

**EFFECTS OF TREASURY SINGLE ACCOUNT ON PUBLIC FINANCE
MANAGEMENT IN NIGERIA**

BY

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APPROVAL PAGE

These thesis meet the regulation governing the award of Masters In Business Administration (MBA), Usmanu Danfodiyo Univesity Sokoto and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research work is dedicated to my late father, Mallam Adamu Goje and late mother Mallama Aishatu, may Allah have mercy on him and make Aljannatul Fidaus his final abode (amin)

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CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background to the Study

Treasury single account (TSA) is an essential tool for consolidating and managing governments' cash resources; thus increasing transparency, accountability, and efficiency in financial management by government. Treasury Single Account (TSA) is one of the Federal Government of Nigeria policy change initiatives that took effect in 2015, aimed at revolutionize Public Finance Management in Nigeria. A Treasury Single Account is a prerequisite for modern cash management and is an effective tool for the ministry of finance/treasury to establish oversight and centralized control over government's cash resources. It provides a number of other benefits and thereby enhances the overall effectiveness of a public financial management (PFM) system. The establishment of a TSA should, therefore, receive priority in any PFM reform agenda (Pattanayak & Fainboim, 2011). TSA implementation is now one most increasing area of research by academics and policy makers owing to its acclaimed potential benefits in public financial management that allows for effective and efficient utilization of government resources.

TSA is an integral part of Government Integrated Financial Management Information System (GIFMIS), which is a component of Nigerian Government Economic Reform and Governance Project (ERGP). GIFMIS also referred to as IFMIS (Integrated Financial Management Information System) in other climes; provides an integrated computerized financial package that enhances the effectiveness and transparency of public resource management by computerizing the budget management and accounting system for the government (Ibrahim, Amina & Yaaba, 2017). It consists of several core sub-systems which plan, process and report on the use of public resources. The scope and functionality of GIFMIS can vary across countries, but sub-systems normally include accounting,

budgeting, cash management, debt management and related core treasury systems (Chêne, 2009; Dikwa, 2016).

The series of Public Financial Management (PFM) reforms initiatives of the Federal Government of Nigeria (FGN) were aimed at reducing wastage, mismanagement of public funds, as well as boosting government revenue and increasing transparency through proper monitoring of government receipts and expenditure. In order to achieve these lofty objectives, in 2009, FGN sought the Technical assistance from International Monetary Fund (IMF) to advice on the feasibility of TSA. A mission report was presented in June 2010 with support from IMF and World Bank. An inter-ministerial Technical Committee developed detailed TSA requirements including the structure, scope strategy and process. The Technical report detailing the TSA structure and implementation strategy was approved in May, 2011(OAGF, 2013). These reforms were as a result of the adoption of the International Public Sector Accounting Standards (IPSAS) in order to entrench transparency and accountability in the reporting of government financial affairs (Otunla, 2015). The Federal Government of Nigeria commenced the partial implementation of TSA in April 2012, with the e-Payment component; the e-Collections component of TSA commenced in January, 2015.

The total implementation of TSA system however, resulted from the directives given by President Muhammadu Buhari on August 9, 2015 that every federal government ministries, departments and agencies (MDAs) to start paying into a Treasury Single Account (TSA) for all government revenues, incomes and other receipts. On 17th August, 2015 vide a Circular by the Head of the Civil Service of the Federation, the directive aimed at ensuring the firm entrenchment of the TSA and e-Collection initiative and the realization of Government's objectives was issued to MDAs for compliance (Dikwa,

2016). These guidelines provide MDAs and other stakeholders with guidance on the practical implementation of the Head of Service's circular concerning the operations of the FGN TSA/ e-Collections initiative (OAGF, 2015).

Before the implementation of the TSA, FGN had multiple bank accounts and countless dormant accounts with huge balances. The status quo at the time impeded government in consolidating its cash position and exercising an oversight control. This led to unnecessary borrowing and incurring charges when there are idle balances in MDA accounts. This makes TSA not only desirable but necessary for efficiency and financial prudence in managing government funds.

1.2 Statement of the Research Problem

Prior to TSA policy, Nigeria, like many developing countries had fragmented banking structure for handling government receipts and payments. In these countries, government lacked a unified view and centralized control over its cash resources. Hence, unspent cash balances lied idle in the different bank accounts held by spending agencies while the government continued to borrow to execute its budget. The implication of having idle cash laying fallow in various accounts of the MDAs while borrowing to finance the budget is that, the FGN is not only borrowing its own money at a high interest rate, but also losing the opportunity to invest such amount of money in profitable venture. Government incurred huge debt through domestic borrowings that were sometimes neither necessary nor desirable. As at January 2015, the FGN has about ₦2.9 Trillion deposits with commercial banks (government was earning 0% interest on its funds outside the CBN) while at the same time, it borrows ₦10.3billion to augment its expenses for the month from commercial banks (Ibrahim et al., 2017). This suggests that government was borrowing and paying interest on its own money. If this money were to be in TSA, FGN

would have had the opportunity of spending the money as well as utilized the idle fund for other purposes without recourse to borrowing and incurring loss due to interest charges.

FGN was therefore losing multi billion naira investment opportunities as a result of the unutilized monthly investible fund domiciled with commercial banks. Thus; government accounting system in the past provided commercial banks the opportunity to use public funds to generate profit. Before the implementation of the TSA, FGN had multiple bank accounts amounting to over 17,000 and countless dormant accounts with huge balances as a result; billions of naira belonging to had been lost in failed commercial banks in the past (Okechukwu, Chukwurah, & Iheanacho, 2015). Moreover, inability of FGN to effectively track its expenditure and generate accurate reports including financial statement in timely manner, non reliable basis to prepare Warrants to MDAs, delays in budget execution and perennial existence of unspent balances by the year end all poses serious threat to efficient public financial management.

Furthermore, prior to the implement of TSA in Nigeria, it was common practice for agencies saddled with revenue generation to defraud government by siphoning public funds through all sorts of bank accounts in their custody and unknown to the authorities, while some heads of these agencies even stationed the revenue they generated in fixed deposit accounts where fat interests accrues and are siphoned (Bashir, 2016).

Thus, adoption of TSA system is aimed at reducing wastages and fund leakages owing to poor public financial management of government resource that allows corruption to fester and become the bane of Nigeria's economic development. Now that the TSA is operational, it is expected that government had a unified view and centralized control over its cash resources, eliminated problems of idle funds in commercial banks, block

financial leakages in the revenue generation, remittance, ensure transparency and accountability as well as address problems of revenue mismanagement by revenue-generating agencies.

However, skepticism by States (TSA coverage is still limited and has not yet been extended to most States and local governments), ASUU, National Assembly, opposition parties, and some economic experts to TSA policy, generated intense debate and mixed reactions among stakeholders in the nation's economy especially financial experts on its effects on Public Finance Management its likely overall consequences on the Nigerian economy as a whole. Given that evidence-based studies that examined adoption and implementation of TSA by Federal and State Governments are scarce, especially in Africa (Udo and Esara, 2016) suggest the strong need for more studies to determine the real effect of TSA implementation and this study is conducted with a view to determining effect of TSA on Public Finance Management in Ministries Department and Agencies in Nigeria.

1.3 Research Questions

In addressing the problems of this study, the following research questions were raised:

- i. To what extent does TSA provide transparency in the utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria?
- ii. To what extent does TSA provide accountability in the utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria?
- iii. What is the effect of TSA adoption on revenue leakages in Ministries, Departments and Agencies of the Federal Government in Nigeria?

- iv. What is the effect of TSA adoption on financial fraud in Ministries, Departments and Agencies of the Federal Government in Nigeria?

1.4 Research Objectives

The objectives of the study are to determine:

- i. the effect of TSA on transparency in the utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria
- ii. the effect of TSA on accountability in the utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria
- iii. the effect TSA adoption on revenue leakages in Ministries, Departments and Agencies of the Federal Government in Nigeria
- iv. the effect of TSA adoption on financial fraud in Ministries, Departments and Agencies of the Federal Government in Nigeria

1.5 Research Hypotheses

Based on the preceding research questions and objectives, the following null hypotheses were formulated for the study:

H₁: TSA has no significant impact on transparency in the utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria

H₂: TSA has no significant impact on accountability in the utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria

H₃: Adoption TSA has no significant effect on level of revenue leakages in Ministries, Departments and Agencies of the Federal Government in Nigeria.

H₄: Adoption TSA has no significant effect on level of financial fraud in Ministries, Departments and Agencies of the Federal Government in Nigeria

1.6 Significance of the Study

Based on the experiences of other countries, the Federal government believed TSA will enhance transparency and accountability, block revenue leakages, result to effective and efficient financial management. Therefore, empirical studies are required to determine effect of this policy especially on Public Finance Management in Nigeria. Thus, the emergence of TSA has made the study on TSA a worthwhile academic endeavor.

The results from this study will enlighten the general public on the effects of TSA on Public Finance Management in Nigeria. The outcome of this research will serve as an input to policy makers in decision making concerning management of public finance. This research will also contribute to other scholars and researchers interested in carrying out further research on TSA.

1.7 Scope and Limitation of the Study.

This study focuses on the effect of TSA policy on Public Finance Management Nigeria. The study covers Federal Government MDAs only because States and Local Governments finances are outside the control of Federal Government, so they not included in the scope of the Federal Government of Nigeria TSA scheme.

The findings of this study will be limited to the experiences of the respondents based on the workings of the policy. It does not include any firsthand information from the Federal Government or its representatives on the effectiveness of the TSA.

In addition, the study uses a small sample of 100 Treasury Staff of the Office of Accountant General of The Federation Working at Federal Pay Office, Sokoto, Federal Pay Office Birnin Kebbi, Federal Government College Sokoto, Federal Science College Sokoto, Federal Government Girls College Tambuwal, Police Pay Office Sokoto and Police Pay Office Birnin Kebbi. Therefore the result of this study should be interpreted

with caution because it may not adequately reflect the experiences and views of all treasury staff of OAGF.

With regards to limitation, TSA is a relatively new concept in Nigeria; both theoretical and empirical researches on the subject are still at rudimentary stage. This makes in-depth analyses on the subject and comparisons of the findings of the study with prior studies quite challenging.

1.8 Scheme of Chapters

This study has five chapters. Chapter one is the foregoing introduction that contains the background to the study, statement of the problem, research questions, research objectives, research hypotheses, significance of the study, scope and limitations, and finally scheme of chapters.

Chapter two presents the literature review and theoretical framework. Chapter three is the methodology for the research covering the overall design and approach to the whole study. It presents the descriptions of the research design, the population for the study, the sample and the sampling technique, the variables to be examined, chosen measurement instruments; procedure for data collection and methods of data analysis.

Chapter four is data presentation, analysis of results and discussion of findings. The last chapter, chapter five, concludes the work with a summary, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter reviews both conceptual and empirical literature on TSA. Meaning, Objectives and benefits of TSA were explored. Legal/Regulatory Framework and Public Financial Management Reforms that Facilitates Implementation of TSA in Nigeria, Objectives of TSA, Main stakeholders and their roles, benefits of TSA to the Nigerian economy, Preconditions for effective TSA implementation, challenges of TSA implementation, structure of TSA in Nigeria, Relationship between TSA and transparency in the utilization of government funds in MDAs, Relationship between TSA and accountability in the utilization of government funds in MDAs, Relationship between TSA and blockage of revenue leakages in MDAs, Relationship between TSA and level of financial fraud in MDAs, Theories of Public Financial Management Linked to TSA, Review of empirical studies and finally, the theoretical framework.

2.2 Conceptual Framework: the conceptual framework of TSA reveals its meaning, based on views of various, institutions, scholars and researchers.

2.2.1 Meaning of Treasury Single Account

Treasury Single Account (TSA) is a form of public account system in which all government revenues, incomes and other receipts are directed to one single account maintained (usually) by the Central bank of Nigeria (CBN) for the purpose of enhancing cash management (CBN, 2016). TSA simply refers to a form of public account system in which all government revenues, incomes and other receipts are routed to one single account with or without sub-accounts maintained by Central Bank through which the government settles its financial obligations (Ibrahim et al., 2017). TSA is a unified

structure of government bank accounts enabling consolidation and optimum utilization of government cash resources (Pattanayak & Fainboim, 2011). It can also be defined as 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. It is, therefore, evident from the ensued definitions that TSA is not necessarily a single bank account. It can be multiple accounts rolled up to a single account through which the government transacts all its receipts and payments.

