact that timing is a vital factor in public budgeting. Specifically, 18 (10.7%) strongly disagree, 61 (36.1%) disagree, 42 (24.9%) undecided, 43 (25.4%) agrees and 5 (3%) strongly agree.

On the assertion of whether the federal annual budget is one of the major channels of economic transformation and poverty reduction in Nigeria, 146 respondents representing 86.4% were affirmative, while the remaining 13.6% were either not sure (3%), disagree (8.3%) or strongly disagree (2.4%). The mean score of 4.14 with a standard deviation of 0.982 suggests affirmation of majority of the respondents that the annual budget is a channel of economic transformation and poverty reduction.
Item 10 of section B of the questionnaire sounded the opinion of the respondents on whether the Nigeria budget had had any significant impact on poverty reduction in the last three decades. The result shows a low means score of 2.25 which indicate that the fact was not supported by majority of the respondents. More specifically, 110 respondents representing 65.1% deny the fact, 26 representing 15.4% were affirmative and 33 or 19.5% were not sure.

In summary, of the ten (10) items raised in section B of the questionnaire relating to the attributes of sound budgeting, only three items (1, 8, 9) had a mean score higher than 3. Other 7 items (2, 3, 4, 5, 6, 7 and 10) had their mean score ranging from 2.05 to 2.74. This reveals that from the perspective of majority of the respondents, the Nigerian budgetary system falls short of sound budgeting attributes.

### 4.4.4: Descriptive Statistics of Peculiar Budgeting Problems in Nigeria

This section shows the descriptive result of responses with respect to section C of the questionnaire, which gives us an insight into the peculiar problems of budgeting in Nigeria. This section contains three sub-sections and provides support to objective 5 and research question 5 of this research thesis.

Table 4.34 shows the frequencies of responses on the first five statements in this section, as well as their associated means and standard deviations.

Item one (1) relates to the issue of whether insufficiency of funds is one of the major problems of budgeting in Nigeria. The result show a low mean score of 2.71 and a standard deviation of 1.217, indicating that majority of the respondents did not agree that insufficiency of funds is one of the major problems of budgeting in Nigeria. The specific frequencies of response are 30 (17.8%) strongly disagree, 52 (30.8%) disagree, 38 (22.5%) not sure, 35 (20.7%) agree and 14 (8.3%) strongly agree.
Table 4.34: Descriptive Statistic of Peculiar Budgeting Problems in Nigeria

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>NS</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficiency of Funds</td>
<td>30</td>
<td>52</td>
<td>38</td>
<td>35</td>
<td>14</td>
<td>14</td>
<td>2.71</td>
</tr>
<tr>
<td></td>
<td>17.8%</td>
<td>30.8%</td>
<td>22.5%</td>
<td>20.7%</td>
<td>8.3%</td>
<td></td>
<td>1.217</td>
</tr>
<tr>
<td>Late Passage of Annual Budget</td>
<td>2</td>
<td>29</td>
<td>36</td>
<td>65</td>
<td>37</td>
<td>37</td>
<td>3.63</td>
</tr>
<tr>
<td></td>
<td>1.2%</td>
<td>17.2%</td>
<td>21.3%</td>
<td>38.5%</td>
<td>21.9%</td>
<td></td>
<td>1.045</td>
</tr>
<tr>
<td>Disregards to Budget Rules and Limits</td>
<td>4</td>
<td>13</td>
<td>20</td>
<td>73</td>
<td>59</td>
<td>59</td>
<td>4.01</td>
</tr>
<tr>
<td></td>
<td>2.4%</td>
<td>7.7%</td>
<td>11.8%</td>
<td>43.2%</td>
<td>34.9%</td>
<td></td>
<td>0.997</td>
</tr>
<tr>
<td>Public Debts</td>
<td>6</td>
<td>35</td>
<td>36</td>
<td>57</td>
<td>35</td>
<td>35</td>
<td>3.47</td>
</tr>
<tr>
<td></td>
<td>3.6%</td>
<td>20.7%</td>
<td>21.3%</td>
<td>33.7%</td>
<td>20.7%</td>
<td></td>
<td>1.139</td>
</tr>
<tr>
<td>Poor Budgetary Reforms</td>
<td>19</td>
<td>40</td>
<td>37</td>
<td>61</td>
<td>12</td>
<td>12</td>
<td>3.04</td>
</tr>
<tr>
<td></td>
<td>11.2%</td>
<td>23.7%</td>
<td>21.9%</td>
<td>36.1%</td>
<td>7.1%</td>
<td></td>
<td>1.157</td>
</tr>
<tr>
<td>Valid Number of Observation</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)

In item two (2), the assertion was whether late passage of the annual budget is one of the major problems of budgeting in Nigeria. The result reveals that 112 respondents representing 60.4% were affirmative, while 31 respondents representing 18.4% denied the fact, and the remaining 36 respondents representing 21.3% were undecided. A mean score of 3.63 and standard deviation of 1.045 indicates a tendency towards agreement with the fact by majority of the respondents that late passage of the annual budget is a major problem of budgeting in Nigeria.

Item three (3) relates to disrespect to budget rules and limits. The result show a sweeping majority (132 or 78.1%) on the affirmative, while 37 remaining respondents either disagree, (13 or 7.7%) strongly disagree (4 or 2.4%) or are undecided (20 or 11.8%). This is reflected in the high mean score of 4.01 and a standard deviation of 0.997, which indicate agreement that disrespect to budgetary rules and limits (budget indiscipline) has been the bane of Nigerian budget management.

The fourth item in this section probes the perception of respondents whether public debt and the culture of borrowing had negatively affected Nigeria’s budget management. The result shows that 6 (3.6%) strongly disagree, 35 (20.7%) disagree, 36 (21.3%) were undecided, 57 (33.7%) agree and 35 (20.7%) strongly agree. The associated mean and standard deviation of 3.47 and 1.139 respectively suggest tendency toward agreement of the fact by majority of the respondents.
Table 4.34 also shows the result of item 5 relating to whether budget reforms in Nigeria are implementable. The result show a mean response score of 3.04 with standard deviation of 1.157, indicating that a fair majority are in agreement with the fact that budget reforms are not implementable. The specific response scores associated with SD, D, NS, A, and SA were 19 (11.2%), 40 (23.7%), 37 (21.9%), 61 (36.1%) and 12 (7.1%) respectively.

