

**ANALYSIS OF INFLUENCE OF TREASURY SINGLE ACCOUNT
ON THE EFFECTIVENESS OF PUBLIC FINANCE MANAGEMENT IN
TERTIARY INSTITUTIONS IN SOUTH-SOUTH, NIGERIA**

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APPROVAL PAGE

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CERTIFICATION

It is hereby certified that the research reported in this dissertation is the original work of **Ashibogwu, Nze Kingsley** (2015197009F). That the works of other authors or researchers used were duly referenced and acknowledged. To the best of the researcher's knowledge, the research contained in this dissertation has neither been submitted in part nor full for the award of any diploma or degree of Nnamdi Azikiwe University or any other institutions.

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Date

DEDICATION

This work is dedicated to former Nigerian president, Dr. Goodluck Ebele Jonathan for approving the pilot testing of the treasury single account.

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ABSTRACT

The study was designed to analyse the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria. Four research questions were posed and eight null hypotheses were tested at 0.05 level of significance. The study adopted a descriptive survey design and the population of the study comprised 48 bursars in federal and state owned tertiary institutions in South-South Nigeria and there was no sampling. The instrument was validated by two experts in accounting and one expert in measurement and evaluation. The Cronbach Alpha method was used to establish the reliability of the instrument and the overall reliability of 0.82 was obtained. Data were collected for the study through the administration of validated instrument on the respondents. The mean and standard deviation were used to analyse data in relation to the research questions while the analysis of variance (ANOVA) was used to test the null hypotheses. The findings of the study revealed that treasury single account highly influences the effectiveness of fraud control, accurate accounting, budgetary control and cash management. The findings of the study also revealed that there is no significant difference in the mean ratings of respondents on the influence of treasury single account on the effectiveness of fraud control, accurate accounting, budgetary control and cash management based on educational qualification and years of working experience. Based on the findings, it was concluded that treasury single account highly influences the effectiveness of public finance management in terms of fraud control, accurate accounting, budgetary control and cash management. It was recommended among others that the federal government should continue to operate with the principle of treasury single account and that the states and local governments should fully adopt the operations of treasury single account

CHAPTER ONE

INTRODUCTION

Background to the Study

It was not until 2012 during the administration of former President Goodluck Jonathan that the government ran a pilot scheme for a treasury single account using 217 ministries, departments and agencies as a test case. The pilot scheme saved Nigeria about ₦500 billion in frivolous spending. The success of the pilot scheme motivated government to fully implement the treasury single account, leading to the directives to banks to implement the technology platform that will help accommodate the treasury single account scheme. The directives by President Mohammed Buhari in 2015 that all government revenues should be remitted to treasury single account are in consonance with the pilot scheme programmes and in compliance with the provision of the 1999 constitution (Central Bank of Nigeria, CBN, 2015).

Sadly too, before the emergence of President Muhammadu Buhari's administration on 29th May, 2015 recent development in the Nigerian economy, tertiary institutions inclusive, seems to indicate that all is not well as expected with the consolidation of inflows of cash from the country's ministries, departments and agencies (MDAs) by way of deposit into commercial banks, traceable into a single account of the Central Bank of Nigeria. For instance, on February 14th, 2016, the Economic and Financial Crimes Commission arraigned

the Vice Chancellor of the Federal University of Technology, Akure, (FUTA), over allegations of fraud to the tune of ₦24 million. According to the charges, the Vice Chancellor and Bursar conspired on or about 21st January, 2015 with intent to defraud to illegal place on fixed deposit the money of the FUTA in a WEMA bank account 1300002035. The said anti-graft agency is also prosecuting three top officials of the Federal University of Agriculture, Abeokuta, (FUNAAB) for their alleged roles in ₦800 million scandal (Vanguard Editorial, 2017). Also the budget monitoring committee of the local chapter of the Academic Staff Union of Universities (ASUU) accused the Management of University of Calabar of mismanaging over three-billion-naira intervention fund released to the University for upgrade of facilities (Premium Times Editorial, 2016).

Nigeria is a developing country faced with the challenge of how to achieve efficient allocation of resources as well as stabilization of the business cycle. To actualize this, it appears that the control and management of cash resources should be structured through a government unified banking system. The government unified banking system is expected to reflect inflow of all government funds through a unified bank account and the subsequent availability of such funds to undertake government's expenditure when necessary to guide against corruption. As Yusuf (2016) puts it, corruption is a cankerworm that has eaten deep into the fabrics of Nigeria system and keeps

Nigeria in a terribly precarious situation that made the great country, Nigeria, to look poor, despite the huge human and natural resources Nigeria is divinely blessed with.

Section 80 (i) of the 1999 constitution as amended states “All revenues, or other money raised or received by the federation (not being revenues or other money payable under the constitution or any Act of the National Assembly into any other public fund of the federation established for a specific purpose) shall be paid into and from one consolidated revenue fund of the federation”. However, successive governments before May 29, 2015 have continued to operate multiple accounts for the collection and spending of government revenues in fragrant disregard to the provision of the constitution which requires that all government revenues be remitted into a single account.

Obinna (2015) had stated that prior to the treasury single account, Nigeria had various banking arrangement for revenue and payment transactions. There were more than 10,000 bank accounts in multiple banks, which made it impossible to establish government consolidated cash position at any point in time. It led to amounts of idle cash balances held in Ministries, Departments and Agencies accounts while government was out borrowing money which would have been avoided using treasury single account.

Treasury single account is a public accounting system under which all government revenue, receipt and income are collected into one single account,

usually maintained by the country's Central Bank and all payments done through this account as well (Adeolu, 2015). The purpose is primarily to ensure accountability of government revenue, enhance transparency and to avoid mismanagement of public funds. The maintenance of a treasury single account will help to ensure proper cash management by eliminating idle funds usually left in different commercial banks and in a way to enhance reconciliation of revenue collection and payment; which in the long run improves the public finance management.

Public finance management (Udeh, 2008) deals with the administration and control of income and expenditure of public authorities, be it federal, state and local government. The benefits of effective public financial management systems include improved service delivery, poverty reduction and achievement of the millennium development goals (Pretorius and Pretorius, 2008); the systems also maximizes financial efficiency, improves transparency and accountability, and in theory would contribute to long-term economic success of transparency and accountability in government. Pretorius and Pretorius further explained that effective public financial management system is required to maximize the efficient use of resources and create the highest level of economic success. A well-functioning public financial management system would provide the assurance that the funds released through debt forgiveness would be productively used in a transparent and efficient manner. Similarly, it would

contribute to overall governance through protection of public resources against the risk of misappropriation and corruption; and as such engenders the integrated payroll personnel information system (IPPIS).

The implementation of Integrated Payroll and Personnel Information System (IPPIS) as a centralized computer based payroll and management system aimed at eliminating payroll fraud (Ocheni, 2016); with focus on the determination of the actual personnel cost at a glance, ensuring data integrity towards establishing that personnel information is correct and intact. Thus, the basis for the current global revolution in government accounting, which Nigeria seems to be following through its treasury single account policy, among other economic policies designed is to tame corruption and reduce fraud. Treasury single account is a measure of fraud control through the blocking of financial leakages. When fraud is controlled there will be improvement in the economic situation of a country. Beyond transparency and accountability, the treasury single account will introduce economy and efficiency into overall management of public finances and this will in the long run lead to effectiveness of government spending since it places government in a better position to realize overall policy goals which creates an avenue for accurate accounting, and for improved economy.

Any economy where the budget is fully funded, the aim certainly will be accomplished and the outcome has always being; improved economic system,

political and social development (Udoma, 2015). Organizations rely heavily on budgetary control to manage their spending activities, and this technique is also used by the public and the private sector as well as private individuals, such as heads of household who want to make sure they live within their means (Dunk, 2009). Budgetary control is a system of management control in which the actual income and spending are compared with planned income and spending, so that the firm can make decisions if plans are being followed and if those plans need to be changed in order to make a profit. Budgetary control is the one of best technique of controlling, management and finance in which every department's budget is made with estimated data. Then, the Management conducts a comparative study of the estimated data with original data and fix the responsibility of employee if variance will not be favorable. Organizations can use budgetary control in forecasting techniques in order to make plan and budget for the future (Epstein & McFarlan, 2011). In essence, cash flow and finance management are adequately monitored.

Cash management is an essential input aimed at fixing the financial position of an organization and needed to keep the business running on a continuous basis. Amoako, Marfo, Gyau and Asamoah (2013) noted that it is a set of guidelines established by management to ensure that the organization has an optimal cash balance at any time to meet the firm objectives. Recovered Cash should equate with cash expended on services so that there are no unused

cash balances. Cash management is concerned with the efficient management of cash so as to achieve an optimum level of cash in the firm's working capital (Olowe 2008; Richard & Stewart 2011). In addition, cash management involves managing the money of the firm to maximize cash availability and interest income on any idle funds involving the experts and the adequately educated personnel in the field (Van Horne, 2014).

Education is a priceless asset of fundamental value to the individual and the society. It provides a sound basis for individuals to develop their potentialities; it is a powerful instrument for effecting national development; it is a dynamic instrument of change (Akinwunmi & Adeyanju, 2011). The wealth of a nation is determined to a large extent by the quality as well as the quantity of its human resources that ultimately set the pace for the social, economic and political development of the nation. Education attainment refers to the type of academic credentials or degrees an individual has obtained. In this study, the concept “educational qualification” applies to employees who hold at least Ordinary National Diploma (OND) or Higher National Diploma (HND) including other higher degrees in accounting or financial studies because these are the minimal qualification criteria in the Nigeria accounting system. However, a degree or educational diploma certification is necessary for employees in financial institutions and most organizations use education as an

indicator of individual skill levels or productivity (Alsuwailem & Elnaga, 2016).

This study analyzed the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria.

Statement of the Problem

A great challenge facing most parts of the world and, particularly, the developing countries like Nigeria is how to achieve efficient allocation of resources as well as stabilization of the business cycles especially in tertiary institutions. The poor economic situation characterized by usual corrupt and sharp dealings with the public funds in the country made the government of President Muhammadu Buhari to look inward on how government could curb such sharp dealings and improve the revenue. An important factor for efficient management and control of government's cash resources is a unified structure of government banking. Such unified banking arrangements should be designed to minimize the cost of government borrowing and maximize the opportunity cost of cash resources. It is based on these reasons that the current global revolution in government accounting became paramount following which Nigeria has initiated and implemented the Treasury Single Account (TSA) to assist in the better management of her economy. However, the implementation of this policy is a critical step towards curbing mismanagement of funds in

public sector especially tertiary institutions and to ensure accountability and transparency in the management of public funds and also to enable efficient control and monitor fund flow to critical sectors of the economy to sustain growth and development. It is against this background that this study analysed the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria.

Purpose of the Study

The purpose of this study was to analyse the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria. Specifically, the study determined;

1. The level of influence of treasury single account on the effectiveness of public finance management in terms of fraud control in tertiary institutions in Nigeria.
2. The level of influence of treasury single account on the effectiveness of public finance management in terms of accurate accounting in tertiary institutions in Nigeria.
3. The level of influence of treasury single account on the effectiveness of public finance management in terms of budgetary control in tertiary institution in Nigeria.

4. The level of influence of treasury single account on the effectiveness of public finance management in terms of cash management in tertiary institutions in Nigeria.

Significance of the Study

The findings of this study will be beneficial to the Federal Government, State Governments, Local Governments, Private Tertiary Institutions, Bursars in other tertiary institutions. The Federal Government will benefit from the findings of this study in that the Government introduced the treasury single account system into the Federal tertiary institutions in Nigeria in a bid to block financial leakages and strengthen the public finance management structure as the findings of this study are expected to indicate the level of influence of treasury single account on the effectiveness of public finance management in tertiary institutions in terms of accurate accounting, fraud control, budgetary control and cash management. The areas where there are high level of influence of treasury single account on the effectiveness of public finance management will be allowed to remain and be improved upon for the effective implementation of the treasury single account system. The findings of the study will also be beneficial to the Federal Government because based on the findings, the Federal Government would determine how educational qualification and years of experience of the bursars contributes to the

management of treasury single account and effectiveness of the public finance management in terms of fraud control, accurate accounting, budgetary control and cash management in tertiary institutions in South-South Nigeria.

The State Government would benefit from the findings of this study as the findings are expected to indicate the level of influence of treasury single account on the effectiveness of public finance management. Assuming the influence is positively high, the State Government in Nigeria would want to introduce the treasury single account system in its system of financial control and administration. When the State Government introduces the treasury single account, financial leakages at the State Government treasury will be blocked, thereby giving room for improved financial control and administration in strengthening the public finance management structure in terms of fraud control, accurate accounting, budgetary control and cash management. Implicatively, the State Government would also want to utilize accountants with necessary educational qualification and adequate years of experience in the administration of treasury single account for effective public finance management in terms of fraud control, accurate accounting, budgetary control and cash management.

Local Government would also benefit from the findings of the study because if the findings revealed that treasury single account highly influences the effectiveness of public finance management, the local governments in

Nigeria will also want to introduce the treasury single account system into their system of accounting and management of all their funds. It is possible they will also ensure that treasury single account will be used as a means of improving on public finance management in the areas of fraud control, accurate accounting, budgetary control and cash management. The unified local government service commission in the various states would want to use treasurers with necessary educational qualification and adequate years of experience for the implementation of the treasury single account system of accounting to ensure effective public finance management of their resources.

Private tertiary institutions will also benefit from the findings of this study because if the study revealed that treasury single account highly influences the effectiveness of public finance management, on that basis, the private tertiary institutions will also introduce the same system of accounting so as to effectively and efficiently manage their funds in the areas of fraud control, accurate accounting, budgetary control and cash management.

Bursars in other tertiary institutions will also benefit from the findings of this study. Assuming the findings revealed that treasury single account highly influences the effectiveness of public finance management in terms of fraud control, accurate accounting, budgetary control and cash management, the Bursars would be confident to apply the principle of TSA to ensure that funds

and resources are not wasted and it will encourage ease in the attainment of the organizational objectives.

Scope of the Study

The study focused on analyzing the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria. The area of public finance management in this study was delimited to fraud control, budgetary control, accurate accounting and cash management. However, the areas of public finance management that the study did not cover are revenue generation and auditing.

Research Questions

The study was guided by the following research questions:

1. What is the level to which treasury single account influence the effectiveness of fraud control aspect of public finance management in tertiary institutions in South-South Nigeria?
2. What is the level to which treasury single account influence the effectiveness of accurate accounting aspect of public finance management in tertiary institutions in South-South Nigeria?
3. What is the level to which treasury single account influence the effectiveness of budgetary control aspect of public finance management in tertiary institutions in South-South Nigeria?

4. What is the level to which treasury single account influence the effectiveness of cash management aspect of public finance management in tertiary institutions in South-South Nigeria?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of fraud control in tertiary institutions based on their educational qualifications (HND/B.Sc, Masters, Ph.D.).
2. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of fraud control in tertiary institutions based on their years of working experience (0-5years, 6-10years, 10years above).
3. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of accurate accounting in tertiary institutions based on their educational qualifications (HND/B.Sc, Masters, Ph.D.).
4. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of accurate accounting in tertiary institutions based on their years of working experience (0-5years, 6-10years, 10years above).

5. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of budgetary control in tertiary institutions based on their educational qualifications (HND/B.Sc, Masters, Ph.D.).
6. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of budgetary control in tertiary institutions based on their years of working experience (0-5years, 6-10years, 10years above).
7. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of cash management in tertiary institutions based on their educational qualifications (HND/B.Sc, Masters, Ph.D.).
8. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of cash management in tertiary institutions based on their years of working experience (0-5years, 6-10years, 10years above).

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter reviewed the views of other authors as they relate to the current study. The review was under the following headings:

Conceptual Framework

Treasury Single Account

Public Sector

Public Finance Management

Theoretical Framework

The Law of Increasing State Activities by Adolph Wagner

Displacement Theory by Jack Wiseman and Alan Peacock

Theoretical Studies

Public Finance Management in Nigeria

Treasury Single Account and Public Finance Management in Nigeria

Objectives of Treasury Single Account

Functions of Treasury Single Account

Advantages of Treasury Single Account in Nigeria

Custody of Treasury Single Account

Operations of Treasury Single Account in Nigeria

Constraints in the Implementation of Treasury Single Account in Nigeria

Treasury Single Account and Fraud Control

Treasury Single Account and Accurate Accounting

Treasury Single Account and Budgetary Control

Treasury Single Account and Cash Management

Empirical Studies

Influence of Treasury Single Account on Effectiveness of Fraud Control

Influence of Treasury Single Account on Effectiveness of Accurate Accounting

Influence of Treasury Single Account on Effectiveness of Budgetary Control

Influence of Treasury Single Account on Effectiveness of Cash Management

Summary of Review of Related Literature

Conceptual Framework

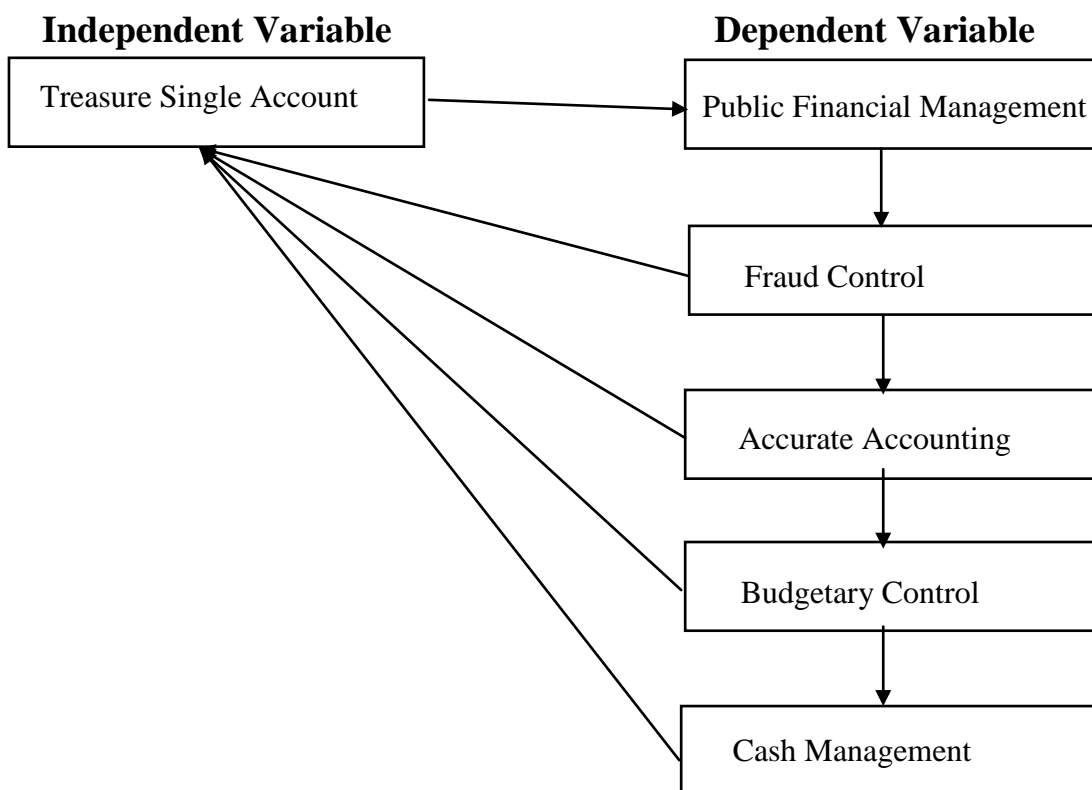


Figure 1: Conceptual Model of Treasury Single Account and Public Finance Management

The conceptual framework was reviewed under the following:

- Treasury Single Account
- Public Sector
- Public Finance Management

Treasury Single Account

Onyewuchi (2015) sees treasury single account as a network of subsidiary accounts all linked to a main account such that, transactions are effected in the subsidiary accounts but closing balances on these subsidiary accounts are transferred to the main account, at the end of each business day. According to him, all Ministries, Departments and Agencies (MDAs) will maintain their individual accounts with the commercial banks, but daily funding of their disbursements are made from the central or main account, which is resident with the central bank, just as their closing balances at the end of day are transferred to the main account. With the treasury single account, the net balances on all the MDA accounts will now reside with the central bank; hence, the government will avoid incurring interest costs when it has positive net position. It is an account with the central bank of Nigeria, CBN, through which government transacts, all its receipts and payments gets a consolidated view of its cash position at any given time. The system also eradicates loss and leakages of legitimate revenue meant for the Consolidated and Federation Accounts.