TSA is a financial program for conducting the internal and external cash flows necessary for executing the public budget of the country, and it realizes the premium utilization of available liquidation (Al-Wadani and Al-Alkawi, 2010). Olanipekun, Brimah and Olowo (2015) averred that TSA as an instrument put in order to control government financial resources and expenditures which permits that complete real time information on government cash resources and improves operational and appropriations control. TSA is 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 (Chukwu, 2015).

2.2.2 Legal/Regulatory Framework and Public Financial Management Reforms that Facilitates Implementation of TSA in Nigeria

Nigeria has undergone a plethora of public financial management reforms since the advent of democracy in 1999. And most of the reforms continue to have a significant bearing on the success registered by the Federal and State government's implementation of the TSA. Review of Legal/Regulatory Framework for the establishment of TSA that require some review as well as other reforms found in literature (Enyinna, Odumegwu, & Stanley, 2016; Ikechukwu; 2016; Isa, 2016; Study Tour Report (STR, 2019) Republic

of The Gambia Ministry of Finance and Economic Affairs on Nigeria's TSA Implementation) are addressed below:

2.2.1 Legal/Regulatory Framework.

Sometimes the existing legal and regulatory frameworks may allow spending units to have independent bank accounts. This need to be amended and good international practice is to vest the ministry of finance/treasury with the sole legal authority for opening government bank accounts. To make the TSA a stable feature of treasury management, it is good practice to include it in related laws (such as a treasury law or an overarching Public Financial Management law) as a fundamental feature of the respective country's PFM system.

Section 80 of the Nigerian constitution provides the legal backing for the operation of a Consolidate Revenue Fund (CRF), hence a TSA. In addition Finance Control and Management act 1958 spelt out how public funds should be expensed and invested by public officials. The Act mandates the OAGF to prepare, sign and present for audit, the accounts showing fully the financial position on the last day of each financial year of the CRF. Another important legal framework in Nigeria is the Fiscal Responsibility Act 2007 (STR, 2019).

Sections 80 and 162 of the 1999 Constitution, which gives legal backing to the TSA reads: "All revenues or other moneys raised or received by the Federation (not being revenues or other moneys payable under this 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 form one Consolidated Revenue Fund of the Federation" (Bashir, 2016). Therefore, the implementation of TSA policy was to aid compliance with the provisions of these sections. However, this constitutional provision appears not to be comprehensive

enough to address the issue of legal requirement because it does not take into account the autonomy of certain agencies such as the National Assembly (NASS), National Judicial Council (NJC), Independent National Electoral Commission (INEC), Human Rights Commission and certain provisions of Fiscal Responsibility Act (FRA) of 2007 (see Ibrahim et al, 2017). Hence, a comprehensive review and amendment of legal/regulatory framework is necessary in order to ensure that the subsisting legal provisions and autonomy of certain agencies do not preclude them from TSA system.

2.2.2 Economic and Financial Reforms

The economic and financial reforms implemented for last two decades have laid the ground for a successful implementation of Nigeria's TSA. This story reinforces the fact that reforms are key in transforming the economic and financial growth of a country and its citizenry. The reforms made by Nigerian Government include the following:

a. Revenue and Tax Administration Reforms

In 2002, the FGN undertook Revenue and Tax Administration reforms. At the time over-reliance on oil, corruption in revenue and tax administration and government's frequent inability to meet its own terms of the 'social contract' meant that there was general unwillingness to pay tax among Nigerians. The reforms constitute one of the deepest, most comprehensive and most successful reform efforts in Nigeria. Tax collection improved significantly from ₦455 billion in 2000 to ₦4.8 trillion by 2013. Following the reforms, actual collection of ₦3 trillion in 2008 alone was higher than the collection for the previous eight-year period put together. The automation of key processes reduced corruption and abuses, thereby leading to high level of efficiency.

b. Budgetary Reforms

The budgetary reforms, which commenced in 2000, have five major planks. They are administrative procedures, budget preparation, and 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. 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).

c. Accounting Transaction Recording Reporting System

Accounting Transaction Recording Reporting System (ATRRS) is an ICT based Accounting Software application which facilitates the input of Accounting Transactions, its reconciliation and the generation of Standard Accounting Reports that meet required Standard of the Treasury. At the point of its conception, It was envisaged that the full deployment and development of the GIFMIS will not be possible within a short time hence the need to have a bridge which will link up with the ultimate objectives of the GIFMIS. This will thus be a stopgap solution to GIFMIS. The implementation of the Accounting Transaction Recording and Reporting System (ATRRS) has opened the doors widely for the Treasury to appreciate the essence and benefits derivable from the computerization of Government Accounting System.

2.2.3 Government Integrated Financial Management Information System (GIFMIS)

Government Integrated Financial Management Information System (GIFMIS) is a computerized financial management information system for the FGN, which is efficient, effective, and user friendly and which: Increases the ability of FGN to undertake central control and monitoring of expenditure and receipts from the MDAs. The reform program

was implemented in 2012 to enhance transparency and accountability in budget preparation, execution, recording and reporting process (STR, 2019).

The introduction of the GIFMIS as one of the most common financial management reform practices, aimed at the promotion of efficiency, effectiveness, accountability, transparency, security of data management and comprehensive financial reporting. Thus, the aim of GIFMIS is to modernize and improve public financial management through a wide range of financial reform initiatives. The scope and functionality of GIFMIS varies across countries, but normally it represents an enormous, complex, strategic reform process (Chêne 2009; Ibrahim et al., 2017).

2.2.4 Chart of Accounts

In preparation for the introduction of GIFMIS, a new multi-dimensional Chart of Accounts (COA) was adopted. The implementation of the new COA commenced with the 2011 budget and a Treasury Circular was issued directing Ministries, Departments and Agencies (MDAs) of government to adopt it for execution of the budget. The COA provides a robust mechanism for the classification of public resources under the budget as well as tracking receipts and payments during budget execution.

2.2.5 Integrated Payroll and Personnel Information System

An Integrated Payroll and Personnel Information System (IPPIS) was put in place in 2007 and is currently being fully rolled out across the service. IPPIS has reduced the cost of governance by saving government ₦185 billion (about US\$1 billion) to date with ₦416 million saved in the first month of operation (STR, 2019).

2.2.6 Banking Reforms

The banking sector reforms in Nigeria are predicated upon the need to strengthen the financial sector, build an efficient banking sector, and enable the economy to compete favorably with international best practices. Nigeria's banking sector was plagued by macroeconomic instability, lack of investor and consumer sophistication, major failures in corporate governance, weak supervision and enforcement, inadequate disclosure and a lack of transparency about the financial health of banks and low capital and liquidity that makes bank consolidation necessary. Bank consolidation in Nigeria comes with an amendment to the existing banking laws. In 1969, capital base for banks was given as N1.5m for foreign banks and N600, 000 for indigenous commercial banks. In 2001, when Universal Banking was adopted in principle, the capital base was jerked up to N1 billion for the existing banks and N2 billion for new banks. But in July, 2004, the new governor of CBN announced the need for banks to increase their capital base from minimum of 2 billion naira to N25 billion by December, 2005 (Enyinna et al., 2016). In 2008, CBN injected a capital of ₦620 Billion to shore up the capital of nine weak banks, established a Macro-Prudential Framework and Market Infrastructure (STR, 2019).

2.3 Objectives of TSA

The primary objective of a TSA is to ensure effective aggregate control over government cash balances to facilitate implementation of FGN Cash Management Policy. The consolidation of cash resources through a TSA aggregate control of cash is also a key element in monetary and budget management. Literature review from previous studies (Isa, 2016; Ibrahim et al, 2017) and CBN Guidelines for the Operation of Treasury Single Account by State Governments (2016) reveals that, TSA is mainly designed to bring all government funds in bank accounts within the effective control and operational purview of the Treasury, in order to: enthrone centralized, transparent and accountable revenue

management; facilitate effective cash management; ensure cash availability; promote efficient management of domestic borrowing at minimal cost; allow optimal investment of idle cash; block loopholes in revenue management; establish an efficient disbursement and collection mechanism for government funds; improve liquidity reserve; and eliminate operational inefficiency and costs associated with maintaining multiple accounts across multiple financial institutions (CBN, 2016: 2). Other objectives for setting up TSA include: minimizing transaction costs during budget execution process, notably by controlling the delay in the remittance of government revenues (both tax and non tax) by collecting banks, and making rapid payments of government expenses; facilitating reconciliation between banking and accounting data; efficient control and monitoring of funds allocated to various government agencies; and facilitating better coordination with the monetary policy implementation (Ibrahim et al, 2017). Lastly, the specific objectives are: to provide greater transparency in the Public Financial Management (PFM); to gain greater clarity to national financing needs and the management of the public debt; to increase fiscal savings (less transaction charges, more revenues); to improve financial markets; to provide more accurate accounting and improved reporting (Isa, 2016).

2.4 Main Stakeholders on the implementation of TSA

OAGF (2015) Guidelines on the Implementation of TSA has identified the stakeholders in TSA and their respective roles which are highlighted below:

a) Ministries, Departments & Agencies (MDAs) b) Deposit Money Banks (DMBs) c) Central Bank of Nigeria (CBN) d) Office of the Accountant-General of the Federation (OAGF) e) Service Providers

2.4.1. Role of MDAs

a) Ensure that their revenue targets are met, b) Provide their payers with details of payment including amount and nature of payment, c) Guide payers on e-collection processes including how to pay at the bank or through other channels of the CBN Payment Gateway (Remita). d) Where applicable, ensure that appropriate services are rendered upon confirmation of payment, e) Monitor their payers and collecting banks to ensure that payments are actually made, f) Undertake regular reconciliation of all collection accounts, g) Render revenue returns to the OAGF on a monthly basis.

2.4.2 Role of Deposit Money Banks

a) Ensure that their duties under the subsisting Payment Gateway MOU are effectively discharged, b) Ensure that customers making payment to government are given prompt service, c) Ensure that all collections in favour of government are promptly remitted, d) Ensure that operational and other relevant issues are logged with appropriate authorities (OAGF, CBN and REMITA) without delay, e) Liaise regularly with OAGF to ensure smooth operation of the e-collection initiative, f) Cooperate with relevant Departments of OAGF and CBN in respect of MDA accounts closure, transfer of funds to MDA accounts at CBN, collection monitoring and reporting.

2.4.3 Role of CBN

a) Provide payment gateway platform, b) Development of overall e-collection and e-payment policies for the nation, c) Interfacing with Deposit Money Banks (DMBs) and monitoring them, d) Creation and maintenance of bank accounts including CRF/TSA, FAAC and TSA Sub Accounts, e) Central Bank is responsible for monitoring of all linked accounts to TSA at the CBN, compliance of banks and other financial institutions with the CBN guidelines on the implementation of TSA as well as ensuring that withdrawals

limits are enforced,) CBN is also responsible for daily transfer of funds from the Sub Accounts to the CRF/TSA based on instructions from the OAGF.

2.4.4. Role of OAGF

a) Ensure effective implementation of e-collection, b) Development of operational guidelines, c) Proper monitoring of the collection gateway, d) Prompt reconciliation of all collections, e) Support MDAs, banks and payers for smooth operation of e-collection f) Regular monitoring of all collections to ensure that they are promptly remitted and accounted for, g) Issuance as well as continuous review and update of the e-Collection guidelines and processes, h) Abide by the provisions of the MOU with CBN, Service Provider and Banks.

2.4.5. Role of Service Provider

a) Work with CBN, OAGF and other stakeholders to articulate system requirements, b) Provide a robust, stable and effective integrated processing platform, c) Ensure the optimal availability of all relevant systems and platforms, d) Provide effective and efficient support to users of the platform, e) Provide users with relevant reports f) Training of users on the use of the payment gateway.

2.5 Benefits of Treasury Single Account to the Nigerian Economy

Payments of revenues into multiple accounts apart from creating discrepancies have also caused severe leakages which in no small measure negatively impact on the nation's economy. The primary benefit of a TSA therefore, is to block these leakages through proper monitoring of government receipts and expenditure leading to efficient and effective cash management. Several studies Okechukwu et al. (2015), Yaaba (2015), Bashir (2016) Isah, (2016) and Ibrahim et al, (2017) have identified the numerous benefits of TSA includes; provision of timely information on cash resources of government hence,

reduces cases of idle funds in multiple accounts as well as the cost of borrowing. It facilitates effective and efficient fiscal and monetary policy coordination. It also has the capability to block leakages, increase transparent tax collection and internally generated revenue (IGR).

Other benefits identified by (Udo, & Esara, 2016) include - Ensuring of accountability of government receipts and expenditure. The implementation of TSA is a critical step towards curbing corruption in public finance. Promotion of transparency, reduction of corruption and diversion of public funds, elimination of idle funds left in numerous accounts in commercial banks usually used to bear interest for corrupt entities and easier reconciliation of revenue collections and payments.