Item six (6) of section C of the questionnaire identified some budgeting problems in Nigeria for the respondents to rank. The problems identified include: insufficiency of funds, allocative inefficiency, indiscipline/corruption, public debt/borrowing tendencies and poor budget reforms. The respondents were allowed the latitude of ranking these problems based on their judgement on a five point scale 1-5. A score of 1 indicates that the problem is perceived to be not influential, while a score of 5 is perceived to be most influential. Other scores are 2 influential, 3 moderately influential and 4 very influential.

Figure 4.14 shows the mean ranking of the major budgeting problems in Nigeria by respondents. The result shows that all the identified problems are influential, albeit at varying degrees, since their mean scores range from 2.02 to 4.63. More specifically, the result reveals that budget indiscipline compounded with corruption with a mean score of 4.63 (approximately 5) is the most influential budgeting problem in Nigeria. Allocative inefficiency has a mean score of 3.51 (approximately 4) indicating that the problem of allocation is very influential (second most influential). Poor budget reforms emerged third with a mean score of 3.22, followed by public debt with a mean score of 2.86. The respondents considered insufficiency of funds as the least influential problem of budgeting in Nigeria.
In item seven (7), the respondents identified other problems of budgeting in Nigeria beside the ones identified in section six above. The result was summarised in frequencies and presented in a bar chart (Figure 4.15). The result reveals five additional problems of budgeting, namely, poor revenue drive by the government agencies, poor governance, instability of policies, fiscal impropriety, general mismanagement, inadequate qualified manpower to handle budget issues and conflict of interest among government organs and agencies, among others. The result further reveals that fiscal impropriety compounded with general mismanagement was identified by 43.56% of the respondents, 29.70% identified poor governance/instability of policies, 10.89% identified poor revenue drive, while inadequate manpower and conflict of interest were identified by 8.91% and 6.93% of the respondents respectively.

**Figure 4.14: Respondents Ranking of Major Budgeting Problems In Nigeria**

*Source: Field Survey (2013)*
4.4.5 Remedies to Budget Problems

This section shows the descriptive analyses of the responses for items 1-7 in section D of the questionnaire relating to the remedies to budgeting problems. Section D of the questionnaire, like section C, has three parts and provides support to the second part of objective 5 and research question 5 of this thesis.

Table 4.35 contains the descriptive statistic of the responses to the first five items of section D of the questionnaire. Some remedies to the budgeting problem were suggested by the researcher based on the literature and were responded to by the respondents. The result shows that for the first item relating to whether increasing the revenue capacity of the government will reduce poverty through budgeting, only 53 respondent representing 31.4% are
affirmative while 116 remaining respondents representing 68.7% are not in support. The mean score of 2.71 with a standard deviation of 1.347 also confirms that majority of the respondents are in the zone of disagreement. In other words, most of the respondents do not believe that more revenue for the government will solve the poverty problem. This corroborates the first item on the budgeting problem section, where most of the respondents deny the fact that insufficiency of funds is a major problem in Nigeria.

**Table 4.35: Descriptive Statistics of Remedies to Nigeria’s Budget Problems**

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>NS</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase Revenue Capacity of Government</td>
<td>36</td>
<td>53</td>
<td>27</td>
<td>30</td>
<td>23</td>
<td>2.71</td>
<td>1.347</td>
</tr>
<tr>
<td>Targeted Budgetary Allocation</td>
<td>9</td>
<td>14</td>
<td>7</td>
<td>67</td>
<td>72</td>
<td>4.06</td>
<td>1.132</td>
</tr>
<tr>
<td>Early Passage of the Budget</td>
<td>23</td>
<td>24</td>
<td>45</td>
<td>57</td>
<td>20</td>
<td>3.16</td>
<td>1.217</td>
</tr>
<tr>
<td>Periodic Review of Reforms, Enforcement of Compliance</td>
<td>24</td>
<td>21</td>
<td>30</td>
<td>61</td>
<td>33</td>
<td>3.34</td>
<td>1.314</td>
</tr>
<tr>
<td>Budget Transparency and Accountability</td>
<td>29</td>
<td>18</td>
<td>16</td>
<td>32</td>
<td>74</td>
<td>3.62</td>
<td>1.539</td>
</tr>
<tr>
<td>Valid Number of Observation</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
<td>169</td>
</tr>
</tbody>
</table>

**Source: Field Survey (2013)**

Item 2 suggested target budgetary allocation to poverty reduction programmes. The result as depicted in Table 4.35, reveals that a whopping majority of 139 representing 82.2% are affirmative, while the remainder either were undecided 7(4.1%), disagree 14 (8.3%) or strongly disagree 9 (5.3%). The mean score of 4.06 and standard deviation of 1.132 further confirms affirmation of the fact.

Early passage of the budget was the third item in this section, the result reveals that 11.8% strongly agree, 33.7% agree, 26.6% were not sure, 14.2% disagree and 13.6% strongly disagree. The mean and standard deviation of 3.16 and 1.217 respectively depicts a fair distribution of responses among the options.

On item 4, the result shows that 94 respondents representing 55.6% are in agreement that a periodic review of budget reforms as well as the enforcement of compliance will strengthen budget management and facilitate poverty reduction in Nigeria. 45 respondents or 26.6% did not support this assertion.
while 30 respondents or 17.8 were undecided on this. The mean score of 3.34 and standard deviation of 1.314 indicate that a fair majority are in support of this assertion.

On the issue of transparency and accountability, a significant majority of the respondents (106 or 62.7%) believe that if the principles of transparency and accountability are imbibed in Nigeria Public budgeting, poverty will be significantly reduced. Other responses include: 18 or 10.7% disagree, 29 or 17.2% strongly disagree while 16 or 9.5% were undecided. A mean of 3.62 indicates affirmation of the subject matter by majority of the respondents.

In item 6 of section D of the questionnaire, the respondents were requested to rank some suggested remedies to the Nigerian budgeting problem on a range of five (5) scores. A score of 1 connotes ‘not important’, 2 for important; 3, moderately important; 4 very important and 5 most important.

**Figure 4.16: Ranking of Remedies to Budget Problems**

*Source: Field Survey (2013)*
Figure 4.16 shows the mean result of the ranking by the respondents. From the figure, transparency and accountability in budgeting with a mean score of 4.45 emerged first; target budgeting with a mean score of 4.21 was ranked second while the third-ranked solution was timing the budget process with a mean score of 3.5. The fourth and fifth ranked remedies were respectively the review and enforcement of budgets (mean 3.14) and increase in government revenue (mean 2.44). The result further reveals that majority of the respondents consider transparency and accountability to be the most important remedies to the budgeting problem in Nigeria, while increased revenue is considered the least important in solving the budgeting challenge.