Jegade (2015) asserted that the treasury single account was introduced to block financial leakages and prevent mismanagement of government's revenue,

unifies all government accounts through a single treasury account, enabling it to prevent revenue loss and management by revenue-generating agencies. It is necessary to distinguish individual cash transactions for control and reporting purposes, this purpose is achieved through the accounting system and not by holding or depositing cash in transaction specific bank accounts. This enables the treasury to delink management of cash from control at a transaction level.

Treasury single account is a process and tool for effective management of government's finances, banking and cash positions. In accordance with the name, it pools and unifies all government accounts through a single treasury account. The advantages and benefits of the treasury single account are legion. The consolidation into a treasury single account paves way for the timely capture and payment of all due revenues into government coffers without the intermediation of multiple banking arrangements. (Vanguard Editorial, 2015).

The basic three essential traits of TSA are first, the government banking arrangement should be unified, to enable ministry of finance (MoF) (or treasury) oversight of government cash flows in and out of these bank accounts. A unified structure of government bank accounts allows complete fungibility of all cash resources, including on a real-time basis if electronic banking is in place. The TSA structure can contain ledger sub-accounts in a single banking institution (not necessarily a central bank), and can accommodate external zero-

balance accounts (ZBAs) in a number of commercial banks. Second, no other government agency operates bank accounts outside the oversight of the treasury. Options for accessing and operating the TSA are mainly dependent upon institutional structures and payment settlement systems. Third, the consolidation of government cash resources should be comprehensive and encompass all government cash resources, both budgetary and corresponding cash flows are subject to budgetary control or not (Yusuf & Chiejina, 2015).

The International Monetary Fund (2010) in a paper titled Treasury Single Account: Concept, Design, and Implementation Issues, outlined the benefits of operating a treasury single account. It started by explaining that the primary objective of a treasury single account is to ensure effective aggregate control over government cash balances and that the benefits include; It allows complete and timely information on government revenue in countries with advanced payment and settlement systems, it improves appropriation control, it improves operational control during budget execution, it enables efficient fund management, it also enables higher quality inflow and out flow outturn analysis to be undertaken, it enables elimination of bank fees and transaction costs, it facilitates efficient payment mechanisms, it can result in substantially lower transaction costs because of economies of scale in processing settlements, it improves bank reconciliation and quality of fiscal accounting system.

Stephen (2015) stated that the implication of treasury single account by the federal government will improve management and control of financial resources and facilitate better fiscal and monetary policy coordination as well as better reconciliation of fiscal and banking data, which in turn improves the quality of fiscal information. The establishment of an effective treasury single account significantly reduces the debt servicing cost and eradicates financial mismanagement in the public sector.

The present researcher views treasury single account as a constitutional financial policy introduced by government to ensure that all funds are paid into a unified account to ensure financial transparency and accountability of public funds.

Public Sector

Adams (2005) defined public sector as all organizations, which are not privately owned and operated but which are operated or established by government on behalf of the public. In the author's opinion, public sector consists of organizations where control lies in the hand of the public as opposed to private owners, and whose objectives involve the provision of services, where profit is not a primary objective.

Ozor (2003) stated that the word public sector denotes a collectivity of ownership by a group of people, or the general citizenry of a polity, living

together in one geopolitical area or society. Public sectors as posited by Osuala (2001) are those business organizations that are established by a special law, which state their powers and functions. They comprise of those business and quasi-business enterprises jointly owned by all members of the Nigeria society and funded directly from the taxpayers. As explained by David (2015), public sector sometimes referred to as the state sector, it is a part of the state that deals with production, delivery and allocation of goods and services by and for the government or its citizens whether national, regional or local/municipal. The author affirmed that public sector activities range from delivering social security, administering urban planning and organizing national defense.

Udeh (2008) articulated that public sector engaged in providing services and in some cases, goods not by the direct wishes of the consumers but by the decision of the government bodies. Based on the information above, it is obvious that public sector engages in many activities such as the provision of goods and services which are in most cases capital intensive. The activities of the public sector therefore cannot be properly performed without adequate finance. The present researcher therefore views public sector as any organization whose primary objective is not to make profit as the organizations are not privately owned but publicly owned and their operations are done by the public and not the private people.

Public Finance Management

Finance is the lifeblood of any sector. It is a key factor of production. Without adequate finance, public cannot acquire other factors of production such as labour, machinery/technology, management, land, as well as raw materials to embark on any business activities. According to Pandey (2007), finance means securing whatever capital that is needed by a firm or institution and employing it (finance activity) in activities, which generate returns on invested capital. Succinctly put, finance means the money that a person, company, government, organization has (Chuke, 2001).

Olaitan (2008) conceptualized finance as a basic tool for success in any development project. In his view, finance can be expressed as cash or material resources that could be exchanged for money and made available for a particular project. The author noted that finance also involves the management of available cash or material resources at the disposal of a project or programme.

Chuke (2001) declared that there are three categories of finance, namely; Private sector finance, public sector finance and international finance. However, this study centers only on public sector finance. Public sector finance as submitted by Chuke is concerned with the financial management of operations of public authorities. It is also called public finance. The author stated that public finance involves examination of government revenue and expenditure policies that affect the economy and the welfare of the citizenry.

Ugwu (2003) explained that public finance involves those financial activities which are within any tier of government. These comprise taxes, customs, public debt, public expenditures and related activities. Public finance as articulated by Dalton in Adams (2005) is concerned with the income and expenditure measures of the public authorities and with the adjustment of one to the other. Therefore, public finance, according to Adams (2005) is the financial operations of the public sector and the implications of it.

Udeh (2008) recorded that public finance means the study of income and expenditure of federal, state and local government, and the principles underlying them. The author further noted that public finance is also a field of inquiry about the income and expenditure of government under the following major division: public revenue, public expenditure, public debt and certain problems of the fiscal system as a whole such as fiscal administration and fiscal policy.

In the opinion of Musgrave (2008), public finance is closely connected to issues of income distribution and social equity. Governments can reallocate income through transfer payments or by designing tax systems that treat high-income and low-income households differently. Public finance, according to Musgrave explains how self-interested voters, politicians, and bureaucrats actually operate, rather than how they should operate.

Joseph (2009) summarized that public finance is a study of the principles which govern the income and expenditure of the various levels of government for the collective satisfaction of wants and of the effects of their financial policies. It is an open secret that the objective of the definition above which is to collectively satisfy wants and effects of financial policies cannot be achieved without a sound public finance management. Public finance management as opined by Chuke (2001) is that management activity which is concerned with the planning, acquisition, and control of financial resources of the public sector in order to achieve the goal(s) of the sector. It focuses on how public sector generates revenue and how the revenue is spent for the benefit of the citizenry.

Pandey (2007) acknowledged that public finance management objectives constitute the care of overall business objectives in the public sector. The author defined public finance management as that managerial activity in public sector which is concerned with the planning and controlling of the sector financial resources. Pandey continued that the function of public financial management is to review and control decisions to commit or recommit funds to new or ongoing projects.

Public finance management as acknowledged by Buchanan and Musgrave (2008), deals with the collection of sufficient resources from the economy in an appropriate manner along with allocating and use of these resources efficiently

and effectively. Public finance management (PFM) basically deals with all aspects of resource mobilization and expenditure management in government.

Udeh (2008) upheld that public finance management deals with the administration and control of income and expenditure of public authorities of the states, be it federal, state and local government. Public finance management as acknowledged by Buchanan and Musgrave (2008) deals with the collection of sufficient resources from the economy in an appropriate manner along with allocating and use of these resources efficiently and effectively. Resource generation, resource allocation and expenditure management (resource utilization), the authors continued, are the essential components of a public financial management system. The present researcher views public finance management as what basically deals with all aspects of resource mobilization and expenditure management in government because managing finances is a critical function of management in any organization of public sector.

Theoretical Framework

The theories that guided the study are:

- The Law of Increasing State Activities by Adolph Wagner
- Displacement Theory by Jack Wiseman and Alan Peacock

The Law of Increasing State Activities by Adolph Wagner

A German Economist known as Adolph Wagner in 1890 postulated this theory. According to him, there are inherent tendencies for the activities of local

government council to grow both intensively and extensively. He added that there exists functional relationship between the growths of an economy and that of government be it local government council activities, and that the government sector grows faster than the economy. All categories of governments irrespective of their level, intentions and sizes, had exhibited the same kind of tendencies of increased expenditures. Therefore, it is imperative to adequately analyse the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria.

This theory is related to this study because the expenditure of the federal and States tertiary institutions where treasury single account system is practiced is owned by the government, and if treasury single account influences public finance management in government, it will have an adverse positive or negative effect on the economy depending on the level of influence. This represents the functional relationship between the economy and the government at the federal level and States level. The intention as postulated by this theory is that treasury single account is intended to block financial leakages and improve the public finance management in the federal and States tertiary institutions in South-South Nigeria.

Displacement Theory by Jack Wiseman and Alan Peacock

The displacement theory as put forth by Jack Wiseman and Alan Peacock in 1961 is another public expenditure theory. The main augment of the theory

was that public expenditures do not increase in a straight or continuous manner, but in “Jack or Stepwise” fashion. At times, some social or other disturbance occur which show the need for increase in public expenditures, which the existing level of revenue cannot meet. Sequel to this, both government and the people would attain a new level of “tax tolerance” by reviewing the revenue position and finding solution to the problem of inadequate revenue. Since each major disturbance always leads government to assume a larger proportion of the national economic activities, the net result is the concentration effect. Therefore “concentration effect” is the tendency for the government activities to grow faster than the economy. Government activities growing faster than the economy will spell doom on government in general and federal tertiary institutions in particular because it is the revenue generated from the economy that is used to carry out government activities. Hence, there is need for revenue (economy) to grow at the same rate with government activities. Therefore, it is imperative to adequately analyse the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria.

This theory is related to the present study because the expenditure in our tertiary institutions increases gradually owing to some social and economic activities. As these activities grow faster than the economy, it means that our expenditure automatically is more than our revenue and the tax payers will

eventually bear the burden. The introduction of the treasury single account will help to checkmate unnecessary expenditure in the public finance management in our tertiary institutions. This will also help to reduce the concentration effect in our tertiary institution where treasury single account is practiced in South-South Nigeria.

Theoretical Studies

This section is organized under the following sub-headings:

- Public Finance Management in Nigeria
- Treasury Single Account and Public Finance Management in Nigeria
- Objectives of Treasury Single Account
- Functions of Treasury Single Account
- Advantages of Treasury Single Account in Nigeria
- Custody of Treasury Single Account
- Operations of Treasury Single Account in Nigeria
- Constraints of Treasury Single Account in Nigeria
- Treasury Single Account and Fraud control
- Treasury Single Account and Accurate Accounting
- Treasury Single Account and Budgetary Control
- Treasury Single Account and Cash Management

Public Financial Management in Nigeria

Public financial management is concerned with the planning, organizing, procurement and utilization of government financial resources as well as the formulation of appropriate policies in order to achieve the aspirations of members of that society. Premchand (2009) sees public financial management

as the link between the community's aspirations with resources, and the present with future. It lies at the very heart of the operations and fiscal policy of government. The stages of public financial management include:

1. Policy Formulation: Policy formulation is one of the most important stages in public financial management structure. According to Premchand (2009), "the transformation of the society's aspirations into feasible policies with well-recognized financial implications is at the heart of financial management. Issues not addressed during policy formulation tend to grow in magnitude during implementation and may frequently contribute to major reversals in the pursuit of policies or major slippages that may lead to contrary results". Public financial management should be designed to achieve certain micro and macroeconomic policies. It entails a clearly defined structured and articulated system that moves to promote cost-consciousness in the use of resources. The government needs to have an estimate of revenue and expenditure to achieve the policy objective of government.

2. Budget Formulation: The budget formulation is the step that involves the allocation of resources before the submission to the legislature for review and final approval. According to Appah (2009), in Nigeria the budget formulation involves the articulation of the fiscal, monetary, political, economic, social and welfare objectives of the government by the President; based on these;

- (i) the department issues policies and guidelines which form the basis of circulars to Ministries/Departments requesting for inputs and their needs for the ensuring fiscal periods;
- (ii) accounting officers of responsibility units are required to obtain and collate the needs of their units and;
- (iii) accounting officers of ministries, in this case the Permanent Secretaries, are required to collate these proposals which would be defended by unit heads before the supervising minister.

3. Budget Structures: According to Anyanwu (2007), budget structure addresses the question of how the budget is or should be composed. In Nigeria, budgets have revenues and expenditure sides. According to Premchand (2009), many governments have yet to put in place cash management systems, which would pave way coordinated domestic management. The practice of limiting outlays to collected revenues has exacerbated this problem. He, further argued that there is a massive underfunding of programs and projects provided for in the budget.

4. Payments System: This involves the operational procedures for receiving monies for the public and for making payments to them. In Nigeria, governments make payments using a variety of procedures. These include book adjustments, issue of cheques, and payment authorities and electronic payment systems.

5. Government Accounting and Financial Reporting: Government accounting and financial reporting is a very important component of the public sector financial management process in Nigeria. As Adams (2005) noted that government accounting entails the recording, communicating, summarizing, analyzing and interpreting financial statement in aggregate and in details. In the same vein, Prenchard (2009) argues that government accounts have the dual purpose of meeting internal management requirements while providing the public with a window on government operations. Government financial reports should be prepared with the objective in mind of providing full disclosure on a timely basis of all material facts relating to government financial position and operations (Achua, 2009). Financial reports on their own do not mean accountability but they are an indispensable part of accountability.

6. Audit: One of the fundamental aspects of public sector financial management in Nigeria is the issue of audit of government financial reports. Audit is the process carried out by suitably qualified Auditors during the accounting records and the financial statements of enterprises are subjected to examination by the independent Auditors with the main purpose of expressing an opinion in accordance with the terms of appointment. The high level of corruption in the public sector of Nigeria is basically as a result of the failure of auditing. As Prenchard (2009) puts it “many audit agencies are legally prevented from reviewing policies. Most of them cannot follow the trail of money, as they do not have the right to look into books of contractors, and

autonomous agencies”. One fundamental failure of audit is the absence of value for money in the Nigerian public sector.

7. Legislative Control: The legislature (House of Representative and Senate) in Nigeria is expected to perform this very important task of controlling and regulating the revenue and expenditure estimates in any fiscal year. It is the responsibility of the members of the National Assembly to ensure that the budget estimates are properly scrutinized to ensure accuracy, effectiveness and efficiency of government revenue and expenditure.

Treasury Single Account and Public Finance Management in Nigeria

Anumihe (2015) states that treasury single account is related to the management of public funds thereby enhancing the efficiency and effectiveness of public financial management. Anumihe (2015) defined treasury single account as unified structure of government bank accounts that gives a consolidated view of government cash resources, it is a bank account or a set of linked bank accounts through which government transacts all its receipts and payments and gets a consolidated view of cash position at the end of each day.

Awogbemi (2015) remarks that treasury single account is a unified structure of government bank accounts enabling consolidation and optimal utilization of government cash resources. It is a bank account or a set of linked bank accounts through which government transacts all its receipts and payments and gets a consolidated view of its cash position at any given time. This

measure is specifically to promote transparency and facilitate compliance with sections 80 and 162 of the 1999 Constitution. This system of account would end the previous public accounting system characterized by the existence of several fragmented accounts for government revenues, incomes and receipts, which in the recent past has meant the loss or leakages of legitimate income meant for the Federation Account. Public finance management reforms are part of pillar 3 of the National Strategy for Public Service Reforms (NSPSR) towards attainment of vision 20:20:20. Treasury single account is part of the public financial management reform initiatives under the Economic Reforms and Governance Project (ERGP) and it was designed to address impediments to effective Cash Management.

Objectives of Treasury Single Account

- i. To provide greater transparency in the public financial management;
- ii. To gain greater clarity to national financing needs and the management of the public debt;
- iii. To increase fiscal savings (less transaction charges, more revenues);
- iv. To improve financial markets;
- v. To provide more accurate accounting and improved reporting;
- vi. Efficient control and monitoring of funds allocated to MDAs;

- vii. To avoid cost of borrowing to finance expenditure of some deserving MDAs with key projects while some MDAs keep idle funds in their respective bank accounts;
- viii. Facilitating reconciliation;
- ix. Ensures effective budgetary control through close monitoring of budget execution of MDAs;
- x. Support monetary policy implementation.

Functions of Treasury Single Account

- i. Provides a safe haven for government cash deposits which minimizes credit risk exposure.
- ii. Aids the efficient management of government liquidity, and facilitates the central bank's coordination of its monetary policy operations in managing liquidity in the economy with government's cash and debt management functions.
- iii. Can facilitate cost effective banking arrangements and speedy settlements (it might be possible to negotiate with the central bank to act as the clearing house for government operations, which may speed settlement).
- iv. Allows for clarity of banking arrangements and remuneration policies between the treasury and the central bank (a service level agreement is normally negotiated to clarify obligations and responsibilities when the central bank acts as the clearing house for government operations).

Advantages of Treasury Single Account in Nigeria

Garbade, Kenneth, John C. Partlan, and Paul J. Santoro, (2004) stated the following as some of the benefits of TSA:

- (i) **Allows complete and timely information on government cash resources:** Where there is an advanced payment and settlement systems and an Integrated Financial Management Information System (IFMIS) with adequate interfaces with the banking system, this information will be available in real-time. A complete updated balance should be available daily for the use of treasury management.
- (ii) **Improves appropriation control:** The treasury single account ensures that the Ministry of Finance has full control over budget allocations, and strengthens the authority of the budget appropriation. When separate bank accounts are maintained, the result is often a fragmented system, where funds provided for appropriations are augmented by additional cash resources that become through various creative means and bank loans.
- (iii) **Improves operational control during budget execution:** When the information about cash resources, it can plan and implement treasury has full information it can plan and implement budget execution in an efficient, transparent, and reliable manner. The existence of uncertainty regarding whether the treasury will have sufficient funds to finance programmed expenditures may lead to sub-optimal behavior by budget

entities, such as exaggerating their estimates for cash needs or channeling expenditures through off-budget arrangements.