2.6 Preconditions for Effective TSA Implementation

Effective implementation of TSA will depend on compliance with certain preconditions outlined in literature (Pattanayak&Fainboim, 2011). Therefore, it is imperative address some important issues upfront before key decisions are taken on design options and the strategy to establish a TSA. Unless these issues are addressed, the TSA implementation is unlikely to be successful, as the experience of many countries demonstrates (Ibrahim etal, 2017). Successful implementation of a TSA also requires sound treasury systems and processes. Therefore, assessment of FGN compliance with the preconditions for the establishment of TSA will shade more light on its effectiveness in Nigeria. Pattanayak and Fainboim (2011) provide four key preconditions for the establishment of TSA as follows:

2.6.1 A Complete Inventory of Existing Bank Accounts

As a key precondition, the government should have full information about the bank accounts opened/operated by various agencies under its control. As a precondition to success full implementation of TSA, it is a prerequisite that government should have

detailed information on all the bank accounts operated in its name to facilitate compilation and transfers of the various sums to the central TSA account domiciled in CBN. To achieve this objective the Federal Government of Nigeria, issued directives and guidelines to all Ministries, Departments and Agencies (MDAs) for compliance (Dikwa, 2016; OAGF, 2015).

As at December 2015, 726 MDAs, which are responsible for almost 98 per cent of the national budget, have complied fully. The Office of the Accountant-General of the Federation, on Monday, February 7, 2016, said it has mopped up N2.3 trillion into the Treasury Single Account (TSA). Its Director of Funds, Mohammed Dikwa, disclosed this at the opening session of the workshop on TSA in Abuja. He said with over 17,000 bank accounts being operated at the federal level in commercial banks, government had no choice but to introduce the TSA which has so far helped in mopping up about N2.3trillion into the various accounts maintained and operated at the Central Bank of Nigeria as reported by Enejata (2016) and Ibrahim et al, (2017).

2.6.2 Political Support for Reform of Government Banking Arrangements

Establishing a TSA may require hard decisions, such as closing the existing bank accounts of spending units (outside treasury control), that can provoke powerful opposition. For success, a TSA reform must be explicitly and strongly supported by the highest levels of government. Cabinet decisions to initiate and reinforce the reform are helpful.

In Nigeria, the desired support by all the stakeholders for the successful implementation of TSA policy has not been fully achieved. In particular, resistance by the National Assembly to join the scheme, as well as the barrage of criticisms by the Academic Staff Union of Universities (ASUU) and the Academic Staff Union of Polytechnics (ASUP) constitute another challenge for the successful implementation of the TSA. ASUU is also

strongly opposed to the idea of joining the Integrated Personnel and Payroll Information System (IPPIS) which is a key component of the TSA (Ibrahim et al, (2017).

Since political support for reform of government banking arrangements is a precondition for the successful implementation of TSA, policy, this suggest the strong need for government to engage all the critical stakeholders in order to persuade them to embrace the financial reform and give the scheme all the required political support for it to achieve optimal success.

2.6.3 Banking Network and Technology

As a precondition for the successful implementation of TSA, the technological feasibility and capacity of the banking system to participate in the operation of a TSA, and to report on TSA transactions, should be established. This includes the existence of an interbank settlement system, a small payments clearing system, a Real Time Gross Settlements System (RTGS) at the central bank for high value transactions, and the connection of major commercial banks to the RTGS. As such, a decision on TSA should trigger the acquisition of necessary technology by the banking system as the banking services will be remuneration based (Isa, 2016).

In order to meet up with the precondition for banking network and technology the CBN had advised all banks in the country to put in place necessary systems in their branches and to also sensitize their staff members on the federal government's electronic revenue collection scheme (e-collection) because of the commencement of the TSA (Okechukwu et al., 2015). Having ascertained the feasibility and capacity of the banking system to participate in the operation of a TSA in Nigeria, the Central Bank of Nigeria (CBN) set up the CBN E- Payment Gateway. The Gateway is a secured electronic platform provided

by, the CBN for the execution of payments and collection instructions of amount due to and from Consolidated Revenue Fund/TSA and Subaccounts of MDAs (Dikwa, 2016).

Therefore makes the payment gateway makes it possible for payments of tax, fees and levies to the appropriately designated accounts with the Banks. But unlike in the past when the monies so collected are left with the banks until such a time the relevant MDA requires to use them, the banks are now required to sweep all revenue collected on behalf these MDAs to the Consolidated Revenue Account with the Central Bank of Nigeria at the end of every banking day. E-Remita Platform is the technology platform used in making direct payment to TSA and making the daily transfer of funds from the Deposit Money Banks (DMBs) to the CBN. However, the Banking network and technology issue suffers from queue management which causes inability of the current platform to effect real time payment, a lot of transactions pending at a time (Dikwa, 2016; Ibrahim et al, 2017).

2.8 Challenges of Treasury Single Account Implementation

It can be deduced from the forgoing review that certain challenges pose serious threat to successful implementation of TSA in Nigeria. Based on evidences found in literature review, and following the work of Ibrahim et al., (2017), Study Tour Report (2019) of Republic of The Gambia Ministry of Finance and Economic Affairs on Nigeria's TSA Implementation, some of the challenges identified are as follows:

i. **Autonomous Agencies/ Institutions:** The constitution of the Federal Republic of Nigeria provides for autonomy of certain agencies of government such as the National Assembly and a few others. This provides room for agitation by these agencies to be excluded from the TSA (Ibrahim et al., 2017). The National Assembly and Judiciary are still not part of the TSA.

ii. **Technological Development:** The feasibility of daily sweeping depends largely on technological development of both fiscal and financial sectors. Although, the financial sector is technologically inclined, there is still a substantial technological gap in the fiscal sector. This could serve as a hindrance to efficiency of TSA. Issues relating to network services and server failures could be detrimental to effective functioning of TSA (Ibrahim et al., 2017).

iii. **Communication Platform:** The operation of TSA requires large, efficient and reliable communication platform. Inefficient communication platform makes or mar the efficiency of TSA (Ibrahim et al., 2017). Information feedback is weak, resulting to difficulty in accessing bank statements and associated reconciliation issues (STR, 2019).

iv. **Capacity of Users:** The technical knowhow of the users of TSA particularly at CBN, Ministry of Finance, Treasury and Budget Office is essential to effective implementation of TSA. The staff still lack basic skills required for efficient operation of TSA (Ibrahim et al., 2017). Moreover, MDAs compliance has been opening numerous sub-accounts at the CBN and therefore making consolidation of individual bank accounts more cumbersome and adversely affecting government oversight function in ascertaining final bank balances at the end of the day (STR, 2019).

- v. There exist still gaps in the legal and regulatory framework, which has not been reconcilable with broad objective of the TSA to be strictly centralized (STR, 2019).

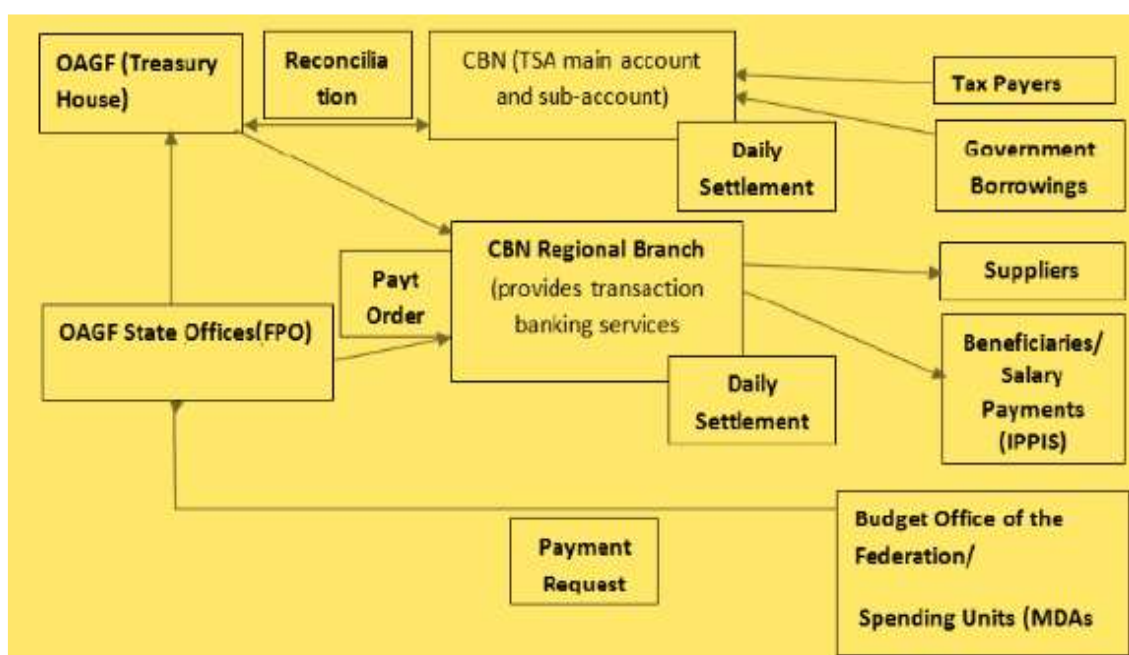
2.9 Structure of FGN TSA

TSA has various structures or modes of operation which varies from country to country. The concern of this study is to examine the model adopted by FGN. The Federal Government of Nigeria maintains Treasury Main Account with CBN where all revenue receipts are lodged and disbursements are met from.

2.8.1. Centralized Main Account

The Federal Government of Nigeria (FGN) operates a centralized TSA structure with a CRF account as the Main Account. MDAs are allowed to maintain sub-accounts at CBN for project accounts, which are linked to the TSA. Notwithstanding, MDAs are not allowed to maintain accounts with DMBs or any other financial institution. Similarly, transaction-processing system for TSA operation is decentralized to maintain the autonomy of MDAs in budget execution. TSA covers all government funds – budgetary, non-budgetary and donor funds.

Figure 1: Centralized TSA Transaction Processing System



Source: (STR, 2019)

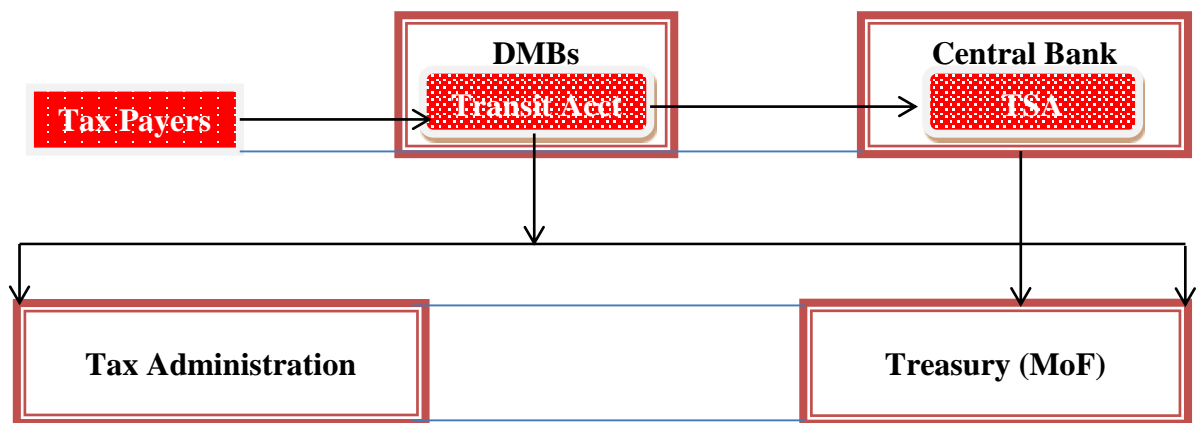
▪ Revenue Collection

Figure 2 depicts the revenue collection circuit. The tax payers pay tax into the transit account domiciled with the deposit money banks (DMBs). The DMBs in-turn transfer the funds to the TSA account in the CBN while generating report to the tax administrators (i.e. FIRS, Customs, NNPC and others) and the treasury. The CBN on its own part alerts

the treasury of receipt. In the revenue collection circuit banks only play the roles of agents while CBN serves only as the custodian. Technology plays a crucial role in the revenue collection drive and payment disbursement under TSA. DMBs as usual host the responsibility for revenue collection on a remuneration basis. These revenues are however transferred on daily basis to the TSA account.

In other words, the accounts turn zero every day. The remuneration for DMBs for collecting the revenue is based on the number of transaction processed (*not* quantum received).