The respondents also had the latitude of suggesting other solutions to the budgeting challenges of Nigeria in Item 7, based on their knowledge and experiences. The summary result was graphed in Figure 4.17. From the result, four main solutions were suggested in the addition to five suggested by the researcher. These are: zero tolerance on corruption, discipline in budget management, participative budgeting as well as increase in capital allocation.

![Figure 4.17: Other Remedies to Budgeting in Nigeria](source: Field Survey (2013))
However, on the basis of their associated percentage frequencies, discipline in budget management with a percentage frequency score of 41.96% indicates that majority of the respondents considered discipline as very fundamental in addressing the budgeting management challenges and poverty reduction in Nigeria. Other three namely, zero tolerance on corruption; participative budgeting and increase in capital allocation were suggested by 27.97%, 21.69% and 8.39% respectively. The result indicates that all the suggestions are important remedies but at varying degrees.

### 4.5.6 Mann-Whitney U Test (MWT) on Budgeting Problems and Suggested Remedies in Nigeria

The Mann-Whitney was used to test for the differences between the perceptions of the government agencies and that of the non-governmental organisations with respect to the problems of budgeting in Nigeria and the suggested remedies. This lends support to objective as well as the fifth research question of this study.

The summary result of the MWT for budgeting problems is presented in table 4.36, while the summary result of MWT for remedies is presented in Table 4.37.

**Table 4.36: Result of Mann-Whitney U Test on Peculiar Problems**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean Ranks</th>
<th>Median</th>
<th>Mann Whitney U</th>
<th>Z</th>
<th>Assymp. Sig (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Agencies</td>
<td>75</td>
<td>84.39</td>
<td>3.4000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Government Organisation</td>
<td>94</td>
<td>85.49</td>
<td>3.4000</td>
<td>3479</td>
<td>-.146</td>
<td>0.884</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td>85.49</td>
<td>3.4000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source: Field Survey (2013)**

From Table 4.36, it can be observed that while the median score for both government agencies (GAs) and non-governmental agencies (NGOs) are the
same, the mean ranks are marginally different, possibly due to the difference in the number of cases: 75 and 94 respectively.

More so, the Mann-Whitney U of 3479 and a z-approximation of -0.146 is not significant at 5% level (Assymp. Sig 2 tailed 0.884). This result reveals that there is no statistically significant difference between Nigeria’s budgeting problems as perceived by government agencies and budgeting problems as perceived by non-governmental organisations. The implication is that the identified and ranked budget problems as well as the other problems suggested by the respondents are the same for the two groups under consideration. Prominent among the problems were indiscipline compounded with corruption, fiscal impropriety/general mismanagement, inefficiencies in budgetary allocation and poor governance/policy instability or inconsistency among others.

With respect to the suggested remedies to the budgeting problems, Table 4.37 reveals also that there is no significant difference between the perception of government agencies (Gas) and that of non-governmental organisation (NGOs). From the table, although their mean ranks are different 86.57 (GAs) and 83.75 (NGOs), their median are the same. And since the MWT compares median and not mean, the Mann-Whitney U of 3407.500, z-approximation of -0.373 is not significant at 5% level of significance. (assym. Sig (2 tailed) 0.709)

Again, the remedies identified and ranked as well as others suggested are the same for the two groups under consideration. The most striking remedies suggested are strict budget discipline, target budgeting, zero tolerance for corruption and increased transparency and accountability in budget management, among others.
Table 4.37: Result of Mann-Whitney U Test on Suggested Remedies

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Ranks</th>
<th>Median</th>
<th>Mann Whitney U</th>
<th>Z</th>
<th>Assymp. Sig (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Agencies</td>
<td>75</td>
<td>86.57</td>
<td>3.4000</td>
<td>3407.500</td>
<td>-0.373</td>
<td>0.709</td>
<td></td>
</tr>
<tr>
<td>Non-Government Organisation</td>
<td>94</td>
<td>83.75</td>
<td>3.4000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td></td>
<td></td>
<td></td>
<td>3407.500</td>
<td>-0.373</td>
<td>0.709</td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)

4.6 Hypotheses Testing

In this section, the result of data analysis in section 4.2 to 4.4 was utilised in testing the hypotheses of this study. In chapter one, four hypotheses were formulated as tentative answers to the research questions. For hypothesis one, two and three, the results of the partial correlation, OLS regression as well as the cointegration regression was used while T statistics result was used to test hypothesis 4. Also, research question 5 and objective 5 were addressed using descriptive statistics of the survey data as well as the Mann-Whitney U-test.

4.6.1: Testing of Hypothesis One

In hypothesis one, it was conjectured that there is no significant functional relationship between budgetary allocations and poverty reduction in Nigeria. Budgetary allocation was represented by the proportion of budgetary allocation to four sectors of the economy, namely, agriculture (PBAAGR), education (PBAEDU), health (PBAHLT) and transport and communication (PBATCOM). Poverty reduction on the other hand was proxied by the incidence of poverty (POI) in Nigeria (measured as the percentage of the population living below the poverty line). Inflation rate (INF) was added as a control variable.

From the partial correlation table and analyses (Table 4.11) it was observed that only budgetary allocation to health (LPBAHLT) has a significant positive relationship with poverty reduction (LPOI) at 1% level. Allocations to other three sectors namely, agriculture (LPBAAGR), education (LPBADU) and transport and communication (LPBATCOM) showed negative but insignificant
association with poverty rate. When the proportion of budget allocated to these four sectors were combined and transformed into one variable (LPBAKS), the partial correlation also indicated a negative and insignificant association with LPOI (Table 4.12).

Probing this relationship further, the OLS regression analysis (table 4.14) also indicated that the proportion of budget allocated to agriculture, education and transport and communication negatively relate with poverty. However, the relationship is not significant since their p-values are greater than the 0.05 benchmark. Only allocation to the health sector manifested a significant positive relationship with poverty given its p-value of 0.001. Again, the combined effect of the four sectors’ allocation (LPBAKS) as presented in Table 4.20 also indicated that LPBAKS possess an insignificant negative relationship with poverty rate in Nigeria.

Furthermore, the long-run relationship between these sectorial allocations and poverty incidence was also investigated using cointegration analysis. The result as presented in Table 4.19 indicates that all the independent variables including the control variable have significant effect on poverty in the long run. Specifically, LPBAAAGR, LPBAHLT and LPBATCOM have positive and significant relationship with LPOI, while LPBAEDU has a significant negative relationship with LPOI. The combined effect of this sectorial allocation (LPBAKS) was also found to be negative and significant in the long run as shown in Table 4.21.