- (iv) **Enables efficient cash management:** A sound treasury single account facilitates effective monitoring of government cash balances.
- (v) **Reduces bank fees and transaction costs:** Reducing the number of bank accounts results in lower administrative cost of maintaining these accounts, including cost associated with bank reconciliation, and reduced banking fees.
- (vi) **Efficient payment mechanisms:** A treasury single account ensures that there is no ambiguity regarding the volume or the location of the government funds, and makes it possible to monitor payment mechanisms precisely. It can result in substantially lower transaction costs because of economies of scale in processing payments. The establishment of a treasury single account is usually combined with elimination of the “float” in the banking and the payment systems, and the introduction of transparent fee and penalty structures for payment services. Many governments have achieved substantial reductions in their real cost of banking services by introducing a treasury single account.
- (vii) **Improves bank reconciliation and quality of fiscal data:** A treasury single account allows for effective reconciliation between the government accounting systems and cash flow statements from the banking system.

This reduces the risk of errors in reconciliation processes and improves the timeliness and quality of the fiscal accounts.

- (viii) **Lowers liquidity reserve needs:** A treasury single account reduces the volatility of cash flows through the treasury, thus allowing it to maintain a lower cash reserve/buffer to meet unexpected fiscal volatility.

Custody of the Treasury Single Account

As the Central Bank acts as the fiscal agent of the government the custody of the treasury single account in most countries is with the Central Bank, although in theory, the main account of a treasury single account system may also be held at a commercial bank. In fact, there is no realistic alternative for economies without a well-developed commercial banking system. In practice, the government banking arrangements may consist of several bank accounts which can be at both the central bank and commercial banks. However, the balances in commercial banks should be cleared every day and all government cash balances should be consolidated in one central account “the treasury single account main account of the federation treasury” at the central bank. There are also instances, particularly in Latin America where a large publicly owned commercial bank operates the treasury single account.

Operations of Treasury Single Account in Nigeria

The central bank has opened a consolidated revenue account to receive all government revenue and effect payments through the treasury single account. All ministries, department and agencies are expected to remit their revenue collections to this account through E-collections. The implication is that banks will no longer have access to the float provided by the accounts they maintained for the MDA's. Different types of account could be maintained under a treasury single account arrangement and they may include any zero balance account; other types of accounts that could operate include impress accounts, other types of correspondence accounts. These accounts are maintained for transaction purposes for funds flowing and in and out of the treasury single account.

Schmitz and Geoffrey(2006) stressed that, for treasury single account policy to be maximized in Nigeria, it needs to be accompanied with the fiscal sunshine bill, which if enacted will open up the financial activities of government in a way that there will be no more hiding place for those who divert or loot government money. For instance, with fiscal sunshine act in place, budgeting process and implementation, including contract awards, should be in the open for Nigerians to see both how revenues are generated and how public money is being spent by those in government, and why.

Larson (2007) explains that treasury single account is bound to improve transparency and accountability in public financial management. First, it will

remove organizational/MDA secrecy around the management of public finances. The discretionary aspect of accounting officers and politicians collaborating to do all manner of business with government finances before executing projects thereby causing delays or negotiating interest rates with banks for private gains will be over. The second is that revenue generating agencies that have been depriving the treasury of due revenue through a plethora of bank accounts under their purview unknown to the authorities will no longer be able to defraud government since all funds will be swept into the treasury single account. Thus, beyond transparency and accountability, the treasury single account will introduce economy and efficiency into overall management of public finances and this will in the long run lead to effectiveness of government spending since it places government in a better position to realize over all policy goals (White, 2006).

Constraints on the Implementation of Treasury Single Account in Nigeria

The political will to push the reforms through the entire system is the first challenge but in the case of Nigeria, the government under the leadership of the present administration will go a long way in enforcing the reform. In fact, it has started. Once the political will is secured, the chances of successful implementation will be great. The second is that the enforcement of the treasury single account on the big Cows of the Nigerian economy such the Nigerian National Petroleum Corporation (NNPC) may be difficult and problematic. The

NNPC for instance, is a big corporation with big tickets and challenges and issues that need responses on a day-to-day basis. It may be imperative to work out special rules and conditions to guarantee that they comply with the treasury single account. Some specific constraints of the policy are:

- i. Under the single account policy, the federal government will be faced with the difficulty of knowing at a glance the revenue accruing to each ministry or amount debited, as all accounts would have been lumped together;
- ii. Economy watchers fear that there will be liquidity squeeze due to the likelihood of unification of government accounts;
- iii. Also, it is expected that the returns of lenders in the economy driven substantially by net interest margins would further be crippled by the treasury single account implementation because the single account which is supposed to unify and monitor incoming and outgoing government transactions for transparency and accountability will deny the banks funds belonging to MDAs currently in the vaults of banks;
- iv. Nigerian bank treasurers are of the view that the implementation would adversely affect liquidity in the banking system and end up putting pressure on interest rates and availability of credit to the economy. According to them, the report on bank accounts with CBN has shown that as at beginning of this current quarter, banks' total public sector deposits

was N1.3 trillion, but additional net flows from Federation Accounts Allocation Committee, FACC, as at end of last month (about N240 billion) as well as expected inflows by end of this month may push the figure close to N2.2 trillion which will make banks to lose about N2trillion deposits to CBN.

The approval of the cash management policy document by the Federal Executive Council for implementation will strengthen Federal Government cash management for better budget implementation and service delivery. Therefore, the effectiveness and efficiency of treasury single account can be achieved if the following cash management policy documents are strictly implemented and monitored.

Treasury Single Account and Fraud Control

Before the introduction of the treasury single account which necessitated the payment of all government revenues and receipts into a single account in the Central Bank of Nigeria, it has sadly been a tale of massive fraud and general lack of commitment to the cause of the nation. According to the ministry of finance, Nigeria has lost so many funds as a result of its maintenance of diverse accounts which has made it easier for embezzlements and fraud related activities.

The Revenue Mobilization and Fiscal Commission released an audit report which indicted some banks for withholding about N12 billion revenue

collected on behalf of the Nigerian Customs Service and Federal Inland Revenue Service. The revenue according to the commission is stashed in 19 banks from January 2008 to June 2012. The chairman, Non- Oil Committee of the Commission, Rev Ajibola Fagboyegun demanded for urgent return of the funds by the banks to avoid sanctions (Hamisu, 2015). This and other issues hinging on corruption, fraud and other related activities have been the order of the day in our public institutions.

Furthermore, it was common practice for agencies saddled with revenue generation to defraud government by the embezzlement of public funds through all sorts of bank accounts in their custody and unknown to the Nigerian government. With all government revenues and receipts being pooled into the treasury single account, not only would it be difficult for this monumental fraud to continue without serious sanctions, but also it would afford government a quick glance at the daily funds pooled into the treasury single account by revenue generation agencies such as federal tertiary institutions in Nigeria.

Treasury Single Account and Accurate Accounting

According to Ocheni (2016), observations are the basis for the current global revolution in government accounting, which Nigeria seems to be following through its treasury single account policy, among other economic policies designed to tame corruption. Other reforms aimed at improving the quality of the nation's Public Financial Management (PFM) systems are

Government Integrated Financial Management Information System (GIFMIS); Automated Accounting Transaction Recording and Reporting System (AATRRS); Integrated Payroll and Personnel Information System (IPPIIS); and International Public Sector Accounting Standard (IPSAS). The author further noted that Federal Government had started the implementation of treasury Single Account with the e-payment component since 2012, while the e-collections commenced in January 2015. The first Treasury Circular on e-Collection was issued on the 19th of March 2015. However, effective implementation of these policies is yet to happen until recently. Treasury single account is an important factor in managing and controlling government's cash resources. It ensures that all tax and non-tax revenues are collected and payments are made correctly in a timely manner and that government's cash balances are optimally managed to reduce borrowing costs. "Non-implementation of treasury single account in a country breeds corruption in multiple regressions because of fragmented government banking arrangements that allows for institutional deficiencies in multiple ways," the don said.

Ocheni (2016) in his lecture at a workshop jointly organized by the Association of National Accountants of Nigeria (ANAN), International Federation of Accountants (IFAC), the Office of the Accountant-General of the Federation (OAGF) and the World Bank in Abuja, titled: "Treasury Single Account: A Catalyst for Public Financial Management in Nigeria," he noted that

there has been mixed feelings about the effects and consequences of the treasury single account among banks, ministries, departments and agencies, as well as government business operators as these agencies failed to understand that fragmented system of handling government receipts and payments through the banking system has attracted institutional deficiencies in multiple ways. First, the idle cash balances in banks failed to earn market related remuneration. Second, the government, being unaware of these resources, incurs borrowing costs. Thirdly, idle balances are used freely by commercial banks, even to extend credit to the owner (government). Ocheni corroborated other experts, who posited that treasury single account facilitates better fiscal and monetary policy coordination, reconciliation of fiscal and banking data and improves the quality of fiscal information. Finally, the establishment of an effective treasury single account significantly reduces the debt servicing costs and eradicates financial misappropriation in the public sector. It should, therefore, receive priority in any public finance management reform agenda.

Treasury single account is a bank account or a set of linked bank accounts through which the government transacts all its receipts and payments and obtains a consolidated view of its cash position at the end of each day. Ocheni maintained that prior to the implementation of the treasury single account, government was incurring finance cost on debit balances in some MDA's accounts, while it was earning close to nothing on the credit balances of other

MDAs. “While it is necessary to distinguish individual cash transactions for control and reporting purposes, these objectives are achieved through the accounting system and not by holding and/or depositing cash in transaction-specific individual bank accounts. This enables the ministry of finance/treasury to delink management of cash from control at a transaction level,” he said with the treasury single account, the net balances on all the MDA accounts will now reside with the central bank, hence the government will avoid incurring interest costs while in positive net position and eradicates loss and leakages of legitimate revenue meant for the Consolidated and Federation Accounts.

Thus, beyond transparency and accountability, the treasury single account will introduce economy and efficiency into overall management of public finances and this will in the long run lead to effectiveness of government spending since it places government in a better position to realize overall policy goals. Ocheni also noted the implementation of Integrated Payroll and Personnel Information System (IPPIS) as a centralized computer based payroll and management system aimed at eliminating payroll fraud, with focus on the determination of the actual personnel cost at a glance, ensuring data integrity towards establishing that personnel information is correct and intact. This, he said, has as objectives, the centralization of data base of public servants; reduction of ghost worker syndrome; ensuring integrity of employee’s data; minimize wastage of public funds; ascertain actual personal emolument of

Federal Government staff and facilitate easy storage, updating and retrieval of personnel records for administrative and pension purposes. The accounting expert listed necessary conditions that must be in place for treasury single account to succeed in Nigeria to include a complete inventory of existing bank accounts; political support for reform of government banking arrangements; the technological feasibility and capacity of the banking system; and review of legal regulatory framework.

The Managing Director, Nigeria Deposit Insurance Corporation (NDIC), Umaru Ibrahim said that the full implementation of the treasury single account was a signal that the era of arm-chair banking in Nigeria was over, adding that the treasury single account policy had presented banks with an opportunity to diversify their sources of deposit mobilization. He stressed that the implementation of the policy should not be strange to the banks, because, according to him, they (the banks) had been warned about three years ago to take steps that would make them not to over rely on government deposits arguing that treasury single account initiative is good for the economy, Ocheni recommended that henceforth, government agency should not be allowed to operate bank accounts without the oversight of the treasury, while the coverage of the treasury single account should be comprehensive and encompassing all government cash resources. He said banks should formulate sound personnel policies to attract people with good morals and knowledge of banking, as

presently treasury single account is affecting banks' liquidity and employment because they failed, refused and neglected the duties bankers do elsewhere.

Treasury Single Account and Budgetary control

The role of budget in an economy cannot be overemphasized. A budget is an important instrument of national resource mobilization, allocation and economic management. It is an economic instrument for facilitating and realizing the vision of the government in a given fiscal year. If a national budget is to serve as an effective instrument for promoting growth and development of a country, there should be proper linkage and management of all the stages of budgeting. A budget has to be well-designed, effectively and efficiently implemented, adequately monitored and its performance well evaluated. With regard to Nigeria's budgets over the years, there is a sharp contrast as expected, between budgeting under military regimes and budgeting under civilian administration. Whereas the former was ad hoc and beclouded with arbitrariness, the latter is often subjected to scrutiny at various stages by the executive and legislative arms of government before the budget is finally approved.

In Nigeria, the reform of the budget process was a major plank of the Public Service Reform (PSR) embarked upon since the inception of civilian administration in 1999. Prior to this time the country was under military rule

during which the budget process was thrown into total disarray with some noticeable defects. Thus, the objectives of the budgetary reforms were to

1. Reduce the excessive share of the budget being allocated to the public service by way of personnel and overhead costs (estimated at over 60%),
2. Reduce the cost of governance in general,
3. Improve resource management by curtailing wasteful expenditure and increasing the level of productivity and efficiency, and
4. Ensure budget discipline (adherence to limits).

The budgetary reforms which commenced in 2000 have five major planks. They are administrative procedures, budget preparation, management of government spending, budget implementation as well as monitoring and evaluation. The management of government spending is achieved through limits imposed by established fiscal rule. The fiscal rule is a statement of limits on disposable revenue projections and fiscal deficit over a budget period. In the case of the Federal Government, it is oil price based using projections of oil prices that are lower than the expected international price of oil over the budget period. It also focuses on savings from the Federal Government debt deals. As part of the budgetary reform measures, steps were taken in 2005 to develop a medium-term expenditure framework which places emphasis on multi-year (three years) budgeting. The revenue estimates were also based on a

Medium Term Revenue Framework (MTRF). In Nigeria, the Medium Term Expenditure Framework (MTEF) seeks to

1. improve macro-economic balance by developing a consistent and realistic resource framework;
2. improve the allocation of resources to strategic priorities among and within sectors;
3. increase the commitment to predictability of both policy and funding for better planning by MDAs and increased programme sustainability; and
4. Provide MDAs with a hard budget constraint and increased incentives for efficient and effective use of funds.

In Nigeria, the adoption of the MTEF at the federal level derives from the need to

1. achieve the right balance between economic development and macro-economic stability
2. direct the bulk of federal spending towards capital spending on the nation's priorities and ensure that budget holders are accountable for the funds allocated to them and
3. Improve the value of federal spending by adding activity and output based budgeting. That is, agreeing in advance the activity to be performed and the expected output and then comparing this with actual output and explaining the variances.

As part of the reform, ministries, departments and agencies (MDAs) of government were given “expenditure envelopes” from which they were to meet all their needs and deliver public goods and services. The allocation of such envelopes was done by the Budget Office of the Federation, working with the Minister of Finance and with the approval of the President following consultations with relevant stakeholders (the National Assembly, Organized Private Sector, Civil Society, the Public Sector and the Political Class). In allocating the envelopes, the major criteria were the size of each MDA’s payroll and priority level accorded to the services to be delivered by each MDA against the background of the priorities of the Federal Government as documented in National Economic Empowerment and Strategy (NEEDS), the Millennium Development Goals (MDGs), Vision 20:2020 and stakeholders’ inputs.

The sectoral component of the medium term expenditure budgeting was the medium-term sector strategy (MTSS) process. Starting from 2005, MDAs were requested to develop and articulate Medium-Term Sector Strategies consistent with National Economic Empowerment and Strategy (NEEDS) and the Millennium Development Goals (MDGs). The process involved

1. clear articulation of goals and objectives by MDAs against the background of the overall goals of National Economic Empowerment and Strategy (NEEDS), Vision 20:2020 and the attainment of the MDGs,

2. identification and articulation of key projects and programmes necessary for the achievement of their goals and objectives bearing in mind their expenditure envelope,
3. costing of the identified key initiatives in a clear and transparent manner,
4. phasing of the implementation of the initiatives over the medium-term (three years),
5. defining the expected outcomes in clear measurable terms and
6. Proper linkage of expected outcomes to their objectives and goals.

The MTSS became a major policy document against which budget proposals of MDAs were evaluated. It should be noted that the implementations of all the above mentioned reform strategies is a continuous process and still ongoing. The Budget Office of the Federation is at the stage of adopting a Performance Based Budgeting System where resources will be allocated to MDAs based on their ability to utilize and deliver the promised deliverables to the Nigerian people. When the treasury has full information about cash resources, it can plan and implement budget execution in an efficient, transparent, and reliable manner. The existence of uncertainty regarding whether the treasury will have sufficient funds to finance programmed expenditures may lead to sub-optimal behavior by budget entities, such as exaggerating their estimates for cash needs or channeling expenditures through off-budget arrangements.

Budgetary control is the establishment of budget relating to the responsibilities of the executives to meet the objectives of an organization and the continuous comparison of actual with budgeted estimates so that, if remedial action is necessary it may be taken at an early stage. (Lou 2002) It can also be defined as a continuous process which reviews and adjust budgetary targets during the financial year and produces a control mechanism to hold budget holders to account, (Wynne, 2003).

Budgetary control, according to Reid (2003), is the whole system of control, financial or otherwise to ensure that income and expenditure are in line with the budgets and wastages are reduced to the minimum. It is a positive and integral part of a public sector organization, planning and appraisal activities so as to achieve the set objectives. The objectives of budgetary control are;

1. To combine the ideas of all levels of management in the preparation of budgets.
2. To centralize control.
3. To channel equal expenditures in the most profitable manner.
4. To provide a yardstick against which actual result can be compared.
5. To plan and control incomes and expenditures so that maximum benefits are achieved.
6. To act as a guide for strategic decision making when unforeseeable conditions affect the budget.

Luder and Jones (2003) outlined the importance of budgetary control as;

1. It increases efficiency as individual's/ accounting officers know that he will be accountable for the fund allocated to his unit and his performance will be evaluated vis-à-vis his output
2. It reveals inefficiency of some officers and as such corrective measures will be taken
3. It reduces greater loses, since it is a continuous measuring of actual and budgeted positions and as such the loopholes will be blocked.
4. The causes of the variances between the budgeted and actual are known and necessary steps taken to forestall the occurrence.
5. It reduces over expenditure on the part of the spending officer.

Chan (2002), outlined the essential features of budgetary control as;

1. **Relevance and Timeliness:** If the budgetary control system is to work properly, the information sent to the officer concerned must be relevant and timely.
2. **Controllable and Non-Controllable Items:** In order to carry out the budgetary control aspect of an organisation, the controllable and non-controllable items should be clearly distinguished between the variables that are directly controllable and non-controllable.
3. **Budget Figure:** For any meaningful budgetary control, it must include the budget figure not only for the whole year but also for appropriate portions of the year.

4. Adequate Information: Before a good budgetary control can be carried out, there should be adequate information which must be understandable and contain the right amount of details.
5. Proper Books: The financial statements prepared at the end of a period give an idea of the activities and flow of fund. Therefore, for the purpose of budgetary control proper books of accounts must be maintained.
6. Regular Checks: Monitoring is a continuous surveillance at the implementation of a project or programme. It seeks to ensure that various activities are carried out according to the budget and that the programme progresses according to plan.
7. Internal Control: Internal control is defined as “the whole system of controls, financial and otherwise established by management in order to carry on the business of the enterprise in an orderly and efficient manner to ensure the completeness and accuracy of records” CIMA. Therefore, for an effective budgetary control, internal control system must be put in place.
8. Disclosure of Committed Balance: in the ministries and extra ministerial departments, cash /commitment basis has been the accounting basis in use where, only the cash received and cash payment are recorded. It is therefore important to disclose the committed balance in the vote book so as to ensure effective budgetary control.

Treasury Single Account and Cash Management

According to Akinyomi (2014), the importance of managing cash in a business comprises the following advantages: Managing cash helps in achieving liquidity in a business and proper control; it assists in the planning towards reducing cash expenses and increasing cash receipts to ensure the business is liquid, Proper managed cash is vital as future cash flow behaviour cannot be predicted and through proper controls of cash, innovative procedures could be implemented for cash receipts and cash payments in the business.