Figure 2: Revenue Collection Circuit



Source: Ibrahim et al., (2016)

2.8.2 Subsidiary Accounts

MDAs hold sub-accounts at the CBN. Figure 2 depicts payment disbursement circuit. MDAs, initiate the payment process using the GIFMIS which allow them to interface with the Treasury; the payment request is then channeled to the TSA account at the CBN. Thereafter, the CBN credits the beneficiaries' accounts directly or through the DMBs that serve as an intermediary that effects the payment to the recipients' accounts. A report on the transaction is then generated to the treasury from the TSA.

2.8.3 TSA Payment Gateway

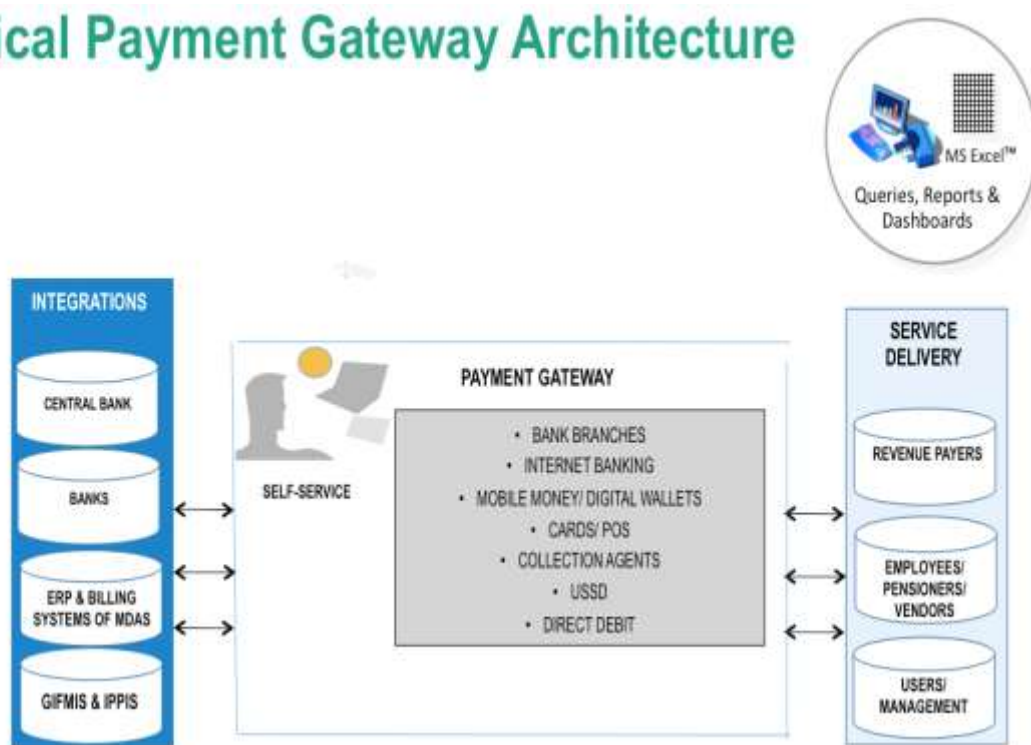
A payment gateway facilitates payment transaction by the transfer of information between a payment portal (such as a website, mobile phone or interactive voice response service), and the front-end processor or acquiring bank.

- **REMITA**

The Nigerian payment gateway for the TSA is called Remita. Remita is a robust and extendable, multi-channel payment gateway that gives users multiple channels to make and receive payments on a SINGLE platform. Remita connects to the Central Bank, all DMBs, micro-finance banks, card schemes, digital wallets etc. to ensure that all authorized financial institutions and schemes can partake in the national payment scheme. Remita makes it easy for customers and service users to pay you using any of the following channels: Online Banking site, Remita (on app, mobile & web), Debit/Credit cards (Visa, Verve, MasterCard, Union Pay), Branches of ANY commercial bank nationwide, Microfinance Banks, POS, Direct Debit, Digital Wallets.

Figure 3; Payment Gateway (REMITA)

Typical Payment Gateway Architecture



Source: (STR, 2019)

2.8.4 Maintenance of TSA Infrastructure.

A unit is created at OAGF called the Directorate of Treasury Single Account, responsible for the management of the TSA. In addition to that System Spec has desk officer at OAGF who gives support in the maintenance of the TSA.

2.8.5 Payment Gateway Fees Charges

The FGN has been paying 1% charges until November 1, 2018. A circular from CBN indicated that henceforth fees charges shall be born by users and fixing the fees at ₦ 150 per transaction. Where Remita takes 50% and the rest is shared by the DMBs (STR, 2019).

2.9 Relationship between TSA and transparency in the utilization of government funds in MDAs

The introduction of TSA is as a result of numerous corrupt practices that exist in Nigeria, such as lack of transparency and accountability (Kanu, 2016). Lack of transparency is seen as a major hindrance to the creation of a favorable investment climate, better management of public resources and poverty reduction (Aderinokun, 2010)

Transparency helps to guard against any possible misuse of power by ensuring that information available can be used to measure the authorities' performance (Eme, Chukwurah, & Ihenacho, 2015). Transparency therefore, seeks to achieve accountability. Since transparency enhances trust, therefore, adequate transparency is crucial to ensuring that wealth is managed for the benefit of the whole population (Nicholas, 2009).

2.10 Relationship between TSA and accountability in the utilization of government funds in MDAs

Financial accountability is served simply by collecting and spending public funds in accordance with laws (including budget laws) and regulations. While this still needs strengthening in many countries, it is a long way short of performance accountability. Several researchers (Bashir, 2016; Ibrahim et al, 2017; Isah, 2016; Okechukwu et al. 2015; Ofurum, Oyibo & Ahuche, 2018; Olorunnishola, & Fasina, 2018; Yaaba, 2015) as well as government institutions (CBN, Ministry of Finance, OAGF) posit that TSA would ensure accountability by plugging loopholes, where hitherto resources were filtered away. If a Ministry, Department and Agencies has various accounts and doesn't have a unique one for receiving inflows; it is very easy to tell its clients to pay money into any of its accounts, which is supposed to be illegal. Besides blocking loopholes, it breeds accountability. All inflows are seen the exact way they come in, can be tracked, and proper documentation maintained (Olanipekun, Brimah, & Olowoleni, 2015).

2.11 Relationship between TSA and blockage of revenue leakages in MDAs

The consolidation into a TSA paves way for the timely capture and payment of all due revenues into government coffers without the intermediation of multiple banking arrangements. This prevents revenue leakages in terms of revenue loss and mismanagement by operators of all revenue-generating agencies (Onyekpere, 2015). If TSA is properly implemented, agencies of government will spend in line with duly approved budget provisions. The maintenance of a single account for government will enable the Ministry of Finance monitor fund as no agency of government is allowed to maintain any operational bank account outside the oversight of the ministry of finance.

The primary benefit of a TSA is to provide for proper monitoring of government receipts and expenditure. In the Nigerian case, it will help to block most, if not all, the leakages that have been the bane of the economy. There are situations where some MDAs manage their finances like independent empires and remit limited revenue to government treasury. Under a properly run TSA, it cannot be possible, an agencies of government are meant to spend in line with duly approved budget provisions (Kanu, 2016; Tayo, 2015).

TSA is believed to be an efficient and effective means of managing government revenue generation and system that provide and enforce sufficient self-control mechanism on revenue generation and budget implementation using a daily return from account balances of various MDAs into a central account (Adebisi & Okike, 2016). However, in an empirical study Dorcas, Stephen, Folashade, Uzoma, and Stephen (2017), found that TSA policy has made a significant unique contribution to blocking government revenue leakages. Also, Ofurum, Oyibo & Ahuche (2018), found that TSA has a negative and significant impact on Federal Government Revenue.

2.12 Relationship between TSA and level of financial fraud in MDAs

Fraud: Fraud as a terminology has attracted a considerable volume of attention across different quarters. Although it has no universal definition; concepts such as embezzlement, misappropriation, financial misstatement, extortion, corruption, illegal acquisition, theft, and concealment of financial facts amongst others are thought to be peculiar to the term (Yakubu, 2018). It is expected that revenue generating agencies that have been depriving the Treasury of due revenue through a plethora of bank accounts under their purview and which is not known to the authorities will no longer be able to defraud the government revenue since all funds will be swept into the TSA (Olanipekun et al., 2015).

Moreover, fraud such payment of salaries and allowances to dead or retired staff and ghost workers is no longer feasible under the TSA platform that uses IPPIS. TSA has been found to have a statistical significance in curbing mismanagement and misappropriation of government revenue (Dorcas et al., 2017) thereby minimizing fraud. Moreso, Adebisi and Okike (2016), in an empirical study, found that the TSA adoption is an effective tool for curbing revenue leakage in Nigerian states. However a study conducted by Yakubu (2018) concludes that the probability of TSA to tackle public sector fraud in Nigeria beyond revenue mobilization is almost non-existent.

2.13 Theories of Public Financial Management Linked to TSA

A number of different theories of socioeconomic accounting were borrowed to form sound foundation to substantiate Treasury Single Account adoption and implementation. Examples are:

2.13.1 Stakeholder Theory: It assumed that adoption of Treasury Single Account by the federal government is as a result of the pressure from stakeholders/citizens majorly against corruption (Aliyu & Bello, 2016). It suggested that the government will responds to the concerns and expectations of powerful stakeholders/citizens and some of the

responses will be in the form of strategic opinions. Stakeholders' theory provides rich insights into the factors that motivate government in relation to the adoption and implementation of Treasury Single Account (Ekubiat & Esara, 2016).

2.13.2 Public Finance Management Theory:

This theory assumed that all aspects of financial resources – mobilization and expenditure should be well managed in government for the benefits of the citizenry (Ekubiat & Esara, 2016). It includes resources mobilization, prioritization of programmes, the budgetary process, efficient management of resources and exercising control to guard against threats. Treasury Single Account (TSA) primarily is to avoid misapplication of public funds.

2.13.3 Modern Money Theory (MMT):

It is a theory that theorized how monetarily sovereign governments operate and their impacts on the economy. It shows that it is relevant to aggregate the central bank and the treasury into a government sector that finances itself through monetary creation such that financial position of the treasury and the central bank are so intertwined that both of them are constantly in contact in order to make fiscal and monetary policy run smoothly (Owie, Wilson & Onuora, 2018).

2.14 Review of Empirical Studies

Brimah and Olawoleni (2015) investigate TSA: a strategy for combating corruption and achieving sustainable development. The study adopted descriptive survey research design, population of the study consist of 248 respondents. Simple random and stratified sampling techniques were used to select respondents. Self constructed questionnaires were used to collect data. The study used tables, frequency counts, percentages and chi-square to analyzed data. It was found that implementation of TSA will to a large extent reduce the level of corruption in the public sector. It therefore recommended that the

government through the office of the Accountant General of the federation should come up with the guidelines and modalities that will strengthen the process of TSA implementation.

Bashir (2016) examines the effect of TSA policy on the public financial management in Nigeria. The objective of this research is to examine the extent to which Treasury Single Account can block financial leakages, promotes transparency and accountability in the public financial management. Both primary and secondary data had been employed. The populations of this study are Ministries, Department and Agencies (MDAs) within Bauchi metropolis using a sample of 72 respondents through judgment sampling. The data were analyzed using the Pearson Correlation techniques. The result of this research shows that adoption of TSA is capable of plugging financial loopholes, promoting transparency and accountability in the public Financial System. Thus, the researcher recommends that for the success of this policy government should promulgate more legislation to make it mandatory for all the three tiers of government in Nigeria. While the study addressed certain aspects of public sector fraud in Nigeria, it largely falls short of stating variation across different government agencies. The implication of such generalization comes to light its inability to distinguish between revenue imperative and nonrevenue imperative government agencies.

Adebisi & Okike (2016) studied the adoption of the treasury single account and its effect on revenue leakages of Nigerian states. In pursuance of achieving the research objective and proffering solution to the research problem the study employed survey research. The target population was the 628 Senior and Management staff of the Ministries of Finance and Board of Internal Revenue of 6 selected states in Nigeria that have adopted the TSA. In selecting the sample size for this study, restructured Yemane (1967) sampling model

is employed to justify the sufficiency of the sample size. The data used for analysis are collected through the use of Likert scale closed ended structured questionnaire. Questionnaires were distributed to the sample size of 133 staffs out of which 124 were fully completed and returned. The analysis was done using regression analysis with the aid of SPSS 22. The result of the study revealed that the TSA adoption is an effective tool for curbing revenue leakage in Nigerian states. It is recommended that those states that are yet to adopt the TSA, adopt and implement it for efficient fund management and curbing revenue leakage.