In view of the contradiction in the empirical outcomes of the short run techniques (partial correlation and OLS regression) and the long run technique (Cointegration test) with respect to hypothesis one, the researcher has to make a decision whether to use the short run or long run outcome in the final judgement of this hypothesis. According to Koop (2010), regression coefficient measure short term relationship, which are temporary and may not be sustainable, while long run indices are more permanent and sustainable. Also, theoretically, the long run allows all economic variables and expectations to fully adjust to the
state of the economy, in contrast to the short run when these variables may not fully adjust (Boundless, n.d.).

From the foregoing argument, the long run analysis was preferred, and hypothesis one was tested using the empirical result of the cointegration regression. On the basis of that, the null hypothesis was rejected in favour of the alternative. We therefore conclude that there is a significant functional negative relationship between budgetary allocation and poverty reduction in Nigeria.

4.6.2 Testing of Hypothesis Two

In hypothesis two, the proposition was that budget discipline does not have any significant effect on poverty reduction in Nigeria. Comparing the results of the partial correlation, OLS regression and cointegration test, the following were observed:

First, the partial correlation coefficient of BDISC with POI was 0.1748 with a P-value of 0.3735 (Table 4.13). This implies that budget discipline (BDISC) has positive but insignificant relationship with poverty rate. From, the OLS regression test, the model was considered well fitted judging from the F-statistic of 9.96 and P-value of 0.0001 and an adjusted $R^2$ of about 54%. The regression coefficient of 6.904746 and its associated t-statistic and P-value of 0.91 and 0.374 respectively (Table 4.16), further confirms that in the short run, the relationship between budget discipline (BDISC) and poverty rate (POI) is positive and insignificant.

Furthermore, the cointegration regression analysis confirms the existence of a long run relationship among the variables in the model, as both the Trace test and Maximum Eigenvalue indicated at least one cointegrating equation (CE). The normalised CE revealed a coefficient of -0.123401 and a t-statistic of -1.71511 in respect of the relationship between budget discipline (LBDISC) and poverty incidence (LPOI). This implies that in the long run, a unit change in
budget discipline will lead to about a 12% change in the rate of poverty in the opposite direction. However, the effect is not statistically significant, judging from its t-statistics which is less than 2.

To that extent, therefore, it will be unsafe to reject the null hypothesis. It was therefore accepted, leading to the conclusion that budget discipline has no significant effect on poverty reduction in Nigeria

4.6.3 Testing of Hypothesis Three

The third hypothesis of this thesis relate to the operational efficiency of the Nigerian budgetary system. It was conjectured that an insignificant relationship exists between budget operational efficiency and poverty reduction in Nigeria. The result of partial correlation, OLS regression and Cointegration was also employed for testing this hypothesis. It should be recalled that two variables, namely, external debt to export ratio (EDExp) and total debt service (TDSERV) were used to proxy operational efficiency.

The partial correlation result (table 4.13) showed a coefficient of 0.1746 for EDExp and 0.7305 for TDSERV with their associated sig. values of 0.3742 and 0.0000 respectively. This indicates that, while both EDExp and TDSERV have positive relationships with poverty index POI, only the association of TDSERV was significant at 1%, 5% and 10% levels.

The result of the standard OLS regression (Table 4.16), also confirms that the association between EDExp and POI is positive but not significant, while TDSERV relates positively and significantly with POI. Their respective coefficients with the associated p-values (table 4.16) are 1.517016 (P = 0.374) and 5.959092 (P = 0.0000)

More so, since partial correlation and OLS regression analysis are considered short term or temporal effect or relationship, the long term relations were also
gauged using the Johansen Cointegration analysis. The result presented in Tables 4.22 and 4.23 confirmed the existence of a long-run relationship between these two budget efficiency measures and poverty index in Nigeria. More specifically, the result reveals that external debt to export (EDExp) has a significant positive effect on poverty index (POI) in the long run, given its coefficient of 0.158931 and t-value of 5.98782, while total debts service (TDSERV) has a negative effect on POI in the long run (coef. = -0.211144, t = -10.3891).

Again, basing our judgement on the long-run relationship between budget operational efficiency and poverty index, the result does not support the null hypothesis. To that extent, it was rejected in favour of the alternative hypothesis. It was therefore concluded that budget operational efficiency significantly affects poverty reduction in Nigeria.

### 4.6.4 Testing of Hypothesis Four

Hypothesis four was formulated to measure the impact of two budget related reforms, namely Medium Term Expenditure Framework (MTEF) and Fiscal Responsibility Act (FRA) and on poverty reduction in Nigeria. The proposition was that budget-related reforms have not significantly impacted on poverty reduction in Nigeria. The paired sample T-test was employed for this hypothesis. The result as presented in Table 4.27 and 4.28 reveal the following:

First, with respect to the impact of the Medium Term Expenditure Framework (MTEF), on poverty reduction (POI), the result shows a t-value of 1.680 and p-value of 0.168 in pair 1 table 4.27. This result indicates that there is no statistically significant difference in the poverty rate five years before and five after the introduction of MTEF in Nigeria. By implication, it means that MTEF had not had any significant impact on poverty reduction in Nigeria.
On the impact of the Fiscal Responsibility Act (FRA) 2007, the result reveals that there is no difference in the incidence of poverty before and after the enactment of the Fiscal Responsibility Act of 2007, judging from its ‘t’ value which is neither significant at 1% nor at 5% levels (t-value = 3.830 and Sig. Value = 0.062). This again implies that FRA had not had any significant influence on poverty reduction in Nigeria.

On the basis of the revelations from the paired sample T-statistic, the null hypothesis was well supported, hence, it was accepted. This therefore led to the conclusion that budget-related reforms in Nigeria (MTEF and FRA) have not significantly impacted on poverty reduction in Nigeria.

4.6.5: Research Objective 5
The fifth objective of this thesis relates to identifying the peculiar problems of budgeting in Nigeria that had impeded the poverty reduction efforts of government. No hypothesis was needed to address this objective. However, the opinions of two groups of stake holders groups were garnered. The two groups of stakeholders were: Federal government agencies (4 MDAs) and non-governmental organisations/Civil Society Organisations (5 NGOs/CSOs). Both descriptive analysis and Mann Whitney U Test were employed in this respect.

From the descriptive analyses of the responses presented in the table in section 4.4.4 and Table 4.34, a preponderance of the respondents were in agreement that the major budgeting problems in Nigeria include: disregard to budget rules and limits, late passage of annual budget as well as public debt among others.