One of the challenges facing developing countries like Nigeria is the absence of efficient allocation of resources as well as stabilization of the business cycles within the domestic economy. The lack of a solid unified structure of government banking as an important factor for efficient management and adequate control of government's cash resources is another debacle. Government's banking arrangements designed to minimize the cost of its borrowing and maximize the opportunity cost of cash resources was non-existent. Nigerian government could not accurately account for total public fund available in different Ministries, Departments and Agencies. A large proportion of the public fund allocated to MDAs for both capital and recurrent expenditures, lodged in various commercial banks were loaned back to the governments at outrageous bank interests. MDAs operated fragmented multiple accounts with various commercial banks, warehousing public funds which were neither traceable to nor disclosed to the central authority at the

end of each accounting year but masqueraded into fictitious accounts. The cost of governance was skyrocketing in a weak economy with a sorry state of infrastructure which demanded urgent government interventions in a quick succession.

The Ministry of Finance and the Accountant General's Office lack a unified view and centralized oversight control over government's cash resources, thereby, created a scenario where cash lies idle for extended periods in numerous bank accounts held by MDAs while the government continued to borrow to execute its budget. The government therefore, was left out with no other option than collapsing all operating accounts of all MDAs domiciled in various Money Deposit Banks with their credit balances into a Single Pool of Account to form a Pyramid of fund. The idle cash balances in bank accounts of the MDAs failed to earn market related remuneration needed for growth. The government being unaware of these unspent resources incurs borrowing costs from the commercial banks, to fund its operations and developmental projects. The idle balances are used freely by Money Deposit Banks to extend credits to the owner-government to finance implementation of its annual budgets. These idle balances instead of being returned to the covers of the government became a deal instrument between the government officials and the financial institutions, in most of the times. These observations, therefore, formed the basis for the emergence of financial

revolution in Nigerian government accounting system termed treasury single account, which was designed to tame corruption, enthrone transparency in the handling of public fund and enhance effective cash management in public life.

A treasury single account can be defined as a unified structure of government bank accounts enabling consolidation and optimum utilization of government cash resources. It separates transaction-level control from overall cash management. In other words, a treasury single account is a bank account or a set of linked bank accounts through which the government transacts all its receipts and payments and gets a consolidated view of its cash position at the end of each day. While it is necessary to distinguish individual cash transactions a typical revenue and/or expenditure transaction of a government unit for control and reporting purposes, these objectives are achieved through the accounting system and not by holding and/or depositing cash in transaction-specific individual bank accounts. This enables the ministry of finance/treasury to delink management of cash from control at a transaction level. An effective treasury single account system is founded on three key principles:

Firstly, government banking arrangement should be unified, to enable ministry of finance/ treasury oversight of government cash flows in and out of these bank accounts and allow complete fungibility of all cash resources, including on a real-time basis if electronic banking is in place. Although a treasury single account structure can contain ledger sub-accounts in a single banking institution (not necessarily a central bank), and can accommodate

external zero-balance accounts (ZBAs) in a number of commercial banks, these separate accounts should be integrated with a top account (called the treasury single account main account) usually at the central bank for netting off their balances (usually at the end of each day) to get the consolidated cash position. No other government agency should operate bank accounts outside the oversight of the treasury. Institutional structures and transaction processing arrangements determine how a treasury single account is accessed and operated. The treasury, as the chief financial agent of the government, should manage the government's cash and debt positions to ensure that sufficient funds are available to meet financial obligations, idle cash is efficiently invested, and debt is optimally issued according to the appropriate statutes. In some cases, debt management including issuance of debt is done by a Debt Management Office (DMO).

Secondly, the treasury single account should have comprehensive coverage, it should ideally include cash balances of all government entities, both budgetary and extra-budgetary, to ensure full consolidation of government's cash resources. In some countries, government balances are consolidated outside the central bank, in a government-owned commercial bank. This model (i) potentially weakens the ministry of finance's policy leverage over the management of government cash flows unless there is a clear framework agreement giving the ministry of finance unambiguous control over all government balances backed by an information flow; and (ii) exposes the

government to greater credit risk, including when the government underwrites the respective commercial bank. It also poses additional challenges for liquidity management by the central bank due to an extra layer of coordination and information sharing.

At least four key issues need to be addressed in designing a treasury single account system:

- (i) coverage of the treasury single account;
- (ii) government bank accounts structure;
- (iii) transaction processing arrangements and associated cash flows; and
- (iv) Roles of the central and commercial banks in managing the treasury single account and provision of banking services.

Coverage of the treasury single account should be comprehensive by including all government-funded entities, including the autonomous and statutory government bodies as well as extra budgetary funds (EBFs) and special accounts. This is to ensure that the treasury single account covers, as far as possible, all relevant cash resources of the government.

All cash flows related to government revenue, expenditure, donor financing, debt issuance and amortization (including those associated with external debt) should be fully integrated into the treasury single account system. Including extra budgetary funds within the treasury single account may be difficult to achieve in some cases where it has a separate legal status or has a

public standing. However, a balance needs to be struck between such extra budgetary funds legitimate claim to operational autonomy on the one hand and the potential costs/ risks arising from fragmented management of public funds on the other.

The donors should be encouraged to integrate their funds with the treasury single account or, as a minimum, to route final payments through the treasury single account. The latter arrangement enables the government to account for and report on donor-funded transactions passing through the treasury single account before payments are made to suppliers/beneficiaries from the donor bank accounts.

Inclusion of social security funds and other trust funds in the treasury single account could be considered, provided that the accounting system is well developed and adequate safeguards exist to prevent the abuse of trust fund resources. Government here means central government unless a decision is taken to have a single treasury single account covering both the central and sub-national governments. One single treasury single account for both central and sub-national governments (and even local governments) could be set up, but it would require a well-developed accounting system and adequate checks and balances to prevent abuse. It also potentially complicates cash-flow forecasting.

Bobitan and Mioc (2011) emphasized the importance of cash management practices which embody all incomes and payments made within a certain period, highlighting potential inconsistencies which can appear for that

period. The language of business revolves around numbers. The ability to understand the value of these numbers will ultimately indicate the ability to understand the business. Consequently, McMahon (2006) stated that when you are out of cash, you are out of business. The indicators of cash management include cash planning which is a technique use to plan and control the use of cash, safety and one to authorize use of cash, cash control, cash allocation and cash budget (Van Horne, 2014). According to Weston and Brigham (2013) profitability is the ability of a firm to earn returns on investment. According to Van Horne the higher the cash balances are in a business, the greater returns or profitability will be foregone. The indicators of profitability include return on capital, return on assets employed and sufficient cash flows. Cash management techniques are adopted by organizations in order to ensure effective investment of cash and to achieve profitability in both the short run and long run (Puxty & Dodds 2008; Pandey 2013; Akinsulire 2012).

According to Amoako et al (2013) cash is the money that a firm can disburse without any restriction. The term cash includes coins, currency and cheques held by the firm and balances on its bank accounts. Sometimes, near cash items such as marketable securities or bank time deposits are also included in the cash. Amoako et al (2013) noted that cash management is concerned with management of cash flows into and out of the firm, cash flow within the firm and cash balances lent by the firm at a time of financial deficit surplus cash.

According to Puxty and Dodds (2008), it is resources in cash by any business unit. According to Van Horne (2014) the need to hold cash may be attributed to the following motives, the transaction motive, precautionary motive and speculate motive. Transaction motive recognized that the organization has to carry out daily transactions in order to protect its profitability position. Cash is needed to pay labour, materials and utilities in order to ensure smooth operations (Akinsulire, 2012). Precautionary motive, cash is needed to cushion the organization against any unforeseen problems like failure of emergency work force problems, failure of electrical system and such problems have negative implications on the organization's profitability. However, the nearness to cash resource mitigates their effects and keeps the organization profits in the balance (Akinsulire, 2012). For speculative motive, the organization maintains cash balances in order to take advantage of any profitable venture that may unexpectedly crop up like a sudden fall in price of scholastic materials. Once the organization's cash has removed speculation, it will not be able to cash on such advantages and additional incomes and savings from such events will be lost (Puxty & Dodds 2008).

According to Amoako, Marfo, Gyau and Asamoah (2013) cash planning is a technique used to plan and control the use of cash. It involves preparation of forecasts of cash receipts and payments so as to give out an idea of the future financial requirements.

Empirical Studies

This section discusses previous empirical studies related to the study.

They are organized under the following headings:

- Influence of Treasury Single Account on Effectiveness of Fraud Control
- Influence of Treasury Single Account on Effectiveness of Accurate Accounting
- Influence of Treasury Single Account on Effectiveness of Budgetary Control
- Influence of Treasury Single Account on Effectiveness of Cash Management

Influence of Treasury Single Account on Effectiveness of Fraud Control

Ocheni (2016) carried out a study on treasury single account as a catalyst for public financial management in Nigeria. Ocheni utilized the mean and standard deviation in analyzing the data. The instrument was validated and a reliability coefficient of 0.61 was obtained. The study on treasury single account as a catalyst for enhancing efficient public financial management in Nigeria, the public perception of the effect of treasury single account policy on the nation's revenue drive, transparency and fight against corruption and also the likely effects of treasury single account policy adoption on banks' liquidity and employment were analyzed. The result shows that the majority has their mean score above the criterion mean of 2.50, because the consolidation of cash

resources through a treasury single account helps to avoid borrowing and paying additional interest charges to finance the expenditures of some agencies while other agencies keep idle balances in their bank accounts

The study therefore concluded that treasury single account policy is paramount in the nation's revenue drive, transparency and fight against corruption. However, the policy adoption affects banks' liquidity and employment as well.

The difference between the study of Ocheni and the present study is that the study of Ocheni considered treasury single account as a catalyst for public financial management while the present research considered an analysis of the influence of treasury single account on the effectiveness of public finance management in Nigeria. Ocheni utilized mean and standard deviation in analyzing the data and the present research also utilized mean and standard deviation in analyzing the data with Analysis of Variance in testing the null hypotheses. The study of Ocheni was aimed at using treasury single account as a catalyst in controlling fraud. The present researcher carried out a study on analysis of the influence of treasury single account on the effectiveness of public finance management in respect to fraud control, accurate accounting, budgetary control and cash management aspects of public finance management.

Oguntodu, Alade, Adekunle and Adegbei (2016) carried out a research work with the expectation to establish the impact of treasury single account on

Nigeria's Economy. Central Bank of Nigeria statistical bulletin (1999-2015) was analyzed using the ordinary least square estimator. To this effect, an empirical analysis of the relationship between treasury single account and economic performance in Nigeria was carried out. The researchers engaged time series data to obtain information because the use of set of economic variables over 17 years. The population of the study was determined based on the available unified data in the Central Bank of Nigeria (CBN) Statistical Bulletin for year 2015 on Gross Domestic Product (GDP), Money Supply (MS), Credit with CBN (CR) and Deposit to CBN (DP); where GDP depends on MS, CR and DP. Due to the nature of this study, secondary data was used. Necessary data were collected between the years 1999-2015 for all the variables. CBN bulletin was selected for their work because it contains the verifications of experts which make it valid for the study. The technique adopted to analyze their work was basically regression by finding the effect of MS, CR and DP on GDP over the available years. E-views 7 statistical package was use to carry out the relevant analysis in order to determine the relationship between the dependent and the independent variables. Regression was used because it showed the extent or degree of relationship between the independent and the dependent variables. In their study, the structure of the GDP which is use to represent Nigeria economy is the dependent while TSA which is represented by Money Supply (MS), Credit with CBN (CR) and Deposit to CBN (DP) represent the

independent variables. Therefore, GDP depends on MS, CR & DP where this is done to examine the Impact of Treasury Single Account on Nigeria's Economy.

The result shows that the treasury single account has a positive significant impact on the country's economic growth but this impact is limited by various factors, one of them being the recent implementation of the policy in Nigeria which made the discovery of historical data difficult. The recommendation of their study is that the federal government of Nigeria should initiate policies and various means to make sure that there are proper accountings of the funds entering into the treasury single account, and that such fund should follow due process. Also, that any subsequent foul play by any agencies, or even the central bank of Nigeria is duly prosecuted.

The difference between the present research and the study carried out by Oguntodu, Alade, Adekunle and Adegbei is that they carried out a study on the impact of treasury single account on Nigeria's Economy. They analyzed the Central Bank of Nigeria statistical bulletin (1999-2015) using the Ordinary Least Square (OLS) estimator. The present researcher carried out a study on the influence of treasury single account on the effectiveness of public finance management in respect of fraud control, accurate accounting, budgetary control and cash management in tertiary institutions in South-South Nigeria. The present researcher utilized mean and standard deviation in answering the research questions and the Analysis of Variance in testing the hypotheses

instead of the OLS estimator used by Oguntodu et al. the present researcher used 48 bursars in federal and states owned tertiary institutions as the population of the study while the former researchers used secondary data available from the unified data in the Central Bank of Nigeria (CBN) Statistical Bulletin for year 2015 on Gross Domestic Product (GDP), Money Supply (MS), Credit with CBN (CR) and Deposit to CBN (DP); where GDP depends on MS, CR and DP.

Influence of Treasury Single Account on Effectiveness of Accurate Accounting

Yusuf (2016) researched on effect of treasury single account on public finance management in Nigeria. The major purpose of the study was to examine the extent to which treasury single account can block financial leakages, promote transparency and accountability in the public financial management conduct. The study population used in the research comprised of workers in the finance offices of MDAs in Bauchi State. In order to have a sizeable number for the study, the judgmental method of sampling was used as only people of knowledge and experienced in the area under the study were selected. A total of seventy-two workers were selected for the study out of the population. Data considered for the study were obtained from primary source. The questionnaire survey was designed where respondents were asked to determine the degree of importance of each information using Likert-type five scales, where (1) referred

to strongly disagree, and (5) strongly agree, and the hypothesis tested statistically using SPSS to fulfill the research objectives. In view of this, 72 questionnaires were administered to relevant accounting departments of some selected Federal Government departments and agencies in Bauchi metropolis which include Federal pay offices, Nigerian Custom office, Federal Polytechnic and Corporate affairs commission office Bauchi. Analyses were made using percentages, mean and chi-square. From the findings, it was revealed that about 70% of the respondents agreed with the fact that introduction of accounting processes largely increased profit margins for the business. Yusuf utilized survey research based on survey design. It involved gathering of data about the effect of Treasury Single Account on Public Finance Management. However, it was recommended that staff should be adequately trained to enhance efficiency in the accounting process of small business. Yusuf's study and the present study are related in the areas of treasury single account impact on public finance management in Nigeria. Both studies are on how treasury single account can block financial leakages and promote transparency and accountability in the public finance management in Nigeria. Both studies also differ in the method of data collection as the former researcher used questionnaire, personal interviews and secondary sources. The former researcher used tables, percentages, mean and chi-squares for data analysis while the present researcher utilized percentages, mean, standard deviation and ANOVA for data analysis.

Igbekoyi and Agbaje (2017) assessed the implication of treasury single account adoption on public sector accountability and transparency. The study captured 570 ministries, departments and agencies (MDAs) in the public service with sample size of ten (10) MDAs involved in revenue generation selected using purposive sampling technique. Descriptive and Inferential analysis were employed in the study. Result showed that TSA has significant positive impact on financial leakages, transparency and curb financial misappropriation. They recommended that for proper public sector accountability and transparency, ministries, departments and agencies in the public service should be involved in the full adoption of treasury single account. They also recommended that strident measures of discipline should be melted on those MDA's that fails to implement the full adoption of treasury single account system. The present work differs from the former because the population of the former is ten ministries, departments and agencies while the present researcher utilized forty-eight bursars in tertiary institutions in the South-South region of Nigeria. Igbekoyi and Agbaje utilized descriptive and inferential statistics in analyzing their data while the present researcher also utilized descriptive and inferential statistics using mean and percentages to analyze the research questions and analysis of variance to analyze the hypothesis. The former study recommended full implementation of TSA by all MDA's and discipline for those who fail to implement the TSA while the present study recommended the implementation of TSA at all level of government and by other private tertiary institutions in

Nigeria. The present researcher also recommended that the concept of TSA should be introduced in the curriculum for training of accounts and finance personnel.

Oti, Igbeng and Obim (2017), assessed the policy impact of Treasury Single Account in Nigeria. Specifically, the study examined the potency of TSA on the transparency and accountability of governments' financial transactions in Nigeria, assessed the relationship between TSA implementation and Nigerian economic growth and evaluated the influence of TSA in projecting future business climate in Nigeria. The study adopts survey and exploratory research designs, employees in government ministries, departments and agencies, Commercial Bank officials, officials of the central Bank of Nigeria, business operators, entrepreneurs, members of the civil society organizations and a cross section of the public were considered as the population for the study as the estimated population summed up to 1012, while the sample size used was 286. Data collected were analyzed using the Pearson Product Moment Correlation coefficient. Discoveries from the study revealed various sheds of opinion: while bankers decry the distortion of their liquidity management plan, the federal government on the other hand claims a huge success because it can now comment on its aggregate cash holding without the drudgery hitherto associated with getting to all commercial banks or MDAs with multiple accounts.

The study of Oti, Igbeng and Obim differs from the present study because the former assessed the potency of TSA on the transparency and accountability of governments' financial transactions in Nigeria, the relationship between TSA implementation and Nigerian economic growth and the influence of TSA in projecting future business climate in Nigeria while the present study assessed the influence of treasury single account on the effectiveness of public finance management in the areas of fraud control, accurate accounting, cash management and budgetary control. The population of the present study consist of 48 bursars in federal and states owned tertiary institutions in South-South Nigeria while employees in government ministries, departments and agencies, Commercial Bank officials, officials of the central Bank of Nigeria, business operators, entrepreneurs, members of the civil society organizations and a cross section of the public were considered as the population for the study as the estimated population summed up to 1012, while the sample size used was 286. The present researcher utilized mean and standard deviation to analyze the data while the former researcher utilized the Pearson Product Moment Correlation coefficient to analyze data. The former researchers concluded that bankers decry the distortion of their liquidity management plan and that the federal government on the other hand claims a huge success in the implementation of treasury single account while the present researcher concluded that Single treasury account is highly influential on the effectiveness of public finance management in tertiary institutions in South-South Nigeria with respect to fraud

control, accurate accounting, budgetary control and cash management and that there is no significant difference in the mean ratings of bursars in federal and state tertiary institutions in South-South Nigeria on the influence of treasury single account on the effectiveness of public finance management in terms of fraud control, accurate accounting, budgetary control and cash management as a result of their qualifications and years of working experience.