In another empirical study, Aliyu and Bello (2016), examined the extent to which TSA can block financial leakages, promote transparency and accountability on the public financial management. Both primary and secondary data were used. The population of the study comprises MDAs within Damaturu, Yobe State. Data were analyzed using ANOVA technique. Findings of the study show that TSA reduces corruption, mismanagement of public funds and also block financial leakages.

In a similar instance, Ekubiat and Esara (2016) studied the implementation of the TSA policy by state governments, with a view to ascertaining plausible benefits, prospects and resultant challenges therewith. The respondents to the study comprises of a total 200 professional accountant, drawn across different sectors in Akwa-Ibom state. The findings of their study dictate that enactment of the policy by state governments will enormously affect the proficiency levels of public finance management in Nigeria. The study however falls short in its analysis as it placed overbearing emphasis of the merits of the scheme, without highlighting possible operational challenges attributed to the policy. In lieu of the magnanimity of fraud in the public sector, it will not be out of place to claim that successive fiscal regulations have largely displayed high levels of want in terms of fiscal

control and oversight. Consequently, upon reviewing relevant literature, fraud is more likely to take place in the presence of opportunity, incentive and rationality. This can be further aided by ineffective control mechanisms. The literature also reveals that fraud is likely perpetuated by persons in higher positions. It further claims that a handful of studies on public sector fraud in Nigeria draw their conclusions based on parochial findings and perceived dominant views, with little or no empirical reviews or studies. Ultimately, the finding of such studies largely affects the dominant views on public sector fraud. Furthermore, a recurring controversy inherent in the literature in the hasty manner in which fraud is interchangeably appropriated with the concept of corruption. In addition, The population for the study consisted of 200 Professional Accountants in Akwa Ibom State of Nigeria as at January 31, 2016 (ICAN members and ANAN) some of whom have no practical knowledge of the how TSA operates.

Felix, Felix, and Rotimi (2018) examined the effect of TSA on tertiary institution finances. The study use survey research design and data were collected from primary source through the administration of questionnaire to respondents. Data collected were analysed using descriptive statistics and Kolmogorow Smirnov non parametric statistic tool. The findings reveal that adoption of TSA impact negatively on human capital development, and also place some challenges on the smooth running of tertiary institutions mostly in the area of project implementation, Budget implementation and payment of conference or workshop allowance to attendee. The paper concludes that TSA adoption inhibits the development of tertiary institutions in Nigeria. The paper recommends the need for government to exclude some aspect of tertiary institutions revenue collection from TSA to enable them meet some extra budgetary items and other running expenses that requires urgency and are time bound.

Dorcas, Stephen, Folashade, Uzoma, and Stephen (2017) conduct a study on TSA policy and government revenue in Nigeria. The survey research design was adopted in this study and copies of questionnaire were administered to respondents. The population comprises of the Nigerian Civil Aviation Authority, Aviation House, Ikeja, Lagos and Federal Inland Revenue Service (FIRS) regional office in Ikoyi, Lagos. Using the purposive sampling method, a sample of One hundred and fifty (150) respondents were selected from the population. The method of analysis was linear regression to explain the relationships between its variables. Findings of the study reveal that TSA policy has made a significant unique contribution to blocking government revenue leakages.

Ofurum, Oyibo & Ahuche (2018), empirically examined the extent to which TSA has improved Federal Government Revenue (FGR) and Gross Domestic Product (GDP) of the economy. Secondary data sources from CBN Statistical bulletin and economic reports were utilized. The obtained was divided in two periods. Pre TSA period third quarter 2013 to second quarter 2015 (Q3-2013 to Q2 2015) and Post TSA period (Q3-2015 to Q2-2017), T-test was used to analyzed the data with the aid of SPSS version 20. Findings of the study reveal that has a negative and significant impact on FGR. However, the study shows that Nigeria's GDP significantly increased after the implementation of TSA.

Yakubu (2018) examines the plausible effects of TSA policy on fraud detection and prevention in the public sector. Employing a descriptive method of social inquiry, the study is of the opinion that parochial, theoretical and empirical evidence as abound in prior literature; attest to the palpable probability of the later to address the issues of fraud. This study argues that policy does not address the incidence of fraud in the Nigerian public sector beyond revenue mobilization, financial reporting and fiscal oversight. To address the inefficacies in public finance administration, the study opines the need for

ardent political will in enforcing New Public Management Initiatives. Thus, the clamor for a shift from manual to digital public sector accounting remains a viable option for addressing inefficiencies of public finance management in Nigeria.

2.15 Theoretical Framework

This sub-section examines the specific view point that guides the conduct of the study. Although there are several theories applicable to TSA, this study is conducted within the framework of Stakeholders theory. This theory is conceptualized on the assumption that adoption of TSA by the FGN was as result of pressure mounted on the government by stakeholders for eradication of corruption and entrenchment of transparency and accountability in management of government fund (Aliyu & Bello, 2016; Ofurum, Oyibo & Ahuche, 2018).

Mboto, Offiong and Ibor (2017) posit that this theory was first laid out by Mitroff (1983) and later popularized by Freeman (1984). It postulates that organizations (including governments) have stakeholders defined as individuals and groups who benefit from or are harmed by, and whose rights are violated or respected by corporate or institutional actions. They emphasize further that the theory holds that stakeholders have stakes that are reciprocal, non-univocal and vary by the organization. This, is because each can affect the other in terms of harms and benefits. Employees, who operate the TSA, have their jobs and livelihood at stake, complemented by specialized skill sets for which there are usually no perfectly elastic market. In return for their labour, these public officers expect security, wages, benefits and meaningful work. Further, in return for their loyalty, government is expected to provide for them through times of economic or social difficulty or recession. Where they are used as a means to an end as is the case in government's implementation of TSA, they must participate in decisions affecting such use. The choice

of Stakeholders theory is because of its clarity, wide spread acceptability and comprehensiveness compared to all other theories relating to TSA. This theoretical framework has also featured more stable and consistent results in a plethora of empirical studies (Aliyu & Bello, 2016; Ekubiat & Esara, 2016; Mboto, Offiong and Ibor, 2017; Ofurum, Oyibo & Ahuche, 2018)

CHAPTER THREE RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology for the research covering the overall design and approach to the whole study. It presents the descriptions of the research design, the

population for the study, sample and sampling technique, instrument for data collection, validity and reliability of the instrument and methods of data analysis.

3.2 Research Design

The study design is a descriptive cross-sectional survey that made use of quantitative (questionnaire) method in which data was collected once across the population through sampling. This design was considered most appropriate as it allowed seeking the views of knowledgeable individuals on the operations of Treasury Single Account (TSA), which provide generalized opinions/statistics from the number of individual cases.

3.2.1 The Independent Variables

The independent variable for this study is Treasury Single Account (TSA)

3.2.2 The Dependent Variables

The dependent variables for the study are: Transparency in the utilization of government funds, Accountability in the utilization of government funds, Revenue leakages, and Level of Financial fraud.

3.3 Population of the Study

The population of the study consist 100 Treasury Staff of the Office of Accountant General of The Federation Working at Federal Pay Office, Sokoto, Federal Pay Office Birnin Kebbi, Federal Government College Sokoto, Federal Science College Sokoto, Federal Government Girls College Tambuwal, Police Pay Office Sokoto and Police Pay Office Birnin Kebbi are considered suitable for this study because they are part and parcel of TSA implementation in Nigeria and are knowledgeable about TSA policy.

3.4 Sample and Sampling Techniques

Given that the population of the study is not large, a census of the entire population was considered.

3.5 Instrument for Data Collection

A structured questionnaire with five sections was designed on a five-point Likert type rating scale. Section A captures the demographic information for the purpose of describing the sample. Section B evaluates respondents' views on implementation of TSA based on its objectives. Section C was designed to measure the extent to which TSA implementation of TSA provides transparency. Section D measures how TSA aids accountability in the Nigerian public sector. Section E measures effects of TSA on revenue leakage in Nigeria public sector. Section F examined effects of TSA on financial fraud.

3.5.1 Validity of the Instrument

The validity of the instrument was established in prior studies by the users (Felix, Felix, & Rotimi, 2018; Udo & Esara, 2016). It was therefore adapted for this study and further examined for content validity by my supervisor and experts who are knowledgeable on TSA. Based on their advice and suggestions, necessary amendments were made before the questionnaire was administered to the respondents.

3.5.2 Reliability of the Instrument

Reliability test based on Cronbach's Alpha was conducted to determine the inter-item consistency and reliability of the research instrument. Table 3.1 presents the result of the reliability tests.

Table 3.1: Reliability Test of the Research Instruments

	TSA	Transparency Scale	Accountability Scale	Revenue Leakage	Financial Fraud Scale
Cronbach's Alpha	0.80	0.75	0.711	0.793	0.74
Number of Items	12	5	5	5	8
Valid Cases	81	96	96	71	100
Excluded Cases	19	4	4	29	0
Total	100	100	100	100	100

Source: Field Survey (2019)

As can be seen from Table 3.1, all the instruments reports high reliability values above 0.7. Therefore the research instruments are for this study.

3.7 Data Analysis Techniques

Descriptive and inferential statistics were used to analyze the data with the aid of Statistical Package for the Social Sciences (SPSS) Version 21. These techniques include: frequency counts, simple percentages and tables, and simple linear regression. The frequency count was used to sort out the number of responses on each item of the instrument of data collection. Responses from the 5 point Likert scale was coded and entered into SPSS with 5 representing Strongly agree, 4 representing Agree, 3 Representing Undecided, 2 representing Disagree and 1representing Strongly Disagree. The weight of the responses were added together and divided to arrive at average score ($5+4+3+2+1=15/5=3$). Therefore, the cut-off point mean is 3.0., which serves as criterion mean score for evaluating respondents' agreement or disagreement with the questions asked. Mean values lower than 3.0, indicates disagreement with a given question or statement. Simple percentages were then used to describe the magnitude of a particular response to an item of the questionnaire.

Inferential statistics by way of Simple regression model was used to examine the effect of independent variable (TSA) on the on the dependent variables: Transparency (TRP), Accountability (ACTB), Revenue leakage (REVL) and Financial fraud(FFRD), using regression equation stated below:

$$Y = \beta_0 + \beta_1 x_1 + e \dots\dots\dots \text{equation (1)}$$

Thus, by substitution the equations are represented respectively as follows:

$$\text{TRP} = \beta_0 + \beta_1 \text{TSA} + e \dots\dots\dots (2)$$

$$\text{ACTB} = \beta_0 + \beta_1 \text{TSA} + e \dots\dots\dots (3)$$

$$\text{REVL} = \beta_0 + \beta_1 \text{TSA} + e \dots\dots\dots (4)$$

$$\text{FFRD} = \beta_0 + \beta_1 \text{TSA} + e \dots\dots\dots (5)$$

Where TRP represents Transparency in utilization of government funds, β_0 is the constant term, β_1 is the coefficient of TSA that shows the degree of its influence on TRP. ACTB represents Accountability in utilization of government funds, β_0 is the constant term, β_1 is the coefficient of TSA that shows the degree of its influence on ACTB. REVL represents Revenue leakage, β_0 is the constant term; β_1 is the coefficient of TSA that shows degree of its influence on REVL. FFRD represents Level of Financial Fraud, β_0 is the constant term, β_1 is the coefficient of TSA that shows the degree of its influence on FFRD

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents and analyses data collected through the questionnaire along with discussion of findings. The analysis of socio demographic characteristics of the respondents came first, followed by analysis of inferential statistics that test the research hypotheses, followed by discussion of findings.

4.2 Data Presentation and Analysis

This section presents descriptive statistics on respondents' demographic characteristics. A total of 100 questionnaires were administered to the respondents and all the questionnaires were retrieved and found worthy for analyses resulting to 100% response rate from the survey.

4.2.1 Descriptive Analyses of Demographic Characteristics of the Respondents

The demographic features of various respondents covered by the study include: Respondent's age, years in service and educational qualifications.

Table 4.1 presents descriptive statistics on respondents' age, number of years in service, gender and educational qualifications. It can be seen from the table that in terms of age, 15 per cent of the respondents fall within the age bracket of 25-34- years, 35 per cent belong to 35-44 years age group, while 55 percent of the sample are 45 years and above.

Analysis based on years in service shows that 29 percent of the respondents have s1- 10 years working experience, 35 percent of them have 11-20 years' work experience while another 35 percent also 21 years or more in service. This analysis shows that majority of the respondent (70%) have more than 10 years.