In ranking the suggested budgeting problems as presented in Figure 4.15, indiscipline and corruption had the highest mean score of 4.63, indicating that it is one of the most notorious problems of budgeting in Nigeria. Other problems with high mean score include: allocative inefficiency (3.51), poor budget reforms (3.22), public debt (2.86) and insufficiency of funds (2.02).
The respondents also suggested other budgeting problems not captured by the researcher. These problems were presented in Figure 4.16. It revealed five additional problems, namely poor revenue drive by government agencies, poor governance/instability of policies, fiscal impropriety/general mismanagement, inadequate qualified personnel to handle budget and conflict of interest among the arms of government. However, fiscal impropriety and poor governance took the lead with a percentage frequency score of 44% and 30% respectively.

Furthermore, the Mann-Whitney U-test was used to test if there was a difference in the opinion of the two groups of stakeholders. The result presented in Table 4.36, showed a Mann-Whitney U of 3479 and a z-approximation of -0.146 with it associated asymptotic significant value of 0.884 (2 tailed). This result reveals that there is no statistically significant difference between Nigeria budgeting problems as perceived by government agencies and budgeting problems as perceived by Non-governmental organisations. In other words, the identified and ranked budget problems as well as the other problems suggested by the respondents are the same for the two groups under consideration.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter is a confluence of the explorations made from chapter one to chapter four of this thesis. It is organised into seven sections, namely summary of work done, summary of findings, conclusion and recommendations. Others are contribution to knowledge, limitations of the study and suggestions for further studies.

5.2 Summary of Work Done

This research work was embarked upon to empirically investigate and establish the relationship between public budgeting and poverty reduction in Nigeria. It was organised into five chapters.

In chapter one, the issues that aroused the interest in this work were highlighted under the background to the study, after which the specific problems that this study intended to resolve were identified. Five research objectives were specified and four testable hypotheses were formulated as tentative answers to the research questions posed by the research problem. Also, the significance of the study, with respect to the expected beneficiaries were highlighted, the scope of the study was clearly defined as well as some factors that may impede the study from achieving its objectives. Other issues covered in chapter one includes: summary of methodology and operational definitions of terms.

Chapter two was devoted to the review of related literature. Accordingly, we navigated the path of various authors and researchers in the area of public budgeting. This was done under four broad headings, namely; conceptual framework, empirical framework and theoretical framework.
In chapter three, the methodology adopted in conducting this research was disclosed in a systematic order. The study adopted analytical research design since it relied heavily on quantitative data analysis to provide answers to the research questions. Both primary and secondary sources of data were explored. For the secondary data, 31 years (1980-2010) time horizon was selected purposefully. This period coincided with the period of time that poverty crises began to escalate in Nigeria (1980) and when the NBS conducted their last survey on poverty in Nigeria (2010) (Obi, 2007; Abdulazeez, 2010). Secondary data were extracted from past budget speeches, Central Bank of Nigeria (CBN) Statistical Bulletins, Federal Government of Nigeria Audited Financial Statements and other government official publications obtained from National Bureau of Statistics (NBS) Abuja. The data so collected relate to poverty incidence (relative poverty headcount), budgetary estimates, and actual expenditures, budgetary allocations to agriculture, education, health, transport and communication. Others include: national debts profile as well as the total value of export for the period considered.

The primary data involved the administration of 400 copies of a questionnaire to two groups of stakeholders, namely, government agencies and Non-Governmental Organisations (NGO). For government agencies, four MDAs were selected purposively, namely, Budget Office of the Federation (BOF), Central Bank of Nigeria (CBN), Debt management Office (DMO) and the Office of the Accountant-General of the Federation. For the NGOs, five were selected also purposefully. They were Nigeria Labour Congress (NLC), Nigeria Bar Association (NBA), Nigeria Union of Journalists (NUJ), Nigeria Union of Teachers (NUT) and Agent of Change (AOC) all in Abuja. The number of the copies of the questionnaire administered (400) was arrived at by applying the Yaro-Yamani formula to the estimated population of Nigeria. Out of that number, 169 copies of the questionnaire representing 42.25% were retrieved.

Chapter four focused on the presentation and analyses of data as well as the hypotheses testing. The data collected were presented in tables, charts and graphs. Both parametric and the non-parametric techniques were employed for
data analysis. Specifically, descriptive statistic was done first as preliminary analysis and then the inferential statistic provided the advance analysis. The descriptive statistic which included: mean, maximum and minimum, standard deviation, trend etc., was used to describe the specific attributes of the data set for all the variables used in this study.

On the other hand, the advanced analysis was used to inferences with respect to the research objectives, answer the research questions and test the hypotheses of this study. The methods used included: partial correlation to measure relationships between two variables while controlling for other confounding variables, standard OLS regression, to measure the short run effect of the independent variables on the dependent variables, the Johansen Cointegration Test, to measure the long-run relationships dependent and independent variables and the Vector Error Correction Model gauged the speed of adjustment of the variables.

Other inferential data analyses techniques adopted were; the Paired Sample T-Test (PST) to measure the impact of budget-related reforms on poverty reduction and the Mann-Whitney U-Test to measure the difference in perception between the agencies of government and the non-governmental organisations with respect to the peculiar problems of budgeting in Nigeria and their suggested remedies. The last part of the chapter was devoted to the testing of the five hypotheses of this study.

Chapter five summarises the findings made in this study, drew conclusions and made recommendations.

5.3 Summary of Findings

This section showcases the findings made in the course of this research work. This is done in two parts: first, as deductions from the related studies reviewed in this study (theoretical findings), and secondly, the findings based on our empirical analysis (empirical findings).
5.4.1 Theoretical Findings

From the review of literature related to this study it was found that public budgeting generally, is a major determinant of the level of poverty, and that a well-planned and implemented budget engenders technical and allocative efficiency, discipline as well as equity which are sine-qua-non to economic growth and national prosperity, while a weak and poorly implemented public budget on the other hand, only translates to high level of poverty. Stating it more plainly, the poverty crises in many countries is largely attributed to poor and ineffective budgeting (Fozzard, Holmes, Klugman and Withers, 2001; Oduro, 2001; Lucien, 2002, Overseas Democratic Institute, 2004)

Specifically the following findings were made from the accumulated works of others:

i. Budgeting in Nigeria for the last three decades has failed to serve as an effective tool of implementing development policies, especially poverty reduction policies. Some the reasons for this poor budget-policy performance are poor or non-existence of the link between budget and policy, budget indiscipline, corruption, ineffective monitoring and evaluation, a focus on budget input rather than on budget output/outcome and non-participatory planning and budgeting.