Influence of Treasury Single Account on effectiveness of Budgetary Control

Kanayo and Harrison (2013) appraised the Public Financial Management and Fiscal Outcomes in Nigeria: Empirical Evidence. The major purpose of the study was to appraise the Public Financial Management and Fiscal Outcomes in Nigeria within a macro econometric modeling framework. Key institutional variables were used to measure the impact of public finance management systems and fiscal outcomes. The results indicated that corruption and literacy rate are the two institutional factors that influence fiscal outcomes in Nigeria. They also recommended the need to critically improve the budget institutions and the coordination of the Ministries, Departments and Agencies (MDA's) of government capital budgeting system through integrated and systematic

accounting system cannot be overemphasized. They employed two methods to analyze the relationship between public finance management and fiscal outcomes in Nigeria. Firstly, they carried out a non-parametric analysis (correlation and trend analysis) to examine the link between the variables. Secondly, regression analysis based on the ordinary least square method was used to determine the impact of each of the selected indications on the specific outcomes. Data were obtained for the study through personal interviews, questionnaires and secondary sources. The relationship of Kanayo and Harrison's work to the present study is that the former researchers used Nigeria as their area of study and the present researcher also used South-South, Nigeria as the area of study. The former study dealt on the management of funds and the present study dealt on fraud control, accurate accounting, budgetary control and cash management. However, Kanayo and Harrison's study differs from the present study in the sense that they appraised Public Financial Management and Fiscal Outcomes in Nigeria while the present study will assess treasury single account effectiveness on public finance management in tertiary institutions in South-South Nigeria.

Ibeto, Nkomah, Osakede and Kinge (2016) evaluated and criticized the policy of Treasury Single Account (TSA) adopted by the Nigerian government as an essential tool for enhancing transparency and accountability in public sector finances. Theoretically, the study adopts both qualitative and quantitative

research design and descriptive analysis to gain an insight into the nature and character of TSA operations in Nigeria. The study draws its argument basically from secondary data, which include personal observation, newspapers, academic publication, and Internet sources. It was concluded in the study that TSA should cater for generated revenue in various foreign currencies especially dealing with exchange difference accounting in their respective annual reports given that the means of establishing exchange differences at the end of the period by translating closing foreign currency balances may no longer be applicable.

The study Ibeto et al differs from the present study because the former study utilized both quantitative research design and descriptive analysis while the present researcher utilized the descriptive survey research design by administering questionnaires to respondents and using ANOVA to test the null hypothesis while mean and percentages were used to answer the research questions. The former researchers looked at foreign currency translation as it affects income generated in Nigerian banks and their current exchange rate as it affects the treasury single account system of accounting while the present researcher looked at the influence of treasury single account on the effectiveness of public finance management as it relates to fraud control, accurate accounting, budgetary control and cash management. The former researchers concluded that treasury single account should cater for generated revenue in various foreign

currencies especially dealing with exchange difference accounting in their respective annual reports while the present researchers concluded that treasury single account should be practiced at the states and local government levels of governance.

Influence of Treasury Single Account on effectiveness of Cash Management

Okoro (2006) conducted an empirical research on strategies for improving the financial management practices of small and medium scale entrepreneurs in Niger Delta of Nigeria. The study was meant to address the financial management constraints faced by entrepreneurial skills. The major purpose of the study was to identify the strategies for improving the financial management practices of small and medium scale entrepreneurs in the Niger Delta region who registered with National Association for Small and Medium Scale Enterprises (NASME). The entire population was surveyed. A structured questionnaire was used to collect data. The mean and standard deviation were used to analyze the research questions while t-test and Analysis of Variable (ANOVA) were used to analyze the hypotheses. The major findings of the study among others included: the respondents agreed that 10 out of the 15 sourcing of funds strategies are ways for enhancing their sourcing of funds; they also agreed that 8 out of 14 control strategies are ways that financial management practices can be effectively improved through the application or adoption of the identified strategies. Finally, it was recommended that federal ministry of industry should

encourage practicing entrepreneur, to gain relevant knowledge in financial resources management. The analysis of financial statements using appropriate management practices assist business managers to determine the position of their ventures in the face of prevailing economic conditions. Therefore, Okoro's study is related to the present study because both of them used mean and standard deviation to analyze research questions. The former researcher utilized t-test and ANOVA in testing the hypotheses and the present researcher also utilized t-test ANOVA in testing the hypotheses. The former researcher surveyed the entire population and the present researcher also surveyed the entire population. Meanwhile, Okoro's work differ from this present study because Okoro looked at the strategies for improving the financial management practices of small and medium scale entrepreneurs in Niger Delta of Nigeria while the present work looked at the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria. The former researcher carried out the study in the Niger Delta region in Nigeria while the present researcher carried out the study in South-South region of Nigeria.

Onuorah and Chigbu (2016) assessed the effect of implementation of Federal Government Treasury Single Account (TSA) Deposits and commercial banks performance in Nigeria. Secondary source of data was considered for the study through collation time series data from Central Bank of Nigeria (CBN)

Statistical Bulletin (2015) for the period of five years (2012 to 2016). The study employed trend analysis (bar charts), descriptive and inferential statistics were also employed in the study. The results obtained revealed that the implementation of Treasury Single Account deposit: federal government demand deposit (LnFGDD), Federal government time deposit (LnFGTD), and Federal Government savings deposit (LnFGSD) have positive impact on the bank performance in Nigeria. LnFGSD impacted negatively on LnCBP in Nigeria. The study of Onuorah and Chigbu differs from the present study because the former assessed the effect of implementation of Federal Government Treasury Single Account (TSA) Deposits and commercial banks performance in Nigeria while the present study assessed the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria. Both studies were carried out in Nigeria. The former researchers considered secondary source of data was for the study through collation time series data from Central Bank of Nigeria (CBN) Statistical Bulletin (2015) for the period of five years (2012 to 2016) while the present researcher collected data from 48 bursars in federal and states owned tertiary institutions in South-South Nigeria. The former researchers concluded that the implementation of Treasury Single Account deposit: federal government demand deposit (LnFGDD), Federal government time deposit (LnFGTD), and Federal Government savings deposit (LnFGSD) have positive impact on the bank while the present researcher concluded that Single treasury

account highly influences the effectiveness of public finance management in tertiary institutions in South-South Nigeria with respect to fraud control, accurate accounting, budgetary control and cash management and that there is no significant difference in the mean ratings of bursars in federal and state tertiary institutions in South-South Nigeria on the influence of treasury single account on the effectiveness of public finance management in terms of fraud control, accurate accounting, budgetary control and cash management as a result of their qualifications and years of working experience.

Summary of Review of Related Literature

The review of literature concentrated on the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria. The conceptual framework reviewed the concepts of treasury single account, public sector, and public finance management.

The theoretical framework of the study was based on the law of increasing state activities postulated by Adolph Wagner and the displacement theory postulated by Jack Wiseman and Alan Peacock. The theoretical studies reviewed literature on public finance management in Nigeria, treasury single account and public finance management in Nigeria, objectives of treasury single account functions of treasury single account in Nigeria, advantages of treasury single account in Nigeria, custody of treasury single account, operations of

treasury single account in Nigeria, constraints of treasury single account in Nigeria, treasury single account and fraud control, treasury single account and accurate accounting, treasury single account and budgetary control and treasury single account and cash management.

Related empirical studies were reviewed on the influence of treasury single account on effectiveness of; fraud control, accurate accounting, budgetary control and cash management. The entire literature provided inputs into the development of questionnaire for collecting data.

On fraud control, Oguntodu et al asserted the federal government should initiate policies and various means to make sure that a proper accounting of the funds entering into the treasury single account, and such funds should follow due process and that any subsequent foul play by any agency or even the central bank of Nigeria is duly prosecuted. Ocheni also concluded that treasury single account policy is paramount in the nation's revenue drive, transparency and fight against corruption.

On accurate accounting, Yusuf asserted that staff should be adequately trained to ensure efficiency in the accounting process of small business to effectively carry out the treasury single account policy, so as to block financial leakages. On budgetary control, Kanayo and Harrison recommended the need to critically improve the budgetary institutions and their coordination of government agencies in terms of capital budgeting systems in order to improve

the nation's fiscal outcomes. On cash management, Onuorah and Chigbu concluded that the implementation of Treasury Single Account deposit: federal government demand deposit (LnFGDD), Federal government time deposit (LnFGTD), and Federal Government savings deposit (LnFGSD) have positive impact on the bank

However, the literature reviewed revealed that no research work has been conducted to analyse the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria. That is the gap this study sought to fill.

CHAPTER THREE

METHOD

This chapter describes in details the procedure adopted in carrying out the study. It is presented under the following headings; research design, area of the study, population of the study, sample and sampling techniques, instrument for data collection, validation of the instrument, reliability of the instrument, method of data collection and method of data analysis.

Research Design

This study utilized the descriptive survey design. Nworgu (2015) posited that a survey research is one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group. The researcher chose this design for the study as the study aimed at surveying the opinions of the bursars in the federal and states tertiary institutions in South-South Nigeria regarding the influence of treasury single account on the effectiveness of public finance management.

Area of the Study

This study was carried out in South-South geo-political zone of Nigeria which represents about 7.5% of Nigeria's land mass with an area of 84,587metre square. It comprises the following states; Bayelsa, Rivers, Akwa Ibom, Cross River, Edo and Delta States. The people in this region are from

diverse cultural background. Fishing and farming are the major occupations of the South-South people because of the abundant creeks, lagoons, rivers and rich soil within which farming is practiced. The reason for conducting this study in this area is because this part of the country has some tertiary institutions owned by the federal and states government.

Population of the Study

The population of this study comprised 48 bursars in the 48 federal and state owned tertiary institutions in South-South, Nigeria. The federal and state owned tertiary institutions are mainly 15 universities, 14 polytechnics and 19 colleges of education. The population distribution by federal and states tertiary institution is shown in Appendix C in page 132.

Sample and Sampling Technique

The population is not too large for the study and it is manageable. Therefore, the entire population size of 48 was studied.

Instrument for Data Collection

The instrument that was used to elicit data for this study was a structured questionnaire titled: “Influence of Treasury Single Account on the Effectiveness of Public Finance Management Questionnaire” (ITSAEPFMQ) developed by the researcher. The ITSAEPFMQ consists of two parts, A and B. Part A focused on respondents’ demographic data such as; qualification and years of experience

while part B is made up of four sections, B₁ to B₄ in accordance with the four research questions. The instrument consists of 40 items in part B. Section B₁ comprises 9 items which focused on fraud control, Section B₂ comprises 15 items which focused on accurate accounting, Section B₃ comprises 8 items which also focused on budgetary control and section B₄ comprises 8 items which focused on cash management.

Bursars were required to use the structured questionnaire developed by the researcher to rate the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria using the 5 point rating scale as follows:

Very Highly Influenced	VHI
Highly Influenced	HI
Moderately Influenced	MI
Lowly Influenced	LI
Very Lowly Influenced	VLI

Validation of the Instrument

In order to establish the face validity of the instrument, one experts in measurement and evaluation and two experts in accounting were given the instrument alongside the purpose of the study, research questions and hypotheses. These experts were chosen in consideration of the fact that they have the knowledge and experience in construction of research instruments and

adequate knowledge in the field of the researcher's study. They were requested to verify the validity of the instrument with respect to appropriateness of language and clarity of the questionnaire items, the possibility of the instrument to elicit the exact data required from the respondents and the extent to which the questionnaire items cover the subject matter. The experts' comments and suggestions were taken into consideration in producing the final copy of the instrument.

Reliability of the Instrument

In order to establish the reliability of the instrument, Cronbach Alpha method was adopted so as to ascertain the internal consistency of the instrument. Copies of the instrument were administered to ten bursars in six federal tertiary institutions and four states owned tertiary institutions in South-East Nigeria. The ten federal and states tertiary institutions for the pilot testing are; Federal Polytechnic, Nekede, Federal Polytechnic, Oko, Nnamdi Azikiwe University, Awka, Federal College of Education(Technical), Umunze, Imo State University, Owerri, Federal University of Technology, Owerri, Enugu State University of Science and Technology, Enugu, University of Nigeria, Nssuka, Federal College of Education, Eha-Amufu, Chukwuemeka Odumegwu Ojukwu University, Uli, all in South-East, Nigeria. The data obtained from the responses were computed and the reliability indices for Sections B₁, B₂, B₃ and B₄ were

0.78, 0.81, 0.85 and 0.78 respectively. The overall reliability of 0.82 was obtained.

Method of Data Collection

The instrument was administered to bursars in federal and states owned tertiary institutions in South-South Nigeria as a primary source of data collected for the study which was also used for data analysis. The data presented were based on the questionnaire with a return rate of 92 percent (46 out of 48). A period of three weeks was used for administration and collection of the questionnaire as a result of the large area of coverage and the busy schedule of the respondents. The researcher administered the instrument personally

Method of Data Analysis

Frequency count and simple percentage were used to analyze data in respect of the respondents' personal characteristics. Mean and standard deviation were used to analyze data relative to the research questions. The mean score was used to provide answer to research questions while standard deviation was used to analyse the relatedness of the mean scores as attested by the respondents. In analysis, therefore, any item that is within the mean range of 4.50-5.00 was considered as very highly influenced, any item with a mean score ranging from 3.50-4.49 was considered as highly influenced, any item with a

mean score ranging from 2.50-3.49 was considered as moderately influenced, any item with a mean score ranging from 1.50-2.49 was considered as lowly influenced and any item with a mean score ranging from 0.10-1.49 was considered very lowly influenced.

Analysis of Variance (ANOVA) was employed to test all the hypotheses at 0.05 level of significance. The decision rule was to accept the null hypothesis if F-calculated is less than the F-critical. On the other hand, the null hypothesis was rejected if the F-calculated is greater than or equal to the F-critical.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

This chapter presents the data collected and the statistical analysis of the study. The data presented were based on the questionnaire. The results of the analysis of data are presented according to the research questions raised and hypotheses formulated in chapter one. Summary of major findings are also presented.

Analysis in Relation to Research Questions

Research Question 1

What is the level to which treasury single account influence the effectiveness of public finance management in respect of fraud control in tertiary institutions in South-South Nigeria?

Analysis of data relating to this research question is presented in Table 1

Table 1
Mean Rating and Standard Deviation of Respondents on Influence of TSA On Fraud Control in Tertiary Institutions in South-South, Nigeria

S/N	Items	Mean	S.D.	Remark
1	Appropriation of asset	3.65	0.51	Highly Influenced
2	Handling of cash	3.63	0.51	Highly Influenced
3	Non- fraudulent disbursement	3.57	0.50	Highly Influenced
4	Reduction in bribery and corruption	3.61	0.51	Highly Influenced

5	Integrity of accounting records	3.72	0.57	Highly Influenced
6	Reduction in money laundering	3.43	0.49	Moderately Influenced
7	Fraud detection	3.37	0.51	Moderately Influenced
8	Fraud prevention	3.89	0.55	Highly Influenced
9	Internal control programmes	4.00	0.57	Highly Influenced
Cluster Mean		3.65	0.52	Highly influenced

Table 1 presents the results on the ratings of bursars on the influence of treasury single account on fraud control in federal and states tertiary institutions in South-South Nigeria. From the result, all the items received mean rating ranging from 3.37 – 4.00 within the real limits of 2.50 – 3.49 and 3.50 – 4.49 and were regarded as moderately influenced and highly influenced. The grand mean for this cluster is 3.65 and also regarded as highly influenced. The range of standard deviation (0.49 – 0.57) and a grand standard deviation of 0.52 revealed that the respondents were not far apart in their rating. This therefore means that treasury single account has high influence on the effectiveness of public finance management with respect to fraud control in tertiary institutions in South-South Nigeria.

Research Question 2

What is the level to which treasury single account influence the effectiveness of public finance management in respect of accurate accounting in tertiary institutions in South-South Nigeria?

Analysis of data relating to this research question is presented in Table 2

Table 2**Mean Rating and Standard Deviation of Respondents on Influence of TSA on Accurate Accounting in Tertiary Institutions in South-South, Nigeria**

S/N	Items	Mean	S.D.	Remark
10	Transparency of tax payer obligation and liabilities	3.76	0.53	Highly Influenced
11	Tax payer registration and assessment	3.67	0.52	Highly Influenced
12	Value for money and control in procurement	3.65	0.51	lightly Influenced
13	Timeliness and regularity of account reconciliation	3.81	0.54	Highly Influenced
14	Unreported government operations	3.80	0.54	Highly Influenced
15	Transparency on inter-government fiscal relation	4.04	0.58	Highly Influenced
16	Internal control for non-salary expenditure	3.52	0.50	Highly Influenced
17	Availability of funds for commitment of expenditure	3.59	0.51	Highly Influenced
18	Quality and timeliness of annual financial statement	3.61	0.51	Highly Influenced
19	Information on resources received by service delivery units	3.78	0.53	Highly Influenced
20	Public access to pay fiscal information	3.98	0.57	Highly Influenced
21	Collection of tax payment	4.04	0.58	Highly Influenced
22	Recording management of cash balances, debt and guarantee	4.09	0.59	Highly Influenced
23	Internal audit	3.98	0.57	Highly Influenced
24	Payroll control	4.00	0.57	Highly Influenced
Cluster Mean		3.82	0.54	Highly Influenced

Table 2 presents the result on respondents' rating on the influence of treasury single account on the effectiveness of public finance management with respect to accurate accounting in federal and states owned tertiary institutions in South-South Nigeria. All the items received mean rating ranging from 3.52 – 4.09 within the real limits of 3.50 – 4.49 and were regarded as highly influenced. Considering that the grand mean of this cluster 3.82 which fell within the same range thus regarded as highly influenced. The standard deviation ranges from 0.50 – 0.59 and a grand standard deviation of 0.54 which implies that the respondents were homogenous in their responses. This therefore means that treasury single account is considered highly influenced in the effectiveness of public finance management with respect to accurate accounting in federal and state owned tertiary institutions in South-South Nigeria.

Research Question 3

What is the level to which treasury single account influence the effectiveness of public finance management in respect of budgetary control in tertiary institutions in South-South Nigeria?

Analysis of data relating to this research question is presented in Table 3

Table 3

Mean Rating and Standard Deviation of Respondents on Influence of TSA on Budgetary Control in Tertiary Institutions in South-South, Nigeria

S/N	Items	Mean	S.D.	Remark
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25	Proper budget planning	4.17	0.61	Highly Influenced
26	Timely budget preparation	3.96	0.56	Highly Influenced
27	Total adoption of the budget	4.20	0.61	Highly Influenced
28	Proper budget execution	3.98	0.57	Highly Influenced
29	Effective internal control of budget	4.07	0.58	Highly Influenced
30	Effective external audit of budget	4.22	0.62	Highly Influenced

Table 3 Continues

S/N	Items	Mean	S.D.	Remark
31	Reduction in excess share of the budget on personnel cost	3.96	0.56	Highly Influenced
32	Reduction in excess share of the budget on overhead cost	4.02	0.57	Highly Influenced
Cluster Mean		4.07	0.59	Highly Influenced

Table 3 presents the result on bursars' rating on the influence of treasury single account on budgetary control in federal and states owned tertiary institutions in South-South Nigeria. Bursars rated all the items on budgetary control highly influenced with mean scores ranging from 3.96 – 4.22. These mean rating fell within the real limit of 3.50 – 4.49 and were regarded as highly influential. The grand mean of this cluster (4.07) fell within the same real limit thus regarded as highly influenced. The standard deviation ranges from 0.62 – 0.56 and a grand standard deviation of 0.59 which indicates homogeneity of responses. Therefore, it was adjudged that treasury single account has high influence on the effectiveness of public finance management with respect to budgetary control in federal and state owned tertiary institutions in South-South Nigeria.

Research Question 4

What is the level to which treasury single account influence the effectiveness of public finance management in respect of cash management in tertiary institutions in South-south Nigeria?