Table 4.1 Summary of Response on Demographic Characteristics

Age		
	Frequency	Percentage
24-34	15	15
35-44	30	30
45 years and above	55	55
Total	100	100
Number of Years in Business or Service		
	Frequency	Percentage
1-10years	29	29
11-20 years	35	35
21 years and above	35	35
Missing	1	1
Total	100	100
Gender		
	Frequency	Percentage
Male	90	90
Female	10	10
Total	100	100
Educational Qualification		
	Frequency	Percentage
SSCE	4	4
OND	22	22
HND/BSc	59	59
PGD/Masters	15	15
Total	100	100

Source: Field Survey (2019)

Analyses based on gender of the respondents show that 90 percent of the respondents were male and 10 percent female. On educational qualifications, majority of the respondents (59%) had Higher National Diploma or Bachelor's Degree, 15 percent had Post Graduate Diploma (PGD) or Masters, 22 percent had Diploma or NCE while 4 percent of the respondents had Senior Secondary School Certificate. This analysis indicates that all the respondents are literate.

In summary, analyses of demographic characteristics shows that the respondents are experienced, literate, specialized and therefore qualified to participate in the survey.

4.2.2 Descriptive Analyses of the Research Questions

The research questions were analyzed based on 5 point Likert Scale in order of which they were presented on the questionnaire. Interpretation of the results is based upon the average mean values of the response to each individual item. The higher the average mean the greater the importance or higher the degree of agreement with the statement or question presented to the respondents. Therefore, the cut-off point mean is 3.0., which serves as criterion mean score for evaluating respondents' agreement or disagreement with the questions asked. Mean values lower than 3.0, indicates disagreement with a given question or statement. Responses presented are ranked according to show pattern of responses and their magnitude.

Table 4.2 presents descriptive statistics showing respondents views on the implementation of based on TSA objectives.

Table 4.2: Descriptive Statistics Showing Respondents' views on Implementation of TSA based on its Objectives

Likert Items	N	Mean	Std. Dev.	Rank	Remark
Implementation of TSA provides a unified structure of government bank accounts enabling consolidation and optimum utilization of government cash resources	100	4.49	0.77	1	A
TSA facilitates efficient control and monitoring of funds allocated to various government MDAs agencies	100	4.41	0.76	2	A
TSA enables efficient cash management	100	4.30	0.79	3	A
Allows complete and timely information on government cash resources	100	4.27	0.73	4	A
TSA Improves operational control during budget execution	100	4.24	0.72	5	A
TSA ensure better coordination with the monetary policy implementation	100	4.21	0.90	6	A
TSA eliminates idle funds left in numerous accounts in commercial banks	100	4.21	1.00	7	A
TSA facilitates efficient payment mechanisms of government financial transactions	100	4.13	0.80	8	A
TSA Improves bank reconciliation	100	4.07	1.00	9	A
Allows optimal investment of idle cash	100	3.93	1.07	10	A
TSA Reduces bank fees and transaction costs	100	3.79	1.15	11	A
TSA Promotes efficient management of domestic borrowing	100	3.68	1.03	12	A
Overall Treasury Single Account Score	100	4.14	0.50	—	A

Note: A=Agree, Std. Dev. Standard Deviation

Source: Field Survey (2019)

The result obtained from the descriptive statistics on Table 4.2 reveals that majority of the respondents agree with the statement measuring TSA implementation based on its objectives. This is shown by their response mean and the standard deviation scores on a

5-point Likert scale. The first statement on the table on whether the 'Implementation of TSA provides a unified structure of government bank accounts enabling consolidation and optimum utilization of government cash resources' has the highest mean scores of 4.49 and standard deviation of 0.77. The implication of this going by the 5 point Likert coding system is that, most respondents, that is 89.8% ($4.49/5 \times 100$) either agreed or strongly agreed with the questionnaire statement, followed by the statement that says "TSA facilitates efficient payment mechanisms of government financial transactions " with mean scores of 4.41 and standard deviation of 0.76. Followed by the statements that says " TSA enables efficient cash management" has mean score of 4.30 and standard deviations 0.789. The next in order of importance is statement "TSA Allows complete and timely information on government cash resources" having mean scores of 4.27 and standard deviation 0.726. The next statement that says 'TSA Improves operational control during budget execution' has mean value of 4.24 and standard deviation 0.72; the respondents also agreed that TSA ensure better coordination with the monetary policy implementation, as shown by their mean value of 4.21 and standard deviation of 0.90; the statement that says ' TSA eliminates idle funds left in numerous accounts in commercial banks' was also affirmed by the respondents as shown by mean values of 4.21 and standard deviation of 1.00; the respondents also agreed that 'TSA facilitates efficient payment mechanisms of government financial transaction with mean response value of 4.13 and standard deviation of 0.80; the respondents also admit that 'TSA Improves bank reconciliation (Mean=4.07, Standard deviation=1.00); TSA allows optimal investment of idle cash (Mean=3.93, Standard deviation=1.07); Reduces bank fees and transaction costs (Mean=3.79, Standard deviation=1.15); and finally 'TSA Promotes efficient management of domestic borrowing which has the lowest but acceptable response mean value of 3.68 and standard deviation of 1.03. In the overall, TSA weight means score of 4.14 was

obtained which is above the cut-off point of 3.0 for five points rating scale. This implies that the respondents agreed with the reasons advance by the Nigerian Federal Government for the implementation of TSA as enshrined in its objectives by the CBN and OAGF.

Table 4.3 presents descriptive statistics evaluating entrenchment of transparency in Government financial transaction due to the implementation of TSA

Table 4.3: Descriptive Statistics Evaluating Transparency due to Implementation of TSA

Likert Items	N	Mean	Std. Dev.	Rank	Remark
Adoption of TSA results to greater accessibility of information regarding government Revenue & expenditure	100	4.32	0.74	1	A
Adoption of TSA provides greater clarity in the Management of government fund	100	4.22	0.68	2	A
Adoption of TSA results to effective monitoring of monies disbursed to MDAs by the Ministry of Finance	100	4.19	0.81	3	A
Overall, adoption of TSA provides greater transparency in the Public Financial Management in Nigeria	100	4.15	0.80	4	A
Adoption of TSA results to greater openness in government financial transactions to stakeholders	100	4.05	0.97	5	A
Overall Transparency Score	100	4.19	0.51	–	A

Note: A=Agree, Std. Dev. Standard Deviation

Source: Field Survey (2019)

The result obtained from the descriptive statistics on Table 4.3 shows that the respondents agreed with the statements that 'Adoption of TSA results to greater accessibility of information regarding government revenue from the revenue generating agencies by government auditors (Mean=4.32, Std. Deviation 0.74); Adoption of TSA provides greater clarity in the Management of government fund (Mean=4.22, Std. Deviation 0.68); Adoption of TSA results to effective monitoring of monies disbursed to MDAs by the Ministry of Finance (Mean=4.19, Std. Deviation 0.81); Overall, adoption of TSA provides greater transparency in the Public Financial Management in Nigeria (Mean=4.15, Std. Deviation 0.80); Adoption of TSA results to greater openness in government financial transactions to stakeholders (Mean=4.05, Std. Deviation 0.97).

It can be seen from the table that greater accessibility of information regarding government revenue from the revenue generating agencies by government auditors, greater clarity in the Management of government fund and effective monitoring of monies disbursed to MDAs by the Ministry of Finance are considered the most important transparency factors by the respondents having being rated in the 1st, 2nd and 3rd place on the table. Moreover, the overall, Transparency weight mean score of 4.19 obtained was above the cut-off point of 3.0 for five points rating scale. This implies that the respondents agreed that the implementation of TSA provides Transparency in Public Financial Management in Nigeria.

Table 4.4 presents descriptive analyses evaluating accountability among treasury staff due to implementation of TSA

Table 4.4: Descriptive Statistics Evaluating Accountability due to the Implementation of TSA

Likert Items	N	Mean	Std. Dev.	Rank	Remark
Adoption of TSA makes it easier for government to hold accountable revenue generating agencies that are not leaving up to expectation.	100	4.12	0.90	1	A
Adoption of TSA makes accountants to be more circumspect (careful) in their professional practices so that they will not be found wanting	100	4.11	0.93	2	A
Adoption of TSA (TSA) has promoted accountability in the public-sector finance in Nigeria	100	4.05	0.96	3	A
Adoption of TSA makes treasury staff liable for delay in remittance of revenues to government account	100	3.93	1.00	4	A
Adoption of TSA makes finance officers more responsible in discharging their duties	100	3.84	1.10	5	A
Overall Accountability Score	100	3.99	0.67	—	A

Note: A=Agree, Std. Dev. Standard Deviation

Source: Field Survey (2019)

The result obtained from the descriptive statistics on Table 4.4 shows that the respondents agreed with the statements that 'Adoption of TSA makes it easier for government to hold accountable revenue generating agencies that are not leaving up to expectation' (Mean=4.12, Std. Deviation =0.90); 'Adoption of TSA forces accountants to be more circumspect (careful) in their professional practices so that they will not be found

wanting' (Mean=4.11, Std. Deviation 0.93); 'TSA has promoted and accountability in the public-sector finance in Nigeria (Mean=4.05, Std. Deviation 0.96); 'Adoption of TSA makes treasury staff liable for delay in remittance of revenues to government account (Mean=3.93, Std. Deviation 1.00); 'Adoption of TSA makes finance officers more responsible in discharging their duties (Mean=3.84, Std. Deviation 1.10).

In summary it can be observed that all the Likert items had high mean values above 3.0 and the overall Accountability value had weight mean score of 3.99 that was above the cut-off point of 3.0 on a 5 points Likert rating scale. This implies that the respondents also agreed that the implementation of TSA entrenched more accountability among Federal Government treasury staff in Nigeria.

Table 4.5 presents descriptive analyses evaluating problems of revenue leakage after the implementation of TSA.

Table 4.5: Descriptive Statistics Evaluating Revenue Leakage After the Implementation of TSA

Likert Items	N	Mean	Std. Dev.	Rank	Remark
TSA implementation ensures proper remittance of all revenues collected on behalf of government.	100	4.26	0.75	1	A
Adoption of TSA has helped reduced embezzlement	100	4.21	0.90	2	A
Facilitates effective monitoring of government revenues being generated by the revenue generating agencies	100	4.20	0.75	3	A
TSA promotes proper revenue generation planning	100	4.18	0.97	4	A
TSA blocks revenue leakages	100	3.71	1.27	5	A
Overall Revenue Leakage Score	100	4.04	0.70	–	A

Note: A=Agree, Std. Dev. Standard Deviation

Source: Field Survey (2019)

The result obtained from the descriptive statistics on Table 4.5 shows views of the respondents on the problems of revenue leakage after the implementation of TSA. The statement that say 'TSA implementation ensures proper remittance of all revenues collected on behalf of government' ranked as the most important role played by TSA in blocking revenue leakage (Mean=4.26, Std. Deviation 0.75), followed by the statement that say 'Adoption of TSA has helped reduced embezzlement (Mean=4.21, Std. Deviation

0.90), followed by the statement that say 'TSA Facilitates effective monitoring of government revenues being generated by the revenue generating agencies' (Mean=4.20, Std. Deviation 0.75), followed by the statement that says 'TSA promotes proper revenue generation planning' (Mean=4.18, Std. Deviation 0.97) and finally, followed by the statement that says 'TSA blocks revenue leakages (Mean=3.71, Std. Deviation 1.27).

In summary it can be observed that all the Likert statements were rated high by the respondents with mean values above 3.0. The overall revenue leakage score (Mean=4.04, Std. Deviation 0.70) was also high above the cut-off point of 3.0 on a 5 points Likert rating scale. This implies that the respondents also established that the implementation of TSA has assists the Nigerian Federal Government in addressing problems of revenue leakage in Nigeria.

Table 4.6 presents descriptive analyses evaluating reduction in level of financial fraud in MDAs after the implementation of TSA

Table 4.6: Descriptive Statistics Evaluating Level of Fraud After the Implementation of TSA

Likert Items	N	Mean	Std. Dev.	Rank	Remark
Adoption of TSA makes it easier for auditors to detect	100	4.22	0.80	1	A
Fraud is considered in the design and implementation of internal control systems of TSA	100	4.20	0.93	2	A
TSA has reduced corruption in public sector financial management	100	4.08	1.09	3	A
TSA implementation minimises embezzlementensures of government fund	100	4.05	0.91	4	A
TSA minimizes financial irregularities in Government Financial Transactions	100	3.86	1.13	5	A
Overall Fraud Score	100	4.09	0.70	—	A

Note: A=Agree, Std. Dev. = Standard Deviation

Source: Field Survey (2019)

The result obtained from the descriptive statistics on Table 4.5 reveals that the respondents considered the statement that says 'Adoption of TSA makes it easier for auditors to detect fraud' as the most import role played by TSA in reducing level of fraud in MDAs having reported the highest mean score of 4.22 and standard deviation of

0.80. Followed by the statement that says ' Fraud is considered in the design and implementation of internal control systems of TSA' (Mean=4.20, Std. Deviation 0.93). The respondent also agreed that ' TSA has reduced corruption in public sector financial management (Mean=4.08, Std. Deviation 1.09); TSA implementation minimizes embezzlement of government fund (Mean=4.05, 0.91) and finally TSA minimizes financial irregularities in Government Financial Transactions which had the lowest mean score of 3.86 and Std. Deviation of 1.13.