ii. Budget indiscipline, in all its three dimensions (numerical, policy, timing) has been a fundamental characteristic of Nigeria’s budgetary practice in the last three decades. This has resulted in the failure of the budget to achieve the envisioned budgetary objectives including poverty reduction. Among the factors that lubricate this problem are; long years of military rule, lack of constitutional provision for the timing of the annual budget, political intrigues, lack of participation by the Civil Society Organisations (CSOs), change of policy direction, executive abuses and corruption (Aruwa, 2004; Orebuiyi & Ugochukwu, 2005; Olomola, 2009; Aborishade, 2008; Olaoye, 2010)
iii. Budgetary allocation has far reaching influence on poverty reduction. This is anchored on the premised that the way public funds are allocated and managed are the main avenues through which government channels resources for carrying out her functions, including poverty reduction (ODI, 2004). However, it is effective and efficient budgetary allocation that gingers the economy and engenders people-oriented outcome (Ogbulu & Torbira, 2012). The Nigerian experience seems to contradict the general view in the literature, partly because of unsatisfactory budgetary provisions compounded by delays in the release of even the allocated funds for budget execution (Akpan & Orok, 2009; Anger, 2010).

iv. Expenditure on education is a significant determinant of rural and urban poverty. This is because expenditure on education is expected to increase the stock of human capital, which in turn increases labour productivity. And since labour is by far the most important asset of the poor, education of the poor will tend to reduce poverty (Anyanwu, 2012). In fact, a two directional relationship between poverty and education was found in that low education leads to poverty and poverty leads to low education (Bastos et al, 2009). In Nigeria, it was found that having no education significantly increased the level of poverty while on the other hand increased literacy significantly reduces poverty (Akpan & Orok 2009).

v. Budgetary allocation to agriculture has a significant relationship with poverty. Agriculture is one of the ways in which government expenditure reaches the poor. Therefore, Increase in government spending on agriculture means increase in agricultural productivity and increased rural wages, which, in turn, reduces rural poverty. According to Wilhelm and Fiestas (2005), expenditure on agriculture, education and infrastructure has positive effect on poverty reduction, but agriculture yields the highest return.
vi. The quality of governance determines to a large extent the impact of public budgeting on poverty reduction. Public spending on health and education for instance, can lower child mortality rates and increase education attainment more in countries with good governance, whereas in poorly governed countries, such expenditure has virtually no impact on health and education (Rajkumar & Swaroop, 2008).

vii. The multiplicity of budget reforms and poverty reduction programmes in Nigeria has not had any significant effect on poverty reduction. These anti-poverty programmes include: National Accelerated Food Production Programmes (NAFPP), Operation Feed the Nation (OFN), Green Revolution (GR), Structural Adjustment Programme (SAP), National Directorate of Employment (NDE) and the Directorate of Food, Roads and Rural Infrastructures (DFRRI). Others are: Better Life for Rural Women (BLFRW), Family Support Programme (FSP), Family Advancement Programme (FAP), Vision 2010, National Poverty Eradication Programme (NAPEP), National Economic Empowerment and Development Strategy (NEEDS), the Seven-Point Agenda (SPA) and the Transformation Agenda which is on-going. Along the line, there have also been budget-related reforms (besides the Annuals Appropriations Acts), which are aimed at strengthening the budget process in terms of discipline, transparency and accountability to engender value to Nigerians. Some of these reforms include: the Medium Term Expenditure Framework (MTEF), Fiscal Responsibility Act (FRA) and Public Procurement Act (PPA) among others. However, all these programmes and policies were bedevilled by myriad forces including: programme hijacks, lack of continuity, poor planning and lack of involvement of the poor themselves among others. Hence, they are yet to deliver their expected dividends.

viii. The main budgeting problems in Nigeria include but are not limited to degeneration in governance, lack of coherence between government policy and the budget, fiscal impropriety and indiscipline (unprofitable
extra-budgetary expenditures, budget delays, disregards to rules), non-participation of CSOs in planning and budgeting, policy instability and corruption.

5.5.2 Empirical Finding

The findings deduced from the empirical investigation, analyses and hypotheses tested in this study are stated hereunder as guided by the research questions.

Research Question 1: What is the functional relationship between budgetary allocation and poverty reduction in Nigeria?

The tentative answer to research question 1 was provided by hypothesis 1 which conjectured that there was no significant functional relationship between budgetary allocation and poverty reduction in Nigeria. On the basis of the results from the data analyses, especially the Partial Correlation (Table 4.11, Table 4.12), the Ordinary Least Square (OLS) Regression (Tables 4.14 and 4.15) as well as the Johansen Cointegration Regression (JCA) analyses (Table 2.19 and 4.21) presented in chapter four, the null hypothesis was rejected leading to the conclusion that there is a significant negative relationship between budgetary allocation and poverty reduction in Nigeria.

Although the results of long run and the short run analyses were at variance, the long run analysis was relied on in making our judgment with respect to research question one. This was not unconnected with the superior argument provided for long term relationship, which is more permanent and sustainable, as against the short term relationship that is temporary, even though the Keynesian economists’ belief that “in the long run we were all dead” (Boundless, n.d.; Koop, 2010).

In the short run however, using the partial and the standard OLS, the relationship between budgetary allocation and poverty reduction was found to be negative but not significant. Specifically, in the short run, the relationship between budgetary allocation to education, agriculture and transport and
communication are negative but not significant, while allocation to health is unexpectedly positive and significant. However, the long run relationship between budgetary allocation to agriculture, health and transport and communication were found to be significantly positive, while budgetary allocation to education was found be negative and significant.

Research Question 2: How does budget discipline relate to and affect poverty reduction in Nigeria?

This research question relates to the relationship between budget discipline measured by the ratio of budgeted expenditure to actual expenditure and poverty reduction measured by poverty incidence. Hypothesis 2, which provided a tentative answer to this question, was retained following the results from the data analyses. Specifically, partial correlation (Table 4.13), OLS regression (Table 4.16) and Johansen Cointegration test (Tables 4.22 and 4.23) provided the basis of judgement in this respect. To that extent, it was concluded that budget discipline has a negative but insignificant effect on poverty reduction in Nigeria. Again, this was based on the long run relationship analysis. In the short run, however, the relationship between budget discipline and poverty incidence is positive but also insignificant.