Analysis of data relating to this research question is presented in Table 4

Table 4

Mean Rating and Standard Deviation of Respondents on Influence of TSA on Cash Management in Tertiary Institutions in South-South, Nigeria

S/N	Items	Mean	S.D.	Remark
33	Cash flow (forecasting and reporting)	4.28	0.63	Highly Influenced
34	Cash concentration	3.93	0.56	Highly Influenced
35	Automatic clearing house	3.96	0.56	Highly Influenced
36	Debt management	3.98	0.57	Highly Influenced
37	Government expenditure monitoring and control	4.09	0.59	Highly Influenced
38	Published financial accounts	4.13	0.60	Highly Influenced
39	Transaction processing and recording	4.17	0.61	Highly Influenced
40	Income generation	4.20	0.61	Highly Influenced
	Cluster Mean	4.09	0.59	Highly Influenced

Table 4 presents the result on respondents' rating on influence of treasury single account on cash management in federal and state owned tertiary institutions in South-South Nigeria. From the result, the mean value ranges from 3.93 –4.28. However, the grand mean of this cluster 4.09 fell within the real limit of 3.50 – 4.49 thus was regarded as highly influenced. The standard

deviation ranges from 0.56 – 0.63 and a grand standard deviation of 0.59 which indicates that the respondents were homogenous in their responses. Therefore, it was adjudged that treasury single account is highly influenced on the effectiveness of public finance management with respect to cash management in federal and state owned tertiary institutions in South-South Nigeria.

Demographic Data

Data collected in respect of this section of the instrument to enable statistical test of the hypothesis are presented in Tables 5 and 6.

Table 5

Year of Work Experience of Respondents

Year of Work Experience	Number of Respondent	Percentage (%)
0 – 5	0	0
6 – 10	14	30.43
Above 10 Years	32	69.57
Total	46	100

From the analysis of the demographic data, none of the respondents had work experience ranging from 0-5 years, which represents 0%. The respondents that had work experience ranging from 6-10 years were 14, which represents 30.43%. The respondents with work experience above 10 years were 32, which also represents 69.57% of the total respondents. The implication of this analysis is that most of the respondents had a work experience of 10 years and above and

the remaining respondents had a work experience of 6-10 years. This means that with high level of work experience, the respondents provided necessary and accurate responses to the items in the research question on influence of treasury single account on the effectiveness of public finance management.

Table 6
Educational Qualifications of Respondents

Qualifications	Number of Respondent	Percentage (%)
OND/HND	0	0
B.Sc/B.Ed	18	39.13
Master	22	47.83
PhD	6	13.04
Total	46	100

From the analysis of the demographic data, none of the respondents possesses OND/HND educational qualification, which represents 0%. The respondents that possesses B.Sc/B.Ed degree were 18, representing 39.13% of the total respondents. The respondents that possesses Master degree were 22, representing 47.83% of the total respondents and 6 of the respondents possesses PhD degree representing 13.04% of the total respondents. The implication is that most of the respondents possesses a Master degree and above while others possesses only a First degree. This means that with the high level of educational

qualification of the respondents, the responses to the items in the question gave a true reflection of the influence of treasuring single account on the effectiveness of public finance management.

Statistical Test of Hypothesis

Hypothesis 1

There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of fraud control in federal and state tertiary institutions with respect to qualification (HND/B.Sc, Masters, Ph.D.).

The test for hypothesis one is presented in Table 7.

Table 7

ANOVA Summary on Mean Ratings of Respondents of Different Educational Qualifications on the Influence of TSA on Fraud Control in Tertiary Institutions in South-South, Nigeria

Source of Variance	Sum of Square	Mean Square	df	F-cal crit	F- α	Remark
Between Groups	4.99	2.49	2	3.21	3.23	0.05 NS
Within Groups	0.69	0.46	43			
Total	5.68	2.95				

Table 7, shows ANOVA summary on mean ratings of bursars of different qualifications on the influence of treasury single account on fraud control in federal and state tertiary institutions in South-South Nigeria. With 2 and 43 as the degree of freedom at 0.05 level of significance, F-critical is 3.23 while F-

calculated is 3.21. Since the F-calculated is less than the F-critical, the null hypothesis is therefore accepted. This indicates that there is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of fraud control in federal and state owned tertiary institutions with respect to qualification.

Hypothesis 2

There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of fraud control in federal and state tertiary institutions with respect to their years of working experience.

The test for hypothesis two is presented in Table 8.

Table 8

ANOVA Summary on Mean Ratings of Respondents of Different Years of Working Experience on the Influence of TSA on Fraud Control in Tertiary Institutions in South-South, Nigeria

Source of Variance	Sum of Square	Mean Square	df	F-cal	F-crit	α	Remark
Between Groups	21.71	11.19	2	2.98	3.23	0.05	NS
Within Groups	7.29	4.46	43				
Total	28.00	15.65					

Table 8, shows ANOVA summary on mean ratings of bursars of different years of working experience on the influence of treasury single account on fraud

control in federal and state tertiary institutions in South-South Nigeria. With 2 and 43 as the degree of freedom at 0.05 level of significance, F-critical is 3.23 while F-calculated is 2.98. Since the F-calculated is less than the F-critical, the null hypothesis is therefore accepted. This indicates that there is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of

fraud control in federal and state owned tertiary institutions with respect to their years of working experience.

Hypothesis 3

There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of accurate accounting in federal and state tertiary institutions with respect to their qualification.

The test for hypothesis three is presented in Table 9.

Table 9

ANOVA Summary on Mean Ratings of Respondents of Different Educational Qualifications on the Influence of TSA on Accurate Accounting in Tertiary Institutions in South-South, Nigeria

Source of Variance	Sum of Square	Mean Square	df	F-cal	F-crit	α	Remark
Between Groups	6.93	3.39	2	2.91	3.23	0.05	NS
Within Groups	3.69	2.86	43				
Total	10.62	6.25					

Table 9, shows ANOVA summary on mean ratings of bursars of different qualifications on the influence of treasury single account on accurate accounting in federal and state tertiary institutions in South-South Nigeria. With 2 and 43 as the degree of freedom at 0.05 level of significance, F-critical is 3.25 while F-calculated is 2.91. Since the F-calculated is less than the F-critical, the null hypothesis is therefore retained. This indicates that there is no significant difference in the mean ratings of respondents on the influence of treasury single account on the effectiveness of public finance management in respect of accurate accounting in federal and state owned tertiary institutions with respect to qualification.

Hypothesis 4

There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of accurate accounting in federal and state tertiary institutions with respect to their years of working experience.

The test for hypothesis four is presented in Table 10.

Table 10

ANOVA Summary on Mean Ratings of Respondents of Different Years of Working Experience on the Influence of TSA on Accurate Accounting in Tertiary Institutions in South-South, Nigeria

Source of Variance	Sum of Square	Mean Square	df	F-cal	F-crit	α	Remark
Between Groups	54.49	32.49	2	3.21	3.23	0.05	NS
Within Groups	21.60	12.86	43				
Total	76.09	45.35					

Table 10, shows ANOVA summary on mean ratings of bursars of different years of working experience on the influence of treasury single account on fraud control in federal and state tertiary institutions in south-south Nigeria. With 2 and 43 as the degree of freedom at 0.05 level of significance, F-critical is 3.23 while F-calculated is 3.21. Since the F-calculated is less than the F-critical, the null hypothesis is therefore accepted. This indicates that there is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of accurate accounting in federal and state owned tertiary institutions with respect to their years of working experience.

Hypothesis 5

There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of budgetary control in federal and state tertiary institutions with respect to their qualifications.

The test for hypothesis five is presented in Table 11.

Table 11

ANOVA Summary on Mean Ratings of Respondents of Different Educational Qualifications on the Influence of TSA on Budgetary Control in Tertiary Institutions in South-South, Nigeria

Source of Variance	Sum of Square	Mean Square	df	F-cal	F-crit	α	Remark
Between Groups	74.22	20.49	2	3.31	3.23	0.05	S

Within Groups	43.65	13.40	43
Total	117.87	33.89	

Table 11, shows ANOVA summary on mean ratings of bursars of different qualifications on the influence of treasury single account on budgetary control in federal and state tertiary institutions in South-South Nigeria. With 2 and 43 as the degree of freedom at 0.05 level of significance, F-critical is 3.23 while F-calculated is 3.31. Since the F-calculated is greater than the F-critical, the null hypothesis is therefore rejected. This indicates that there is significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of budgetary control in federal and state owned tertiary institutions with respect to their qualifications.

Hypothesis 6

There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of budgetary control in federal and state tertiary institutions with respect to years of working experience.

The test for hypothesis six is presented in Table 12.

Table 12

ANOVA Summary on Mean Ratings of Respondents of Different Years of Working Experience on the Influence of TSA on Budgetary Control in Tertiary Institutions in South-South, Nigeria

Source of Variance	Sum of Square	Mean Square	df	F-cal	F-crit	α	Remark
Between Groups	99.71	35.49	2	2.86	3.23	0.05	NS
Within Groups	54.69	21.46	43				
Total	154.40	56.95					

Table 12, shows ANOVA summary on mean ratings of bursars of different years of working experience on the influence of treasury single account on fraud control in federal and state tertiary institutions in South-South Nigeria. With 2 and 43 as the degree of freedom at 0.05 level of significance, F-critical is 3.23 while F-calculated is 2.86. Since the F-calculated is less than the F-critical, the null hypothesis is therefore accepted. This indicates that there is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of budgetary control in federal and state owned tertiary institutions with respect to their years of working experience.

Hypothesis 7

There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of cash management in federal and state tertiary institutions with respect to their qualifications.

The test for hypothesis seven is presented in Table 13.

Table 13

ANOVA Summary on Mean Ratings of Respondents of Different Educational Qualifications on the Influence of TSA on Cash Management in Tertiary Institutions in South-South, Nigeria

Source of Variance	Sum of Square	Mean Square	df	F-cal	F-crit	α	Remark
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Between Groups	84.59	52.49	2	3.41	3.23	0.05	S
Within Groups	34.69	34.46	43				
Total	119.28	86.95					

Table 13, shows ANOVA summary on mean ratings of bursars of different qualifications on the influence of treasury single account on fraud control in federal and state tertiary institutions in South-South Nigeria. With 2 and 21 as the degree of freedom at 0.05 level of significance, F-critical is 3.23 while F-calculated is 3.41. Since the F-calculated is less than the F-critical, the null hypothesis is therefore accepted. This indicates that there is significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of cash management in federal and state owned tertiary institutions with respect to qualification.

Hypothesis 8

There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of cash management in federal and state tertiary institutions with respect to their years of working experience.

The test for hypothesis eight is presented in Table 14.

Table 14

ANOVA Summary on Mean Ratings of Respondents of Different Years of Working Experience on the Influence of TSA on Cash Management in Tertiary Institutions in South-South, Nigeria

Source of Variance	Sum of Square	Mean Square	df	F-cal	F-crit	α	Remark
Between Groups	76.59	44.39	2	3.01	3.23	0.05	NS
Within Groups	40.69	30.46	43				
Total	117.28	74.85					

Table 14, shows ANOVA summary on mean ratings of bursars of different years of working experience on the influence of treasury single account on cash management in federal and state tertiary institutions in South-South Nigeria. With 2 and 21 as the degree of freedom at 0.05 level of significance, F-critical is 3.23 while F-calculated is 3.01. Since the F-calculated is less than the F-critical, the null hypothesis is therefore accepted. This indicates that there is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of cash management in federal and state owned tertiary institutions with respect to their years of working experience.

Summary of Findings

The major findings of the study are summarized as follows based on bursars rating.

1. Treasury single account is highly influenced the effectiveness of public finance management with respect to fraud control in tertiary institutions in South-South Nigeria.

2. Treasury single account is highly influenced the effectiveness of public finance management with respect to accurate accounting in tertiary institutions in South-South Nigeria.
3. Treasury single account is highly influenced the effectiveness of public finance management with respect to budgetary control in tertiary institutions in South-South Nigeria.
4. Treasury single account is highly influenced the effectiveness of public finance management with respect to cash management in tertiary institutions in South-South Nigeria.
5. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of fraud control in federal and state tertiary institutions with respect to qualification.
6. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of fraud control in federal and state tertiary institutions with respect to their years of working experience.
7. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of accurate accounting in federal and state tertiary institutions with respect to their qualification.

8. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of accurate accounting in federal and state tertiary institutions with respect to their years of working experience.
9. There is significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of budgetary control in federal and state tertiary institutions with respect to their qualifications.
10. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of budgetary control in federal and state tertiary institutions with respect to years of working experience.
11. There is significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of cash management in federal and state tertiary institutions with respect to their qualifications.
12. There is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of cash management in federal and state tertiary institutions with respect to their years of working experience.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This chapter presents the discussion of the findings, conclusion and recommendations. The chapter also dealt with implications of the findings, limitation of the study and suggestions for further study.

Discussion of the Findings

The findings of this study are organized and discussed under the following subheadings.

Influence of Treasury Single Account on Effectiveness of Fraud Control

Influence of Treasury Single Account on Effectiveness of Accurate Accounting

Influence of Treasury Single Account on Effectiveness of Budgetary Control

Influence of Treasury Single Account on Effectiveness of Cash Management

Influence of Treasury Single Account on Effectiveness of Fraud Control

The result of the analysis showed how influential treasury single account is on the effectiveness of public finance management in respect of fraud control in tertiary institutions in South-South Nigeria. From the result, it was found that single treasury account is highly influential on the effectiveness of public finance with respect to fraud control in terms of appropriation of asset, handling of cash, non- fraudulent disbursement, reduction in bribery and corruption, integrity of accounting records, reduction in money laundering, fraud detection,

fraud prevention and Internal control programmes. The result implies that treasury single account is highly influential on the effectiveness of public finance with respect to fraud control in tertiary institutions in South-South Nigeria.

This finding is in agreement with the recommendation of Jegede (2015). Jegede recommended that central monitoring and control are keys elements for prevention and control of fraud in management of public finance. The author added that no matter the hands that are involved and quality of training and education received, monitoring of financial management practices and activities of office handling organizational finance is inevitable for the success and survival of any business organization. This is because according to the author, it will not only discover all instances of fraud, but are extremely useful in safeguarding the institutions against waste, abuse and misuse of resources. Hamisu (2015) observed that the introduction of treasury single account will enhance the control of financial data with the aim of detecting omissions, frauds and securing the reliability and credibility of financial statements at the end of a given period.

To compare the views of respondents based on hypothesis that was tested, this indicated that there is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of fraud control in

federal and state tertiary institutions with respect to qualification. Similarly, the result of ANOVA analysis on Table 6 equally showed that there is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of fraud control in federal and state tertiary institutions with respect to years of working experience.

These results led to the two null hypotheses being accepted. Jegede (2015) upheld the results and the impact of treasury single account by maintaining that it will enhance the quality of performance over time and ensure that findings of audits and other reviews are promptly resolved and that internal control continues to operate effectively.

Influence of Treasury Single Account on Effectiveness of Accurate Accounting

The result of the analysis showed how influential treasury single account is on the effectiveness of public finance management in respect of accurate accounting in tertiary institutions in South-South Nigeria. The study showed that treasury single account is highly influential on the level of effectiveness of public finance management with respect to accurate accounting in terms of transparency of tax payer obligation and liabilities, tax payer registration and assessment, value for money and control in procurement, unreported government operations, transparency on inter-government fiscal relation, collection of tax payment, internal control for non-salary expenditure, public

access to pay fiscal information, recording management of cash balances, debt and guarantee, internal audit and payroll control.

This result is in line with Obinna (2015) who held that the introduction of treasury single account will enhance the transparency of tax payer's obligations and liabilities as well as transparency of inter-government fiscal relations. Obinna also maintained that government organization will be more effective in the area of proper recording and accounting in management of public finance if single treasury account is maintained as planned by federal government.

The result of the study also revealed that treasury single account is influential on the level of effectiveness of public finance management in respect of accurate accounting in the areas of: timeliness and regularity of account reconciliation, quality and timeliness of annual financial statement and information on resources received by service delivery units. This result is in accord with Hamisu (2015) who noted that one of the major setbacks in public sectors when it comes to financial management is delay in account reconciliation and annual financial statement. Hence, it is expected that government new policy on single treasury account will address the numerous setback in public finance management including unnecessary delay in account reconciliation and annual statement of account. In a similar view, Obinna (2015) maintained that timeliness and accuracy of records are very essential elements for effective and efficient management of public finance.

The study further revealed that treasury single account is moderately influential on the effectiveness of public finance management in terms of availability of funds for commitment of expenditure. This result is in line with Stephen (2016) who noted that the recent treasury single account has the disadvantage of not making fund readily available as at when due especially when the situation on ground needed to be addressed urgently.

The tested hypothesis indicated that there is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of accurate accounting in federal and state tertiary institutions with respect to their qualifications. Similarly, the result of ANOVA-test analysis on Table 8 equally showed that there is no significant difference in the mean ratings of respondents on the level of influence of treasury single account on the effectiveness of public finance management in respect of accurate accounting in federal and state tertiary institutions with respect to their years of working experience. These results led to the two null hypotheses being accepted. Ugwu (2015) validated the impact of treasury single account on accurate accounting by maintaining that it will enhance effective recording and management of cash balances, debt and guarantee. According to the author, accurate accounting is not only needed but required because of its inestimable value in financial management.

Influence of Treasury Single Account on Effectiveness of Budgetary Control

The result of the analysis showed how influential treasury single account is on the level of effectiveness of public finance management in respect of budgetary control in tertiary institutions in South-South Nigeria. The study showed that treasury single account is highly influential in the effectiveness of public finance management with respect to budgetary control in terms of proper budget planning, total adoption of the budget, proper budget execution, effective internal control of budget, effective external audit of budget, reduction in excess share of the budget on personnel cost and reduction in excess share of the budget on overhead cost.

This result is supported by Yusuf (2013) who held that treasury single account will help government agencies to properly plan and execute their budget. Planning preparation and proper execution of financial budget of organization is a primary measure of financial stability and organizational effectiveness. The author recommended that government at all levels in Nigeria should adopt the treasury account system for effective public finance management. Udoma (2009) added that excessive share of the budget which goes to personnel and overhead cost will be effectively monitored and controlled under treasury single account.

The tested hypothesis on indicated that there is no significant difference in the mean ratings of respondents on the influence of treasury single account

on the effectiveness of public finance management in respect of budgetary control in federal and state tertiary institutions with respect to their qualifications. Similarly, the result of ANOVA-test analysis on Table 10 equally showed that there is no significant difference in the mean ratings of respondents on the influence of treasury single account on the level of effectiveness of public finance management in respect of budgetary control in federal and state tertiary institutions with respect to their years of working experience. Based on these results, the two null hypotheses were accepted.

Stephen (2016) validated the relevance of treasury single account in ensuring effective management of public finance by maintaining proper monitoring and control of budget of public institutions and organizations through treasury single account will not only minimize or eradicate fraud but will also help to eliminate waste, abuse and misuse of public fund.

Influence of Treasury Single Account on Effectiveness of Cash Management

The result of the analysis in showed how influential treasury single account is on the level of effectiveness of public finance management in respect of cash management in tertiary institutions in South-South Nigeria. The study showed that treasury single account is highly influential on the level of effectiveness of public finance management with respect to cash management in the areas of: cash flow (forecasting and reporting), cash concentration, automatic clearing house, debt management, government expenditure

monitoring and control, transaction processing and recording and income generation

This finding is in agreement with the study of Ugwu (2008) who observed that cash management which involves the collection, handling, and usage of cash has improved tremendously in many government establishments in recent times. The author further observed that effective public finance management require cash management because it minimizes unproductive cash balances, investing temporarily excess cash advantageously and to make the best possible arrangement for meeting planned and unexpected demands on the organizations' cash. Yusuf (2016) and Udoma (2012) corroborated this result when they maintained that single treasury account enhances transparency in cash flow in government institution through government expenditure monitoring and control.