In summary it can be observed that all the Likert statements were rated high by the respondents with mean values above 3.0. The overall Fraud Score had mean value of 4.09 high above the cut-off point of 3.0 on a 5 points Likert rating scale. This implies that the respondents affirm that the implementation of TSA has contributed reduction in level of financial fraud in Federal Government MDAs in Nigeria.

4.2.2 Inferential Statistics

Inferential analyses were carried out in this section to test the study hypotheses. As stated in chapter three, simple linear regression model was used to predict the impact of the independent variable (TSA) on the dependent variables (Transparency in the utilization of government funds, Accountability in the utilization of government funds, Revenue leakages, and Level of Financial fraud. The analyses is done based on the sequence the hypotheses were arranged in chapter one.

4.2.2.1 Test of Hypotheses

H₁: TSA has no significant impact on transparency in the utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria

Tables 4.7 and 4.8 present the result of simple regression analyses on hypothesis one. The Model Summary of simple regression equation results on Table 4.7 displays the value $R=0.589$ and coefficient of determination (Adjusted Rsquare) value of .340. This shows that there is strong positive relationship between the implementation of TSA and transparency in the utilization of government funds in Federal MDAs in Nigeria. The result further shows that the independent variable (TSA) explains about 34% of the variance in the dependent variable (transparency in the utilization of government funds).

Table 4.7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.589	.347	.340	.417

a. Predictors: (Constant), Treasury Single Account

b. Dependent Variable: Transparency Score

Source: Field Survey Computations (2019)

Table 4.8 presents the coefficient of the regression equation showing a significant Standardized Beta coefficient value of 0.589. This implies that a one unit change or increase in the effectiveness of TSA will result to about 59 percent increase in transparency in the utilization of Federal government funds in Nigeria.

Table 4.8 Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.698	.348		4.882	.000
1 Treasury Single Account	.601	.083	.589	7.214	.000

a. Dependent Variable: Transparency Score

Source: Field Survey Computations (2019)

Therefore, hypothesis 1 which predicted that TSA has no significant impact on transparency in the utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria is rejected.

H₂: TSA has no significant impact on accountability in the utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria

Table 4.9 presents regression model summary result that quantifies the impact of TSA on accountability in the utilization of government fund. The table displays the value of R = 0.543 and Adjusted R Square value of 0.288. This indicates that there is strong positive relationship between TSA and accountability in the utilization of government funds finance officers in Federal MDAs in Nigeria. The result further shows that the TSA explains about 34% of the variation in the finance staff accountability score in the utilization of government funds.

Table 4.9 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.543 ^a	.295	.288	.56391

a. Predictors: (Constant), Treasury Single Account

b. Dependent Variable: Accountability Score

Source: Field Survey Computations (2019)

Table 4.10 displays the coefficient of the regression equation showing a significant Standardized Beta coefficient value of 0.543. This implies that a one unit change or increase in the effectiveness of TSA will result to about 54 percent increase in accountability in the utilization of Federal government funds in MDAs in Nigeria.

Table 4.10: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.002	.470		2.13	.036

Treasury Single Account	.722	.113	.543	6.40	.000
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a. Dependent Variable: Accountability Score

Source: Field Survey Computations (2019)

Therefore, hypothesis 2 which predicted that TSA has no significant impact on accountability in the utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria is rejected.

H₃: Adoption TSA has no significant effect on level revenue leakages in Ministries, Departments and Agencies of the Federal Government in Nigeria.

Summary of the result for hypothesis 3 is displayed on tables 10 and 11 respectively. The model summary result on the table displays the value of R = 0.526 and Adjusted R Square value of 0.269. This indicates that there is strong relationship between TSA and level revenue leakages in Federal MDAs in Nigeria and that the TSA, accounts for 27% of the variation in the level of revenue leakages in Federal government MDAs in Nigeria. Thus increasing TSA effectiveness will result to decrease in the level of revenue leakage. Therefore, hypothesis 3 which predicted that Adoption TSA has no significant effect on level revenue leakages in Ministries, Departments and Agencies of the Federal Government in Nigeria is rejected.

Table 4.11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.526	.276	.269	.594

a. Predictors: (Constant), Treasury Single Account

b. Dependent Variable: Level of Revenue Leakage Score

Source: Field Survey Computations (2019)

Table 4.12 displays a significant negative regression coefficient with Standardized Beta value of -0.526. This implies that a one unit change or increase in the effectiveness of TSA will result to about 53 percent decrease in level of revenue leakages in Federal government MDAs in Nigeria.

Table 4.12 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.026	.496		2.07	.041
1 Treasury Single Account	-.727	.119	-.526	6.12	.000

a. Dependent Variable: Level of Revenue Leakage Score

Source: Field Survey Computations (2019)

H₄: Adoption TSA has no significant effect on level of financial fraud in Ministries, Departments and Agencies of the Federal Government in Nigeria.

Summary of the result for hypothesis 4 is displayed on tables 4.13 and 4.14 respectively.

Table 4.13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.524	.275	.267	.59939

a. Predictors: (Constant), Treasury Single Account

b. Dependent Variable: Fraud Score

Source: Field Survey Computations (2019)

The model summary result on the Table 4.13 exhibit the value of R = 0.524 and Adjusted R Square value of 0.267. This indicates that there is strong relationship between TSA and level revenue leakages in Federal MDAs in Nigeria and that TSA, accounts for 27% of the variation in the level of revenue leakages in Federal government MDAs in Nigeria.

Thus, increasing TSA effectiveness will result to decrease in the level of financial fraud in Federal MDAs in Nigeria. Therefore, hypothesis 4 which predicted that Adoption TSA has no significant effect on level of financial fraud in Ministries, Departments and Agencies of the Federal Government in Nigeria is rejected.

Table 4.14: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.069	.500		2.138	.035
1 Treasury Single Account	-.729	.120	-.524	6.091	.000

a. Dependent Variable: Fraud Score

Source: Field Survey Computations (2019)

Table 4.14 displays a significant negative regression coefficient with Standardized Beta value of -0.524. This implies that a one unit change or increase in the effectiveness of TSA will result to about 52 percent decrease in level of level of financial fraud in Federal MDAs in Nigeria.

4.2.2.2 Discussion of Findings

The purpose of this section is to interpret the results of the study and place them in the contest of research questions, hypotheses and literature review. The descriptive results on Table 4.2 shows that majority of the respondents have positive assessment of the implementation TSA, and agreed with it has largely achieved the objectives that it was meant to accomplish.

Furthermore, inferential results on Tables 4.7 and 4.8 shows that TSA has significant impact on transparency in the utilization of government funds in MDAs. Therefore, hypothesis one which predicted that TSA has no significant impact on transparency in the

utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria is rejected. This finding is consistent with that of Aderinokun (2010) and Kanu (2016) who also found that the implementation of TSA program has significant impact on transparency in the utilization of government fund.

Furthermore, with regards to the relationships between TSA and Accountability, it was established from the descriptive analyses on Table 4.4 that majority of the respondents agreed that TSA brings about increase in accountability in the utilization of government funds. This finding was further supported by the regression result on Table 4.9, which shows that TSA has significant impact and Accountability in the utilization of government funds. Therefore hypothesis two which predicted that TSA has no significant impact on accountability in the utilization of government funds in Ministries, Departments and Agencies of the Federal Government in Nigeria is rejected. This finding corroborates that of Bashir (2016) and Ofurum et al., (2018) who also empirically established that implementation of TSA result increase in financial accountability in the utilization of government funds.

Moreover, with regards to the impact of TSA on level of revenue leakages, hypothesis 3 predicted that 'Adoption TSA has no significant effect on level of revenue leakages in Ministries, Departments and Agencies of the Federal Government in Nigeria'. However, the results of the study (see table 4.12) show TSA has a significant negative relationship with level of fraud such that increase in the effectiveness of TSA will result corresponding decrease in level of revenue leakages and vice versa. This finding is similar to that of Dorcas et al., (2017) who found that implementation of TSA policy has made a significant unique contribution to blocking government revenue leakages. It also supports the

findings of Adebisi and Okike (2016) whose study revealed that the TSA adoption is an effective tool for curbing revenue leakage in Nigeria.

Finally, hypothesis 4 predicted that 'Adoption TSA has no significant effect on level of financial fraud in Ministries, Departments and Agencies of the Federal Government in Nigeria'. However, findings of the study indicate that there is strong negative relationship between TSA and level of financial fraud in Federal MDAs in Nigeria. Thus, increasing TSA effectiveness will result to decrease in the level of financial fraud in Federal MDAs in Nigeria. The regression model shows that TSA has significant impact on level of financial fraud in MDAs as account for up to 0.27 variations in fraud.

This finding is consistent with that of Brimah and Olawoleni (2015) whose study empirically established that implementation of TSA to a large extent reduce the level of corruption in the public sector in Nigeria. However it contradicts the findings of Yakubu (2018) who concludes that the probability of TSA to tackle public sector fraud in Nigeria beyond revenue mobilization, financial reporting and fiscal oversight is almost non-existent.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The main aim of this study is conducted with a view to determining effect of TSA on Public Finance Management in Ministries Department and Agencies in Nigeria. This chapter presents the summary, conclusions and recommendations of the study.

5.2 Summary

This study began with the introductory aspect of the subject matter of TSA in chapter one which contains statement of the research problem, research questions, and the objectives of the study. It also contains significance of the study and research hypotheses as well as scope and limitation of the study. Chapter two gives a critical review of relevant literature. Chapter three contains the research methodology as well as techniques of data analysis. In chapter four, analyses were carried out to test the research hypotheses in order to determine the impact of TSA on Transparency in the utilization of government funds, Accountability in the utilization of government funds, Revenue leakages, and Level of Financial fraud in MDAs in Nigeria.

Based on the results of simple linear regressions conducted, the study found that TSA had significant effect on Transparency, Accountability, Revenue leakages, and Level of Financial fraud in Nigeria.

5.3 Conclusion

TSA is one of the Nigerian Government Economic Reform and Governance Project program that was implemented in 2015 after President Muhammadu Buhari became the Nigerian President in 2015. This study examines its effects on Public Finance Management in MDAs in Nigeria. The findings of the study reveals that implementation by the Federal Governments had significant effect on transparency, accountability, revenue leakages, and level of financial fraud in MDAs in Nigeria. Therefore It is the conclusion in this study that TSA is an effective public finance management policy and a

veritable tool for ensuring transparency, accountability, blockage of revenue leakages, and reducing level of financial fraud in MDAs in Nigeria.

5.4 Recommendations

Based on the aforementioned study findings and conclusions, the following recommendations are hereby made:

1. In order to enhance TSA effectiveness, government should invest in Computer and Information Technology facilities to meet of with the global requirement for Technological Development which is the bedrock for successful operation of TSA
2. Government should enhance the capacity of users (accountants, heads of MDAs, and other stakeholders in the implementation chain) through continuous training that will enable them meet up with the challenges of TSA operations.

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APPENDIX A: QUESTIONNAIRE

Department of Business Administration,
Faculty of Management Sciences,
Usmanu Danfodiyo University,
P.M.B. 2346, Sokoto.
September 19, 2019

Dear Respondent,

REQUEST TO PARTICIPATE IN RESEARCH

I am a Master student from Usmanu Danfodiyo University, Sokoto, currently conducting research on Effects of Treasury Single Account on Public Finance Management in Nigeria. Therefore, these questionnaires are designed to collect data for academic purpose only. No reference will be made to any individual and the information will be reported in an aggregated form and your response will be treated with strict confidentiality.

Please note that your participation is voluntary, I however urge you to participate because of its importance. Kindly assist to answer the questions below as truthful as you can. The success of this study depends on your willingness to answer the questions accurately.

Thank you in anticipation of your full cooperation.

Yours faithfully,

Adamu Garba Augie

Section A: Profile of Respondent

Instruction: Please tick[☒] the appropriate box where applicable or provide the required information in the space provided.

- 1) Age of respondent _____
- 2) Tenure (Number of years in service) _____
- 3) What is your gender?

- Male [☐]
- Female [☐]

4) What is your highest educational qualification?