Research Question 3: To what extent is budget operational efficiency associated with poverty reduction in Nigeria?

This question relates to the association between budget operational efficiency and poverty reduction in Nigeria. Operational efficiency was measured by the extent of the debt burden for the past 31 years, using two indices, namely, the ratio of external debt to export ratio (EDEXP) and the value of total debt serviced (TDSERV). Hypothesis three, which proposed that there is no significant relationship between operational efficiency indices and poverty incidence, provided a temporal answer to this research question. On the basis of
the analysis presented in Table 4.13, Table 4.26, Table 4.22 and Table 4.23, the null hypothesis was abandoned in favour of the alternative. It was deduced therefore that budget operational efficiency has a significant effect on poverty reduction.

The direction of the effect differs depending on the efficiency measure adopted. For instance, the relationship between external debt to export ratio and poverty reduction was found to be positive and significant in the long run, while that of total debt service and poverty index was found to be significantly negative. However, in the short run, both the ratio of eternal debt to export and total debt serviced are positively related to poverty incidence, but only the relationship of total debt serviced is significant.

This result is in any case an improvement on the result obtained by Akpan (2006), using only OLS regression analysis.

Research Question 4: In what ways and to what extent have budgetary reforms impacted on poverty reduction in Nigeria?

On the question of how budget related reforms had impacted on poverty reduction in Nigeria, two reforms namely, Medium Term Expenditure Framework (MTEF) and Fiscal Responsibility Act (FRA) were used as proxy. The revelation from the paired sample T test resulted in the retention of the null hypothesis which states that budget related reforms have not had any significant impact on poverty reduction.

Specifically, it was found that the introduction of the Medium Term Expenditure Framework (MTEF) had not had any significant impact on poverty reduction in Nigeria. This finding was based on the paired sample T test which indicated no statistically significant difference in poverty incidence five years before and five after its introduction and adoption in the 2005 budget year.

Also, from the T test result, it was found that the introduction of the Fiscal Responsibility Act (FRA) in Nigeria had not had any significant influence on
poverty reduction. Also, the T test analyses revealed no statistically significant difference in poverty rate three years before and three after the introduction 2007.

Research Question 5: What are the most influential problems of budgeting in Nigeria?

Research question five (5) and objective five (5) were intended to identify budgeting problems that are peculiar to Nigeria and which had hindered the achievement of poverty reduction objective of government. Although no hypothesis was formulated, yet the responses from the administered questionnaire were analysed for the purpose of achieving this objective.

The result of the descriptive statistic of the survey data as well as the Mann-Whitney U test revealed that a preponderance of the 169 respondents identified problems peculiar to Nigeria’s budget management (Table 4.35). The identified problems include: budget indiscipline, official corruption, fiscal impropriety, allocative inefficiency poor budget governance among others.

5.6 Conclusion

The preoccupation of this study was to empirically investigate and establish the functional relationship between the attributes of sound budget management and poverty reduction as observed in Nigeria. Specifically, the study set out to ascertain the functional relationship between budgetary allocation and poverty reduction in Nigeria; establish the relationship between budget discipline and poverty reduction in Nigeria; determine how budget operational efficiency relates and affects poverty reduction in Nigeria, determine the impact of budget-related reforms on poverty reduction in Nigeria as well as identify the most influential problems of budgeting in Nigeria.

Utilising both primary and secondary data, which were subjected to both descriptive and inferential statistical analyses to test the hypotheses formulated,
and given the delimitations and limitations under which this study was carried out, the study achieved its predetermined objectives. To this end, the following conclusions were reached:

Budgetary allocation is a significant determinant of poverty reduction in Nigeria. The extent of this determination is a function of the efficiency with which the allocation is made. The implication is that increase in meaningful budgetary allocation, especially to key sectors of the Nigerian economy (agriculture, education, Health, transport) could tame the ever-increasing wave of poverty. Put differently, budgetary allocation to some key sectors through its positive effects can enhance equity and reduce poverty. Specific sectorial allocations however, manifested mixed results, implying that it is only allocations that are carefully done as against haphazard allocations that deliver the expected outcome of reducing poverty in Nigeria.

The functional relationship between budget discipline and poverty reduction in Nigeria is negative but not significant. The implication of the direction of this relationship is that increase in budget discipline has the likelihood to slowdown the rate of poverty, although the effect of the slowdown is not significant. It should be noted, however, that the nature of budget discipline in Nigeria is actually budget indiscipline. This is because for 24 years out 31 years considered, indiscipline was the norm, this would have explained to a large extent why the magnitude of the relationship with poverty rate is not significant.

Operational efficiency of the budgetary process significantly affects poverty reduction in Nigeria. Specifically, external debt to export ratio has a positive and significant effect on poverty rate while the relationship between total debt serviced and poverty is significantly negative. The implication is that increase in external debt in relation to the values of export will significantly worsen the incidence of poverty in Nigeria and vice-versa, while increase in the values of total debt serviced will significantly reduce poverty. The latter contradicts our a priori expectation, but it however suggests that influence of domestic debt is healthier for an economy than external debt since it is merely a rearrangement of account within the circular flow of income in an economy.
Furthermore, budget-related reforms had not significantly impacted on poverty reduction in Nigeria, although only two of the reforms, namely, Medium Term Expenditure Framework (MTEF) and Fiscal Responsibility Act (FRA) were considered.

Finally, indiscipline, corruption, fiscal impropriety, allocative inefficiency and poor governance are among the peculiar problems of budgeting in Nigeria which had impeded the poverty reduction objectives of government.

5.7 Recommendations

On the premises of both the theoretical and empirical findings of this study, the following recommendations are made.