The tested hypothesis indicated that there is no significant difference in the mean ratings of respondents on the influence of treasury single account on the level of effectiveness of public finance management in respect of cash management in federal and state tertiary institutions with respect to their qualifications. Similarly, the result of ANOVA-test analysis on equally showed that there is no significant difference in the mean ratings of respondents on the influence of treasury single account on the effectiveness of public finance management in respect of cash management in federal and state tertiary

institutions with respect to their years of working experience. Based on these results, the two null hypotheses were accepted. The influence of treasury single account on the level of effectiveness of public finance management with respect of cash management was further validated by Stephen (2016) who posited that all cash flows related to government revenue, expenditure, donor financing, debt issuance and amortization are fully integrated into the treasury single account system for effective and efficient management.

Conclusion

Based on the findings of the study, it is concluded that single treasury account is highly influential on the effectiveness of public finance management in tertiary institutions in South-South Nigeria with respect to fraud control, accurate accounting, budgetary control and cash management.

Implications of the Study

The findings of the study have a number of implications which include the following:

The study revealed that treasury single account is highly influential on the effectiveness of public finance management in tertiary institutions in South-South Nigeria with respect to fraud control. This therefore implies that there will be limited or no incidences of financial fraud in federal and states tertiary

institutions if the operations of treasury single account system are strictly adhered to.

The study also indicated that treasury single account is highly influential on the effectiveness of public finance management in tertiary institutions in South-South Nigeria with respect to accurate accounting. This also means that management of public finance will be more accurate and transparent than ever. Government agencies and institutions operating the treasury single account are likely to have more accurate accounting records than those that are not.

The study also indicated that treasury single account is highly influential in the effectiveness of public finance management in tertiary institutions in South-South Nigeria with respect to budgetary control. Consequently, federal government institutions where the treasury single account is in operation are likely to experience proper budget planning, timely budget preparation and proper budget execution when compared with other tertiary institutions like state where the treasury single account is yet to be implemented fully.

Again, the study revealed that treasury single account is highly influential in the effectiveness of public finance management in tertiary institutions in South-South Nigeria with respect to cash management. This also implies that federal tertiary institution is likely to be more effective in the area of cash management with the operation treasury single account. In essence, treasury single account will enhance the effectiveness of public finance management by

monitoring and controlling of government expenditure as well as debt management.

Recommendations

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

1. The Federal Government should continue to operate with the principles of single treasury account because of the positive influence it has on the effectiveness of public finance management in areas of fraud control, accurate accounting, budgetary control and effective cash management.
2. State and Local governments across the nation should endeavour to adopt the operation of single treasury account for effective and efficient management of public finance especially in the areas of fraud control, accurate accounting, budgetary control and cash management.
3. The government should make provision for adequate knowledge and skills in the operation of treasury single account as a primary requirement for appointment into any office that involve public finance management for the purpose of effectiveness in the area of fraud control, accurate accounting, budgetary control and cash management.
4. Since the concept, theory and practice of treasury single accounting is relatively new in the Nigerian context and environment, government should organize training and retraining programme for account and

finance staff in tertiary institutions on the principles and practice of treasury single account in order to realize maximum benefits from it.

5. Finally, the concept, theory and practice of treasury single account should be included in the curriculum for training of accounts and finance personnel, so that graduates of such programmes will not find it difficult coping with the demands of treasury single account when they are employed to manage public finance.

Suggestions for Further Study

Based on the fact that this study could not be considered exhaustive for improving public finance management in tertiary institutions in Nigeria, the researcher therefore suggests the following area for further study;

1. Availability and adequacy of manpower needed for effective implementation of treasury single account operations in tertiary institutions in South-South Nigeria.
2. Evaluation of public finance management competencies possessed by bursars and account personnel in tertiary institutions in South-South Nigeria
3. Assessment of public finance management practices in tertiary institutions in South-South Nigeria.
4. Influence of treasury single account on the effectiveness of public finance management in Nigeria.

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Appendix A

Letter of Transmittal

Department of Technology and
Vocational Education,
Faculty of Education,
Nnamdi Azikiwe University,
Awka.
20th January, 2017.

Dear Sir,

REQUEST TO COMPLETE A RESEARCH QUESTIONNAIRE

I am a post-graduate student of Nnamdi Azikiwe University, Awka. I am conducting a study on analysis of the influence of treasury single account on the effectiveness of public finance management in tertiary institutions in South-South Nigeria.

The attached questionnaire is designed for collection of relevant data for the study. As a bursar in a federal/state tertiary institution within my area of study, I humbly request you to assist me in completing the questionnaire with the assurance that your input will be used solely for the stated academic purpose.

Thanks for your anticipated co-operation.

Yours faithfully,

Very Highly Influenced	VHI
Highly Influenced	HI
Moderately Influenced	MI
Lowly Influenced	LI
Very Lowly Influenced	VLI

Section B₁

Indicate the level to which treasury single account influence fraud control in public finance management in tertiary institutions in South-South Nigeria.

S/N	To what extent does TSA influence the effectiveness of fraud control in term of:	VHI	HI	MI	LI	VLI
1	Appropriation of asset					
2	Handling of cash					
3	Non-fraudulent disbursement					
4	Reduction in bribery and corruption (racketeering and extortion)					
5	Integrity of accounting records					
6	Reduction in money laundering					
7	Fraud detection					
8	Fraud prevention					
9	Internal control programmes					

Section B₂

Indicate the level to which treasury single account influence accurate accounting in public finance management in tertiary institutions in South-South Nigeria.

S/N	To what extent does TSA influence the effectiveness of accurate accounting in term of:	VHI	HI	MI	LI	VLI
10	Transparency of taxpayer obligations and liabilities					
11	Tax payer registration and assessment					
12	Value for money and control in procurement					
13	Timelessness and regularity of accounts reconciliation					
14	Unreported government operations					

15	Transparency of intergovernmental fiscal relations					
16	Internal controls for non-salary expenditure					
17	Availability of funds for commitment of expenditures					
18	Quality and timeliness of annual financial statements					
19	Information on resources received by service delivery units					
20	Public access to pay fiscal information					
21	Collection of tax payments					
22	Recording management of cash balances, debt and guarantees					
23	Internal audit					
24	Payroll control					

Section B₃

Indicate the level to which treasury single account influence budgetary control in public finance management in tertiary institutions in South-South Nigeria.

S/N	To what extent does TSA influence the effectiveness of budgetary control in term of:	VHI	HI	MI	LI	VLI
25	Proper budget planning					
26	Timely budget preparation					
27	Total adoption of the budget					
28	Proper budget execution					
29	Effective internal control of the budget					
30	Effective external audit of the budget					
31	Reduction in excessive share of the budget on personnel cost					
32	Reduction in excessive share of the budget on overhead cost					

Section B₄

Indicates the level to which treasury single account influence cash management in public finance management in tertiary institutions in South-South Nigeria.

S/N	To what extent does TSA influence the effectiveness of cash management in term of:	VHI	HI	MI	LI	VLI
33	Cash flow (forecasting and reporting)					
34	cash concentration					
35	Automated clearing house					
36	Debt management					
37	Government expenditure monitoring and control					
38	Published financial accounts					
39	Transaction processing and recording					
40	Income generation					

Appendix C

Population Distribution of Bursars by their Tertiary Institutions

S/N	Name of Tertiary Institution	No. of Bursar
1	University of Uyo, Akwa-Ibom State.	1
2	Federal polytechnic, Akwa-Ibom State	1
3	Federal Polytechnic, Otuoke, Bayelsa State.	1
4	Federal Polytechnic, Ekowe, Bayelsa State.	1
5	University of Calabar, Cross-River State.	1
6	Federal College of Education, Obudu, Cross River State.	1
7	Federal University of Petroleum Resources, Effurun, Delta State.	1
8	Federal College of Education (Technical), Asaba, Delta State.	1
9	University of Benin, Benin-City, Edo state.	1
10	Auchi Polytechnic, Auchi, Edo State.	1
11	National Institute of Construction Technology, Uromi, Edo State.	1
12	University of Port-Harcourt, Rivers State.	1
13	Federal Polytechnic of Oil and Gas, Bonny, Rivers State.	1
14	Federal College of Education (Technical) Omoku, Rivers State.	1
15	Maritime Academy of Nigeria, Oron	1
16	College of Education, Ekiadolor	1
17	College of Education, Warri	1
18	Delta State University, Abraka	1

19	Port-Harcourt College of Education	1
20	Delta State Polytechnic, Ozoro	1
21	Ibrahim Babangida College of Education, Agircukture, Obubra	1
22	Cross River State University, Calabar	1
23	Cross River State College of Education	1
24	Bayelsa State University	1
25	Bayelsa State College of Education	1
26	Institute of Science and Technology, Yenagoa	1
27	Uyo City Polytechnic	1
28	Edo State College of Agriculture	1
29	Niger Delta University, Yenagoa	1
30	Akwa Ibom State University, Uyo	1
31	Akwa Ibom State University of Technology, Mkpata Enin	1
32	Bayelsa State College of Arts and Science	1
33	College of Education, Agbor	1
34	Bayelsa State College of Health Technology	1
35	Ambrose Ali University, Edo state	1
36	College of Education, Nsit Ibom	1
37	Rivers State College of Education	1
38	College of Education (Technical), Obudu	1
39	Rivers State University of Science and Technology	1
40	College of Education, Igueben	1
41	Delta State Polytechnic, Otefe Ogharra	1
42	Rivers State University of Education	1
43	Delta State Polytechnic, Ogwashi Uku	1
44	Rivers State Polytechnic	1
45	College of Agriculture, Igbuoriakhi	1
46	Obong University, Obong Ntak Inyang	1
47	Petroleum Training Institute, Effurun	1
48	College of Education, Mosogar	1

Appendix D

Population Distribution of Bursars by their Tertiary Institutions for Reliability

S/N	Name of Tertiary Institution	No. of Bursar
1	Nnamdi Azikiwe University, Awka, Anambra State.	1
2	Federal College of Education (Technical), Umunze, Anambra State.	1
3	Federal Polytechnic, Oko, Anambra State.	1
4	Federal Polytechnic, Nekede, Imo State	1
5	Imo State University, Owerri, Imo State	1
6	Federal University of Technology, Owerri, Imo State	1
7	Enugu State University of Science and Technology, Enugu, Enugu State	1
8	University of Nigeria, Nsukka, Enugu State	1
9	Federal College of Education, Eha-Amufu,	1
10	Chukwuemeka Odumegwu Ojukwu University, Uli, Anambra State	1

Fraud Control		\bar{X}	SD	Remarks
1	Appropriation of asset	3.65	0.51	Highly Influenced
2	Handling of cash	3.63	0.51	Highly Influenced
3	Non- fraudulent disbursement	3.57	0.50	Highly Influenced

Appendix E

**Respondents' Mean Ratings and Standard Deviation for Research
Question One**

N=46

4	Reduction in bribery and corruption (racketeering and extortion)	3.61	0.51	Highly Influenced
5	Integrity of accounting records	3.72	0.57	Highly Influenced
6	Reduction in money laundering	3.43	0.49	Moderately Influenced
7	Fraud detection	3.37	0.51	Highly Influenced
8	Fraud prevention	3.89	0.55	Highly Influenced
9	Internal control programmes	4.00	0.57	Highly Influenced

**Respondents' Mean Ratings and Standard Deviation for Research
Question Two**

N=46

	Accurate Accounting	\bar{X}	SD	Remarks
10	Transparency of tax payer obligation and liabilities	3.76	0.53	Highly Influenced
11	Tax payer registration and assessment	3.67	0.52	Highly Influenced
12	Value for money and control in procurement	3.65	0.51	Highly Influenced
13	Timeliness and regularity of account reconciliation	3.81	0.54	Highly Influenced
14	Unreported government operations	3.80	0.54	Highly Influenced
15	Transparency on inter-government fiscal relation	4.04	0.58	Highly Influenced
16	Internal control for non-salary expenditure	3.52	0.50	Highly Influenced
17	Availability of funds for commitment of expenditure	3.59	0.51	Highly Influenced
18	Quality and timeliness of annual financial statement	3.61	0.51	Highly Influenced
19	Information on resources received by service delivery units	3.78	0,53	Highly Influenced
20	Public access to pay fiscal information	3.98	0.57	Highly Influenced
21	Collection of tax payment	4.04	0.58	Highly Influenced
22	Recording management of cash balances, debt and guarantee	4.09	0.59	Highly Influenced
23	Internal audit	3.98	0.57	Highly Influenced
24	Payroll control	4.00	0.57	Highly Influenced

**Respondents' Mean Ratings and Standard Deviation for Research
Question Three**

N=46

S/N	Budgetary Control	\bar{X}	SD	Remarks
25	Proper budget planning	4.17	0.61	Highly Influenced
26	Timely budget preparation	3.96	0.56	Highly Influenced
27	Total adoption of the budget	4.20	0.61	Highly Influenced
28	Proper budget execution	3.98	0.57	Highly Influenced
29	Internal control of budget	4.07	0.58	Highly Influenced
30	External audit of budget	4.22	0.62	Highly Influenced
31	Reduction in excessive share of the budget on personnel cost	3.96	0.56	Highly Influenced
32	Reduction in excessive share of the budget on overhead cost	4.02	0.57	Highly Influenced

**Respondents' Mean Ratings and Standard Deviation for Research
Question Four**

N=46

S/N	Cash Management	\bar{X}	SD	Remarks
33	Cash flow (forecasting and reporting)	4.28	0.63	Highly Influenced
34	Cash concentration	3.93	0.56	Highly Influenced
35	Automatic clearing house	3.96	0.56	Highly Influenced
36	Debt management	3.98	0.57	Highly Influenced
37	Government expenditure monitoring and control	4.09	0.59	Highly Influenced
38	Published financial accounts	4.13	0.60	Highly Influenced
39	Transaction processing and recording	4.17	0.61	Highly Influenced
40	Income generation	4.20	0.61	Highly Influenced

Appendix F

Calculation of Respondents mean and standard deviation of the items in the instrument.

Item 1: Appropriation of Asset

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	14	70	1.35	1.8225
4	16	64	0.35	0.1225
3	5	15	-0.65	0.4225
2	8	16	-1.65	2.7225
1	3	3	-2.65	7.0225
	$\sum f = 46$	$\sum fx = 168$		$\sum (x-\bar{x})^2 = 12.1125$

$$X = \frac{\sum fx}{\sum f} = \frac{168}{46} = 3.65$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{12.1125}{46}}$$

$$S.D = \sqrt{0.2633} \quad S.D = 0.51$$

Item 2: Handling of Cash

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	17	85	1.37	1.8769
4	12	48	0.37	0.1369
3	6	18	-0.63	0.3969
2	5	10	-1.63	2.6569
1	6	6	2.63	6.9169
	$\sum f = 46$	$\sum fx = 167$		$\sum (x-\bar{x})^2 = 11.9845$

$$X = \frac{\sum fx}{\sum f} = \frac{167}{46} = 3.63$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{11.9845}{46}} \quad S.D = \sqrt{0.2605} \quad S.D = 0.51$$

Item 3: Non Fraudulent Disbursement

Grade Point(x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	16	80	1.43	2.0449
4	11	44	0.43	0.1849
3	7	21	-0.57	0.3249
2	7	14	-1.57	2.4649
1	5	5	-2.57	6.6049

	$\sum f = 46$	$\sum fx = 164$		$\sum (x-\bar{x})^2 = 11.6245$
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$$X = \frac{\sum fx}{\sum f} = \frac{164}{46} = 3.57$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{11.6245}{46}}$$

$$S.D = \sqrt{0.2527}$$

$$S.D = 0.50$$

Item 4: Reduction in Bribery and Corruption (Ractereering and Extortion)

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	14	70	1.39	1.9321
4	14	56	0.39	0.1521
3	8	24	-0.61	0.3721
2	6	12	-1.61	2.5921
1	4	4	-2.61	6.8121
	$\sum f = 46$	$\sum fx = 166$		$\sum (x-\bar{x})^2 = 11.8605$

$$X = \frac{\sum fx}{\sum f} = \frac{166}{46} = 3.61$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{11.8605}{46}}$$

$$S.D = \sqrt{0.2578} \quad S.D = 0.51$$

Item 5: Integrity and Accounting Records

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	14	70	1.28	1.6384
4	16	64	0.28	0.0784
3	7	21	-0.72	2.6784
2	7	14	-1.72	2.9584
1	2	2	-2.72	7.3984
	$\sum f = 46$	$\sum fx = 171$		$\sum (x-\bar{x})^2 = 14.752$

$$X = \frac{\sum fx}{\sum f} = \frac{171}{46} = 3.72$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{14.752}{46}}$$

$$S.D = \sqrt{0.3207} \quad S.D = 0.57$$

Item 6: Reduction in Money Laundering

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	13	65	1.57	2.4649
4	11	44	0.57	0.3249
3	9	27	-0.43	0.1849
2	9	18	-1.43	2.0449
1	4	4	-2.43	5.9049
	$\sum f = 46$	$\sum fx = 158$		$\sum (x-\bar{x})^2 = 10.9245$

$$X = \frac{\sum fx}{\sum f} = \frac{158}{46} = 3.43$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{10.9245}{46}}$$

$$S.D = \sqrt{0.2375} \quad S.D = 0.49$$

Item 7: Fraud Detection

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	15	75	1.63	2.6569
4	7	28	0.63	0.3969
3	10	30	-3.37	1.2469
2	8	16	-1.37	1.8769
1	6	6	-2.37	5.6169
	$\sum f = 46$	$\sum fx = 155$		$\sum (x-\bar{x})^2 = 11.7945$

$$X = \frac{\sum fx}{\sum f} = \frac{155}{46} = 3.37$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{11.7945}{46}}$$

$$S.D = \sqrt{0.2564} \quad S.D = 0.51$$

Item 8: Fraud Prevention

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	19	95	1.11	1.2321
4	13	52	0.11	0.0121
3	7	21	-0.89	0.7921
2	4	8	-1.89	3.5721
1	3	3	-2.89	8.3521