I. The Federal Government should consciously increase allocations to key sectors of the Nigerian economy as a policy matter. In doing so, preference should be given to the productive sector and the social services sector because of their direct impact on the poor. This will bring about reduction of hunger, increase in health, cheaper transportation and increase in literacy rate. The end results of these will be national prosperity and poverty reduction. However, the most efficient plan of budget-making may be of no avail unless the budget, after it is passed, is efficiently administered. More plainly stated, budgetary allocations without adequate arrangement to enforce implementation of the budget as well as monitoring of the budget performance will render allocations inconsequential. Therefore, the budget monitoring unit of the budget office of the federation should be strengthened with adequate and qualified personnel and equipment to carry out this all important function. In addition, the oversight function of the National Assembly should not only be heard, it should be seen. They should ensure that, for all budgetary allocations, funds are promptly released as well as ensure that those funds are spent to add value to the citizens.
II. Budget discipline should be enforced in all its three dimensions, namely, numerical discipline, timing discipline and policy discipline. Although, only numerical discipline was empirically tested in this study, it was theoretically found that both timing discipline and policy discipline are far from being attained and constitute impediments to the budgetary system in Nigeria. Therefore, in order to ensure numerical discipline, the government should ensure that claims against appropriations are allowed only when they constitute proper charges against such appropriations, and extra budgetary expenditure should be avoided as much as possible, unless they constitute expenditures that would enhance national prosperity and reduce poverty, in which case, they should be routed through the National Assembly as Supplementary Appropriation Act (SAA). Also, to enforce timing discipline, the time line for the annual budget should be set out and possibly constitutionalised. The budget for the next year should be approved at least three months before the commencement of the budget year. This presupposes that formulation and presentation to the National Assembly must commence early enough so as to afford the legislature enough time for budget debate. Again, to enforce policy discipline, there should be stiff penalties for non-compliance with the budget rules.

III. The Government should encourage participation in the budget process. This is because involving those who are supposed to benefit from government services in budget preparation and monitoring can significantly improve the impact of public budgeting on poverty reduction. In order to foster participatory budget planning, the government must provide stakeholders with (i) information to enable them to understand the budget process and how they can influence key decisions; (ii) information on budget decisions after the passage of the budget; and (iii) open avenues for stakeholders to monitor actual expenditures in order to ensure that budget execution is in tandem between budget plans.
IV. Public debts and especially external debt should be reduced to the barest minimum if not eliminated. The government should discourage all Ministries, Departments and Agencies (MDAs) from the proclivity to borrow, unless for the execution of projects with direct positive impact on the economy. Even in this case, internal financing options such as bond, treasury bills and domestic borrowing should be explored before approaching external sources.

V. The provisions of the Fiscal Responsibility Act (FRA, 2007) and the Medium Term Expenditure Framework (MTEF) as well as other restrictive provisions of the budget should be enforced. This will enable the reforms to impact positively on the budget performance and ultimately on the economy and the people.

VI. Target budgeting strategy should be adopted. Target budgeting or target allocation refers to identifying a specific need of the poor and allocating resources to meet that specific need. Better targeting of services is essential for reaching the poor. Besides, effective targeting is one way of ensuring that programmes for the poor are not hijacked by the rich, as was the case with many anti-poverty programmes of the past. Effective targeting, however, should start with consultation with the users for their views on needs and priorities. This will give them a sense of commitment and ensure proper implementation.

VII. The on-going anti-corruption crusade should be strengthened to ensure success. In other words, government should have zero tolerance for corruption, and those found to be hijacking the process for their selfish interest should be made to face the full weight of the law.
5.8 Contribution to Knowledge

In view of the conceptual, theoretical, methodological and analytical basis of this study, the following specific contributions had been made to knowledge:

i. This study had empirically brought to the fore both the short run and long run relationships and effects of four (4) attributes of sound budgeting on the rate of poverty in Nigeria. The four budget attributes are: budgetary effectiveness (allocative efficiency), budget discipline, (numerical discipline), budget efficiency (operational efficiency) and budgetary reform quality

ii. The study developed a conceptual budget-poverty model as well as one of the empirical budget-poverty models (model 1B). The other two models (model 1A and 2) were, however, adapted from prior studies. These will not only provide a fulcrum for further studies in the area of budgeting, but will also serve as a springboard or a launching pad for the “Budgeting Away Poverty” (BAP) initiative.

iii. In addition, this study empirically identified the most influential problems of budgeting in Nigeria that had over the years scuttled government poverty reduction goals. It also empirically identified the most preferred remedies to the problems.

5.9 Limitations of the Study

The methodological challenges encountered in the course of this study include the following:

I. First, accessing secondary data for the study period (1980-2010) was an uphill task. To mitigate this challenge, the researcher explored both online and offline means to gather data. A practical visit to the National Bureau of Statistics (NBS), Central Bank of Nigeria (CBN), Debt Management Office (DMO), the Accountant-General’s Office (AGO) as
well as the National Assembly Complex (NASS), all in the Federal Capital Territory Abuja, helped in this regards.

II. Secondly, and following from data availability challenge, was the inconsistency of public data. It was observed that public data relating to a particular variable and for a particular period were different from different MDAs. This limitation was however conquered by the reliability checks employed in this study.

III. Thirdly, the inherent historical weakness and instability associated with time series data was also recognised in this study. However, the validity and reliability checks as well as the stationarity test conducted in this study excused the result and interpretation from being spurious.

IV. Fourthly, with respect to primary data, our inability to sample more than 400 individuals as well as our consideration of two groups of stakeholders constitutes a limitation. However, since the subject of this study is a public policy issue (budgeting), a stakeholder’s purposive sampling technique applied is very appropriate (Palys 2009). Hence, the sample size does not vitiate the relevance of the study.

V. Fifthly, a response rate of about 42% of the 400 copies of the questionnaire administered seemed to be low. However, since there was no statistically significant difference in the responses of the two groups sampled, it indicates representativeness of opinions, which is more important than response rate (Institute of Citizens-Centred Service (ICCS), (2012)). To this extent, the response rate is permissible.

VI. Sixthly, the scope of this study especially with respect to secondary data covered 31 years (1980-2010), hence did not capture data for the more current years (2011-2013). However, since 2010 was the most recent year of Nigeria’s official poverty survey, coupled with the fact that the
primary data collection was done in 2013, this work was not significantly weakened by this limitation.

5.10 Suggestions for Further Studies

In view of the scope and limitations of this study, a number of research issues were not attempted but were felt in the course of this study. To this end, the following suggestions are made for further study:

i. Further research should be conducted on the same topic, but the number of years should be increased to at least 40 years, possibly starting from 1970 to date.

ii. With respect to primary data, future research should increase the number of stakeholder groups to at least three, including the legislative arm of government in view of their role in the budget process. The number of copies of the questionnaire could also be increased to allow for a sizeable response rate in view of the low response rate associated with a research of this nature.

iii. In view of the fact that budget discipline has three dimensions, namely, numerical discipline, policy discipline and timing discipline, and given the fact that this study considered only numerical variant, further research should attempt to empirically gauge the impact of the other two dimensions of budget discipline on poverty rate in Nigeria.

iv. With the increase in the scope of the study as suggested, the number of variables in the budget poverty model may also need to be increased in future research.

v. Finally, since this study concentrated on only federal government data, further research may need to consider data from the local and state governments in the investigation of the budget-poverty relationship.
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