	$\sum f = 46$	$\sum fx = 179$		$\sum (x-\bar{x})^2 = 13.9605$
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$$X = \frac{\sum fx}{\sum f} = \frac{179}{46} = 3.89$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{13.9605}{46}}$$

$$S.D = \sqrt{0.3035}$$

$$S.D = 0.55$$

Item 9: Internal Control Programmes

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	20	100	1	1.0000
4	13	52	0	0.0000
3	8	24	-1	1.0000
2	3	6	-2	4.0000
1	2	2	-3	9.0000
	$\sum f = 46$	$\sum fx = 184$		$\sum (x-\bar{x})^2 = 15.0000$

$$X = \frac{\sum fx}{\sum f} = \frac{184}{46} = 4.00$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{15.0000}{46}}$$

$$S.D = \sqrt{0.3261}$$

$$S.D = 0.57$$

Item 10: Transparency of Taxpayer Obligations and Liabilities

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	17	85	1.24	1.5376
4	15	60	0.24	0.5076
3	5	15	-0.76	0.5776
2	4	8	-1.76	3.0976
1	5	5	-2.76	7.6176
	$\sum f = 46$	$\sum fx = 173$		$\sum (x-\bar{x})^2 = 12.888$

$$X = \frac{\sum fx}{\sum f} = \frac{173}{46} = 3.76$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{12.888}{46}}$$

$$S.D = \sqrt{0.2802} \quad S.D = 0.53$$

Item 11: Tax Prayer Registration and Assessment

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	15	75	1.33	1.7689
4	13	52	0.33	0.1089
3	10	30	-0.67	0.4489
2	4	8	-1.67	2.7889
1	4	4	-2.67	7.1289
	$\sum f = 46$	$\sum fx = 169$		$\sum (x-\bar{x})^2 = 12.2445$

$$X = \frac{\sum fx}{\sum f} = \frac{169}{46} = 3.67$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{12.2445}{46}}$$

$$S.D = \sqrt{0.2662} \quad S.D = 0.52$$

Item 12: Value for money and control in procurement

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	17	85	1.35	1.8225
4	12	48	0.35	0.1225
3	8	24	-0.65	0.4225
2	4	8	-1.65	2.7225
1	5	5	-2.65	7.0225
	$\sum f = 46$	$\sum fx = 168$		$\sum (x-\bar{x})^2 = 12.1125$

$$X = \frac{\sum fx}{\sum f} = \frac{168}{46} = 3.65$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{12.1125}{46}}$$

$$S.D = \sqrt{0.2633}$$

$$S.D = 0.51$$

Item 13: Timelessness and Regularity of Accounts Reconciliation

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	17	85	1.2	1.4400
4	13	52	0.2	0.0400
3	9	27	-0.8	0.6400
2	4	8	-1.8	3.2400
1	3	3	-2.8	7.8400

	$\sum f = 46$	$\sum fx = 175$		$\sum (x-\bar{x})^2 = 13.2000$
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$$X = \frac{\sum fx}{\sum f} = \frac{175}{46} = 3.81$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{13.2000}{46}}$$

$$S.D = \sqrt{0.2870} \quad S.D = 0.54$$

Item 14: Unreported Government Operations

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	18	90	1.2	1.4400
4	10	40	0.2	0.0400
3	11	33	-0.8	0.6400
2	5	10	-1.8	3.2400
1	2	2	-2.8	7.8400
	$\sum f = 46$	$\sum fx = 175$		$\sum (x-\bar{x})^2 = 13.2000$

$$X = \frac{\sum fx}{\sum f} = \frac{175}{46} = 3.80$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{13.2000}{46}}$$

$$S.D = \sqrt{0.2870}$$

$$S.D = 0.54$$

Item 15: Transparency of Intergovernmental Fiscal Relations

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	21	105	0.96	0.9216
4	12	48	-0.40	0.0016
3	8	24	-1.04	1.0816
2	4	8	-2.04	4.1616
1	1	1		9.2416
	$\sum f = 46$	$\sum fx = 186$		$\sum (x-\bar{x})^2 = 15.408$

$$X = \frac{\sum fx}{\sum f} = \frac{186}{46} = 4.04$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{15.408}{46}}$$

$$S.D = \sqrt{0.3350} \quad S.D = 0.58$$

Item 16: Internal Control for Non-salary expenditure

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	15	75	1.48	2.1904
4	11	44	0.48	0.2304
3	8	24	-0.52	0.2704
2	7	14	-1.52	2.3104
1	5	5	-2.52	6.3504
	$\sum f = 46$	$\sum fx = 162$		$\sum (x-\bar{x})^2 = 11.352$

$$X = \frac{\sum fx}{\sum f} = \frac{162}{46} = 3.52$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{11.352}{46}}$$

$$S.D = \sqrt{0.24678}$$

$$S.D = 0.50$$

Item 17: Availability of Funds for Commitment of Expenditure

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	14	70	1.41	1.9881
4	16	64	0.41	0.1681
3	5	15	-0.59	0.3481
2	5	10	-1.59	2.5281
1	6	6	-2.59	6.7081
	$\sum f = 46$	$\sum fx = 165$		$\sum (x-\bar{x})^2 = 11.7405$

$$X = \frac{\sum fx}{\sum f} = \frac{165}{46} = 3.59$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{11.7405}{46}}$$

$$S.D = \sqrt{0.2552} \quad S.D = 0.51$$

Item 18: Quality and Timelessness of Annual Financial Statement

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	17	85	1.39	1.9321
4	10	40	0.39	0.1521
3	9	27	-0.61	0.3721
2	4	8	-1.61	2.5921
1	6	6	-2.61	6.8121

	$\sum f = 46$	$\sum fx = 166$		$\sum (x-\bar{x})^2 = 11.8605$
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$$X = \frac{\sum fx}{\sum f} = \frac{166}{46} = 3.61$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{11.8605}{46}}$$

$$S.D = \sqrt{0.2578}$$

$$S.D = 0.51$$

Item 19: Information on Resources Received by Service Delivery Unit

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	21	105	1.22	1.4884
4	10	40	0.22	0.0484
3	5	15	-0.78	0.6084
2	4	8	-1.78	3.1684
1	6	6	-2.78	7.7284
	$\sum f = 46$	$\sum fx = 174$		$\sum (x-\bar{x})^2 = 13.042$

$$X = \frac{\sum fx}{\sum f} = \frac{174}{46} = 3.78$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{13.042}{46}}$$

$$S.D = \sqrt{0.2835} \quad S.D = 0.53$$

Item 20: Public Access to Pay Fiscal Information

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	20	100	1.02	1.0404
4	12	48	0.02	0.0004
3	9	27	-0.98	0.9604
2	3	6	-1.98	3.9204
1	2	2	-2.98	8.8804
	$\sum f = 46$	$\sum fx = 183$		$\sum (x-\bar{x})^2 = 14.802$

$$X = \frac{\sum fx}{\sum f} = \frac{183}{46} = 3.98$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{14.802}{46}}$$

$$S.D = \sqrt{0.3218}$$

$$S.D = 0.57$$

Item 21: Collection of Tax Payment

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	23	115	0.96	0.9216
4	11	44	-0.04	0.0016
3	6	18	-1.04	1.0816
2	3	6	-2.04	4.1616
1	3	3	-3.04	9.2416
	$\sum f = 46$	$\sum fx = 186$		$\sum (x-\bar{x})^2 = 15.408$

$$X = \frac{\sum fx}{\sum f} = \frac{186}{46} = 4.04$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{15.408}{46}}$$

$$S.D = \sqrt{0.3350}$$

$$S.D = 0.58$$

Item 22: Recording Management of Cash Balances, Debt and Guarantees

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	24	120	0.91	0.8281
4	11	44	-0.09	0.0081
3	5	15	-1.09	1.1881
2	3	6	-2.09	4.3681
1	3	3	-3.09	9.5481
	$\sum f = 46$	$\sum fx = 188$		$\sum (x-\bar{x})^2 = 15.9405$

$$X = \frac{\sum fx}{\sum f} = \frac{188}{46} = 4.09$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{15.9405}{46}}$$

$$S.D = \sqrt{0.3465}$$

$$S.D = 0.59$$

Item 23: Internal Audit

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	22	110	1.02	1.0404
4	11	44	0.02	0.0004
3	6	18	-0.98	0.9604
2	4	8	-1.98	3.9204
1	3	3	-2.98	8.8804

	$\sum f = 46$	$\sum fx = 183$		$\sum (x-\bar{x})^2 = 14.802$
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$$X = \frac{\sum fx}{\sum f} = \frac{183}{46}$$

$$= 3.98$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{14.802}{46}}$$

$$S.D = \sqrt{0.3218}$$

$$S.D = 0.57$$

Item 24: Payroll Control

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	22	110	1.00	1.00
4	11	44	44	0.00
3	7	21	21	-1.00
2	3	6	6	-2.00
1	3	3	3	-3.00
	$\sum f = 46$	$\sum fx = 184$		$\sum (x-\bar{x})^2 = 15.0000$

$$X = \frac{\sum fx}{\sum f} = \frac{184}{46} = 4.00$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{15.0000}{46}}$$

$$S.D = \sqrt{0.3261}$$

$$S.D = 0.57$$

Item 25: Proper Budget Planning

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	24	120	0.83	0.6889
4	12	48	-0.17	0.0289
3	5	15	-1.17	1.3689
2	4	8	-2.17	4.7089
1	1	1	-3.17	10.0489
	$\sum f = 46$	$\sum fx = 192$		$\sum (x-\bar{x})^2 = 16.8445$

$$X = \frac{\sum fx}{\sum f} = \frac{192}{46} = 4.17$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{16.8445}{46}}$$

$$S.D = \sqrt{0.3662}$$

$$S.D = 0.61$$

Item 26: Timely Budget Preparation

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	22	110	1.04	1.0816
4	12	48	0.04	0.0016
3	4	12	-0.96	0.9216
2	4	8	-1.96	3.8416
1	4	4	-2.96	8.7616
	$\sum f = 46$	$\sum fx = 182$		$\sum (x-\bar{x})^2 = 14.608$

$$X = \frac{\sum fx}{\sum f} = \frac{182}{46} = 3.96$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{14.608}{46}}$$

$$S.D = \sqrt{0.3176}$$

$$S.D = 0.56$$

Item 27: Total Adoption of the Budget

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	21	105	0.80	0.6400
4	17	68	-0.20	0.0400
3	5	15	-1.20	1.4400
2	2	4	-2.20	4.8400
1	1	1	-3.20	10.2400
	$\sum f = 46$	$\sum fx = 193$		$\sum (x-\bar{x})^2 = 17.2000$

$$X = \frac{\sum fx}{\sum f} = \frac{193}{46} = 4.20$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{17.2000}{46}}$$

$$S.D = \sqrt{0.3739} \quad S.D = 0.61$$

Item 28: Proper Budget Execution

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	18	90	1.02	1.0404
4	16	64	0.02	0.0004
3	7	21	-0.98	0.9604
2	3	6	-1.98	3.9204
1	2	2	-2.98	8.8804
	$\sum f = 46$	$\sum fx = 183$		$\sum (x-\bar{x})^2 = 14.802$

$$X = \frac{\sum fx}{\sum f} = \frac{183}{46} = 3.98$$

$$S.D = \sqrt{\frac{\sum(x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{14.802}{46}}$$

$$S.D = \sqrt{0.3218}$$

$$S.D = 0.57$$

Item 29: Effective Internal Control of the budget

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	19	95	0.93	0.8649
4	17	68	-0.07	0.0049
3	6	18	-1.07	1.1449
2	2	4	-2.07	4.2849
1	2	2	-3.07	9.4249
	$\sum f = 46$	$\sum fx = 187$		$\sum(x-\bar{x})^2 = 15.7245$

$$X = \frac{\sum fx}{\sum f} = \frac{187}{46} = 4.07$$

$$S.D = \sqrt{\frac{\sum(x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{15.7245}{46}}$$

$$S.D = \sqrt{0.3418} \quad S.D = 0.58$$

Item 30: External Audit of the Budget

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	23	115	0.78	0.6084
4	14	56	-0.22	0.0484
3	6	18	-1.22	1.4884
2	2	4	-2.22	4.9284
1	1	1	-3.22	10.3684
	$\sum f = 46$	$\sum fx = 194$		$\sum(x-\bar{x})^2 = 17.4420$

$$X = \frac{\sum fx}{\sum f} = \frac{194}{46} = 4.22$$

$$S.D = \sqrt{\frac{\sum(x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{17.4420}{46}}$$

$$S.D = \sqrt{0.3792}$$

$$S.D = 0.62$$

Item 31: Reduction in Excessive share of the budget on personnel Cost

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	18	90	1.04	1.0816
4	17	68	0.04	0.0016
3	4	12	-0.96	0.9216
2	5	10	-1.96	3.8416
1	2	2	-2.96	8.7616
	$\sum f = 46$	$\sum fx = 182$		$\sum (x-\bar{x})^2 = 14.608$

$$\bar{X} = \frac{\sum fx}{\sum f} = \frac{182}{46} = 3.96$$

$$\bar{X} = 3.96$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{14.608}{46}}$$

$$S.D = \sqrt{0.3176} \quad S.D = 0.56$$

Item 32: Reduction in Excessive Share of the budget on overhead cost

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	20	100	0.98	0.9604
4	15	60	-0.02	0.0004
3	5	15	-1.02	1.0404
2	4	8	-2.02	4.0804
1	2	2	-3.02	9.1204
	$\sum f = 46$	$\sum fx = 185$		$\sum (x-\bar{x})^2 = 15.202$

$$X = \frac{\sum fx}{\sum f} = \frac{185}{46} = 4.02$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{15.202}{46}}$$

$$S.D = \sqrt{0.3305}$$

$$S.D = 0.57$$

Item 33: Cash Flow (Forecasting and Reporting)

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	25	125	0.72	0.5184
4	13	52	-0.28	0.0784
3	5	15	-1.28	1.6384
2	2	4	-2.28	5.1984
1	1	1	-3.28	10.7584
	$\sum f = 46$	$\sum fx = 197$		$\sum (x-\bar{x})^2 = 18.1920$

$$X = \frac{\sum fx}{\sum f} = \frac{197}{46} = 4.28$$

$$S.D = \sqrt{\frac{\sum (x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{18.1920}{46}}$$

$$S.D = \sqrt{0.3955} \quad S.D = 0.63$$

Item 34: Cash Concentration

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	19	95	1.07	1.1449
4	16	64	0.07	0.0049
3	5	15	-0.93	0.8649
2	2	4	-1.93	3.7249
1	3	3	-2.93	8.5849
	$\sum f = 46$	$\sum fx = 181$		$\sum (x-\bar{x})^2 = 14.3245$

$$X = \frac{\sum fx}{\sum f} = \frac{181}{46} = 3.93$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{14.3245}{46}}$$

$$S.D = \sqrt{0.3114}$$

$$S.D = 0.56$$

Item 35: Automated Clearing House

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	22	110	1.04	1.0816
4	11	44p	0.04	0.0016
3	6	18	-0.96	0.9216
2	3	6	-1.96	3.8416
1	4	4	-2.96	8.7616
	$\sum f = 46$	$\sum fx = 182$		$\sum (x-\bar{x})^2 = 14.608$

$$X = \frac{\sum fx}{\sum f} = \frac{182p}{46} = 3.96$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{14.608}{46}}$$

$$S.D = \sqrt{0.3176} \quad S.D = 0.56$$

Item 36: Debt Management

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	24	120	1.02	1.0404
4	11	44	0.02	0.0004
3	8	16	-0.98	0.9604
2	2	2	-1.98	3.9204
1	1	1	-2.98	8.8804
	$\sum f = 46$	$\sum fx = 183$		$\sum (x-\bar{x})^2 = 14.802$

$$X = \frac{\sum fx}{\sum f} = \frac{183}{46} = 3.98$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{14.802}{46}}$$

$$S.D = \sqrt{0.3218}$$

$$S.D = 0.57$$

Item 37: Government Expenditure Monitoring and Control

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	23	115	0.91	0.8281
4	10	40	-0.09	0.0081
3	8	24	-1.09	1.1881
2	4	8	-2.09	4.3681
1	1	1	-3.09	9.5481
	$\sum f = 46$	$\sum fx = 188$		$\sum (x-\bar{x})^2 = 15.9405$

$$X = \frac{\sum fx}{\sum f} = \frac{188}{46} = 4.09$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{15.9405}{46}}$$

$$S.D = \sqrt{0.3465} \quad S.D = 0.59$$

Item 38: Published Financial Account

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	25	125	0.87	0.7569
4	12	48	-0.13	0.0403
3	6	12	-1.13	1.2769
2	2	4	-2.13	4.5369
1	1	1	-3.13	9.7969
	$\sum f = 46$	$\sum fx = 190$		$\sum (x-\bar{x})^2 = 16.4079$

$$X = \frac{\sum fx}{\sum f} = \frac{190}{46} = 4.13$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{16.4079}{46}}$$

$$S.D = \sqrt{0.3567}$$

$$S.D = 0.60$$

Item 39: Transaction Processing and Recording

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	24	120	0.83	0.6889
4	12	48	-0.17	0.0289
3	6	18	-1.17	1.3689
2	2	4	-2.17	4.7089
1	2	2	-3.17	10.0489
	$\sum f = 46$	$\sum fx = 192$		$\sum (x-\bar{x})^2 = 16.8445$

$$X = \frac{\sum fx}{\sum f} = \frac{192}{46} = 4.17$$

$$S.D = \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$$

$$S.D = \sqrt{\frac{16.8445}{46}}$$

$$S.D = \sqrt{0.3662} \quad S.D = 0.61$$

Item 40: Income Generation

Grade Point (x)	Frequency (f)	FX	$x-\bar{x}$	$(x-\bar{x})^2$
5	23	115	0.80	0.6400
4	14	56	-0.20	0.0400
3	5	15	-1.20	1.4400
2	3	6	-2.20	4.8400
1	1	1	-3.20	10.2400
	$\sum f = 46$	$\sum fx = 193$		$\sum (x-\bar{x})^2 = 17.2000$

$$X = \frac{\sum fx}{\sum f} = \frac{193}{46} = 4.20$$

$$S.D = \sqrt{\frac{\sum(x-x)^2}{N}}$$

$$S.D = \sqrt{\frac{17.2000}{46}}$$

$$S.D = \sqrt{0.3739}$$

$$S.D = 0.61$$

Appendix G

Computation of Reliability Using Cronbach Alpha by SPSS

Cluster 1:

Reliability

Scale: Fraud Control

Case Processing Summary

	N	%
Valid	9	100.
Cases Excluded ^a	0	.0
Total	9	100.

Reliability Statistics

Cronbach's	No of Items
.782	9

Cluster 2:

Reliability

Scale: Accurate Accounting

Case Processing Summary

	N	%
Valid	15	100.
Cases Excluded ^a	0	.0
Total	15	100.

Reliability Statistics

Cronbach's	No of Items
.811	15

Cluster 3:

Reliability

Scale: Budgetary Control

Case Processing Summary

	N	%
Valid	8	100.
Cases Excluded ^a	0	.0
Total	8	100.

Reliability Statistics

Cronbach's	No of Items
.852	8

Cluster 4:

Reliability

Scale: Cash Management

Case Processing Summary

	N	%
Valid	8	100.
Cases Excluded ^a	0	.0
Total	8	100.

Reliability Statistics

Cronbach's	No of Items
.781	8

Reliability

Scale: **OVERALL RELIABILITY**

Case Processing Summary

	N	%
Valid	40	100.
Cases Excluded ^a	0	.0
Total	40	100.

Reliability Statistics

Cronbach's	No of Items
.822	40

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Appendix H

Federal Establishments Affected by the Directive that All Fully Funded Organs of Government, Ministries, Department and Agencies (MDA's), Foreign Missions and Partially Funded Government Establishments to Embark on TSA Operation are:

- teaching hospitals,
- medical centers and
- tertiary institutions.
- Others include the Central Bank of Nigeria (CBN),
- Securities and Exchange Commission (SEC),
- Corporate Affairs Commission (CAC),
- Nigeria Ports Authority (NPA),
- Nigerian Communication Commission (NCC),
- Federal Airports Authority of Nigeria (FAAN),
- Nigeria Civil Aviation Authority (NCAA),
- Nigeria Maritime Administration and Safety Agency (NIMASA).
- National Deposit Insurance Corporation (NDIC),
- National Shippers Council (NSC),
- Nigeria National Petroleum Corporation (NNPC),
- Federal Inland Revenue Service (FIRS),
- Nigerian Custom Service (NCS),

- Ministry of Mines and Steel Development (MMSD), and the
- Department of the Petroleum Resources (DPR)