Section B: Research Questions						
<p>Instruction: Listed below are series of statements that represent views individuals might have about the TSA. With respect to your candid opinion based on experience about the subject, please indicate the degree of your agreement or disagreement with each statement by ticking the appropriate box that best describes your response. There are no right or wrong responses; we are merely interested in your personal opinions. The options are: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD).</p>						
B (I): TSA		SA	A	U	D	SD
5)	Implementation of TSA provides a unified structure of government bank accounts enabling consolidation and optimum utilization of government cash resources					
6)	Allows complete and timely information on government cash resources					
7)	TSA Improves operational control during budget execution					
8)	TSA enables efficient cash management					
9)	TSA Reduces bank fees and transaction costs					
10)	TSA facilitates efficient payment mechanisms of government financial transactions					
11)	TSA Improves bank reconciliation					
12)	Promotes efficient management of domestic borrowing					
13)	TSA eliminates idle funds left in numerous accounts in commercial banks					
14)	Allows optimal investment of idle cash					
15)	TSA facilitates efficient control and monitoring of funds allocated to various government MDAs agencies					
16)	TSA ensure better coordination with the monetary policy implementation					
B (II): TSA and Transparency		SA	A	U	D	SD
17)	Adoption of TSA results to greater openness in government financial transactions to stakeholders					
18)	Adoption of TSA results to greater accessibility of information regarding government revenue from the revenue generating agencies by government auditors					
19)	Adoption of TSA results to greater accessibility of information regarding government expenditure					
20)	Adoption of TSA provides greater clarity in the Management of government fund					
21)	Adoption of TSA results to effective monitoring of monies disbursed to MDAs by the Ministry of Finance					

22)	Overall, adoption of TSA provides greater transparency in the Public Financial Management in Nigeria					
B (III): TSA and Accountability		SA	A	U	D	SD
22)	Adoption of TSA makes finance officers more responsible in discharging their duties					
23)	Adoption of TSA makes accountants to be more circumspect (careful) in their professional practices so that they will not be found wanting					
24)	Adoption of TSA makes it easier for government to hold accountable revenue generating agencies that are not leaving up to expectation.					
25)	Adoption of TSA makes treasury staff liable for delay in remittance of revenues to government account					
26)	Adoption of TSA (TSA) has promoted and accountability in the public-sector finance in Nigeria					
B (III): TSA and Revenue		SA	A	U	D	SD
26)	TSA promotes proper revenue generation planning					
28)	TSA implementation ensures proper remittance of all revenues collected on behalf of government.					
29)	TSA blocks revenue leakages,					
30)	Facilitates effective monitoring of government revenues being generated by the revenue generating agencies					
31)	Adoption of TSA has helped reduced embezzlement					
B (III): TSA and Fraud Detection		SA	A	U	D	SD
32)	Fraud is considered in the design and implementation of internal control systems of TSA					
33)	Adoption of TSA makes it easier for auditors to detect fraud.					
34)	TSA has reduced corruption in public sector financial					
35)	Adoption of TSA has helped reduced embezzlement					
36)	TSA has reduced corruption in public sector financial management					
37)	TSA minimizes financial irregularities in Government Financial Transactions					

Thank you for your participation and cooperation.

APPENDIX B: DESCRIPTIVE STATISTICS

DESCRIPTIVES VARIABLES=Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15 TSA
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Descriptive

Notes

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Descriptive Statistics

	N	Mean	Std. Deviation
Implementation of TSA provides a unified structure of government bank accounts enabling consolidation and optimum utilization of government cash resources	99	4.49	.774
TSA facilitates efficient control and monitoring of funds allocated to various government MDAs agencies	99	4.41	.756
TSA enables efficient cash management	98	4.30	.789
Allows complete and timely information on government cash resources	99	4.27	.726
TSA Improves operational control during budget execution	99	4.24	.716
TSA ensure better coordination with the monetary policy implementation	100	4.21	.902
TSA eliminates idle funds left in numerous accounts in commercial banks	100	4.21	.998
Treasury Single Account	100	4.1438	.50297
TSA facilitates efficient payment mechanisms of government financial transactions	97	4.13	.799
TSA Improves bank reconciliation	96	4.07	.997
Allows optimal investment of idle cash	94	3.93	1.070
TSA Reduces bank fees and transaction costs	99	3.79	1.154
Promotes efficient management of domestic borrowing	95	3.68	1.034
Valid N (listwise)	81		

DESCRIPTIVES VARIABLES=Q16 Q17 Q18 Q19 Q20 Transparency
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Descriptives

Notes

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Descriptive Statistics			
	N	Mean	Std. Deviation
Adoption of TSA results to greater accessibility of information regarding government revenue from the revenue generating agencies by government auditors	99	4.32	.740
Adoption of TSA provides greater clarity in the Management of government fund	100	4.22	.675
Adoption of TSA results to effective monitoring of monies disbursed to MDAs by the Ministry of Finance	98	4.19	.808
Transparency Score	100	4.1880	.51326
Overall, adoption of TSA provides greater transparency in the Public Financial Management in Nigeria	99	4.15	.800
Adoption of TSA results to greater openness in government financial transactions to stakeholders	99	4.05	.973
Valid N (listwise)	96		

DESCRIPTIVES VARIABLES=Q21 Q22 Q23 Q24 Q25 Accountability
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Descriptives

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Descriptive Statistics			
	N	Mean	Std. Deviation
Adoption of TSA makes it easier for government to hold accountable revenue generating agencies that are not leaving up to expectation.	100	4.12	.902
Adoption of TSA forces accountants to be more circumspect (careful) in their professional practices so that they will not be found wanting	99	4.11	.925
Adoption of TSA (TSA) has promoted and accountability in the public-sector finance in Nigeria	97	4.05	.961
Accountability Score	100	3.9925	.66823
Adoption of TSA makes treasury staff liable for delay in remittance of revenues to government account	100	3.93	.998
Adoption of TSA makes finance officers more responsible in discharging their duties	100	3.84	1.098
Valid N (listwise)	96		

DESCRIPTIVES VARIABLES=Q26 Q27 Q28 Q29 Q30 Revenue/STATISTICS=MEAN STDDEV /SORT=MEAN (D) .

Descriptives

Notes

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Syntax		DESCRIPTIVES VARIABLES=Q26 Q27 Q28 Q29 Q30 Revenue	
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Descriptive Statistics

	N	Mean	Std. Deviation
TSA implementation ensures proper remittance of all revenues collected on behalf of government.	98	4.26	.750
Adoption of TSA has helped reduced embezzlement	94	4.21	.902
Facilitates effective monitoring of government revenues being generated by the revenue generating agencies	98	4.20	.746
TSA promotes proper revenue generation planning	85	4.18	.966
Level of Revenue Leakage Score	100	4.0365	.69518
TSA blocks revenue leakages, Valid N (listwise)	91 71	3.71	1.267

Notes

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	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=Q31 Q32 Q33 Q34 Q35 Fraud
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Notes

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Syntax		
Resources	Processor Time Elapsed Time	00:00:00.00 00:00:00.01

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DESCRIPTIVES VARIABLES=Fraud Q31 Q32 Q33 Q34 Q35
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/SORT=MEAN (D) .
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Descriptives

Notes

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	N of Rows in Working Data File	100
Missing Value Handling	Definition of Missing Cases Used	User defined missing values are treated as missing. All non-missing data are used. DESCRIPTIVES VARIABLES=Fraud Q31 Q32 Q33 Q34 Q35 /STATISTICS=MEAN STDDEV /SORT=MEAN (D).
Syntax		
Resources	Processor Time Elapsed Time	00:00:00.02 00:00:00.01

[DataSet1] C:\Users\ASUS\Desktop\FPO abuja analyses\SPSS FPO.sav

Descriptive Statistics

	N	Mean	Std. Deviation
Adoption of TSA makes it easier for auditors to detect fraud	99	4.22	.802

Fraud is considered in the design and implementation of internal control systems of TSA	99	4.20	.926
Fraud Score	100	4.0918	.70019
TSA has reduced corruption in public sector financial management	99	4.08	1.094
TSA implementation minimizes embezzlement ensures of government fund	98	4.05	.912
TSA minimizes financial irregularities in Government Financial Transactions	99	3.86	1.134
Valid N (listwise)	96		

FREQUENCIES VARIABLES=AGE TENURE GENDER Qualification
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Frequencies

Notes		
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	N of Rows in Working Data File	100
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=AGE TENURE GENDER Qualification /ORDER=ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

[DataSet1] C:\Users\ASUS\Desktop\FPO abuja analyses\SPSS FPO.sav

Statistics				
	Age Groupings	Years in Service	Gender of Respondents	Qualification
N	Valid	100	99	100
	Missing	0	1	0

Frequency Table

		Age Groupings			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-34 Years	15	15.0	15.0	15.0
	35-44 Years	30	30.0	30.0	45.0

45 Years and Above	55	55.0	55.0	100.0
Total	100	100.0	100.0	

Years in Service

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1-10 Years	29	29.0	29.3	29.3
11-20 Years	35	35.0	35.4	64.6
21 Years and Above	35	35.0	35.4	100.0
Total	99	99.0	100.0	
Missing System	1	1.0		
Total	100	100.0		

Gender of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	90	90.0	90.0	90.0
Female	10	10.0	10.0	100.0
Total	100	100.0	100.0	

Qualification

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid SSCE	4	4.0	4.0	4.0
ND/NCE	22	22.0	22.0	26.0
HND/Bsc	59	59.0	59.0	85.0
PGD/Masters	15	15.0	15.0	100.0
Total	100	100.0	100.0	

RELIABILITY /VARIABLES=Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15/SCALE('TSA SCALE') ALL/MODEL=ALPHA.

Reliability

Notes

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	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.	
Missing Value Handling		RELIABILITY	
		/VARIABLES=Q4 Q5 Q6 Q7 Q8 Q9 Q10	
		Q11 Q12 Q13 Q14 Q15	
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[DataSet1] C:\Users\ASUS\Desktop\FPO abuja analyses\SPSS FPO.sav

Scale: TSA SCALE

Case Processing Summary

		N	%
Cases	Valid	81	81.0
	Excluded ^a	19	19.0
	Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.805	12

RELIABILITY

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Reliability

Notes

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	Weight	<none>	
	Split File	<none>	
	N of Rows in Working Data File		100
	Matrix Input		
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.	
Syntax		RELIABILITY /VARIABLES=Q16 Q17 Q18 Q19 Q20 /SCALE('Transparency SCALE') ALL /MODEL=ALPHA.	
Resources	Processor Time		00:00:00.02
	Elapsed Time		00:00:00.01

[DataSet1] C:\Users\ASUS\Desktop\FPO abuja analyses\SPSS FPO.sav

Scale: Transparency SCALE

Case Processing Summary

		N	%
Cases	Valid	96	96.0
	Excluded ^a	4	4.0
	Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.748	5

RELIABILITY /VARIABLES=Q21 Q22 Q23 Q24 Q25/SCALE('Accountability SCALE') ALL/MODEL=ALPHA.

Reliability

Notes		
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	Matrix Input		
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.	
Syntax		RELIABILITY /VARIABLES=Q21 Q22 Q23 Q24 Q25 /SCALE('Accountability SCALE') ALL /MODEL=ALPHA.	
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	Elapsed Time		00:00:00.04

[DataSet1] C:\Users\ASUS\Desktop\FPO abuja analyses\SPSS FPO.sav

Scale: Accountability SCALE

Case Processing Summary			
		N	%
Cases	Valid	96	96.0
	Excluded ^a	4	4.0
	Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.711	5

RELIABILITY /VARIABLES=Q26 Q27 Q28 Q29 Q30/SCALE('Revenue Leakage SCALE') ALL /MODEL=ALPHA.

Reliability

Notes		
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	Weight	<none>	
	Split File	<none>	
	N of Rows in Working Data File		100
	Matrix Input		
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.	
Syntax		RELIABILITY /VARIABLES=Q26 Q27 Q28 Q29 Q30 /SCALE('Revenue Leakage SCALE') ALL /MODEL=ALPHA.	
Resources	Processor Time		00:00:00.02
	Elapsed Time		00:00:00.01

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Scale: Revenue Leakage SCALE

Case Processing Summary			
		N	%
Cases	Valid	71	71.0
	Excluded ^a	29	29.0
	Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.793	5

RELIABILITY/VARIABLES=Q31 Q32 Q33 Q34 Q35 /SCALE('Financial Fraud SCALE') ALL /MODEL=ALPHA.

Reliability

Notes		
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	Weight	<none>	
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	N of Rows in Working Data File		100
	Matrix Input		
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.	
Syntax		RELIABILITY /VARIABLES=Q31 Q32 Q33 Q34 Q35 /SCALE('Financial Fraud SCALE') ALL /MODEL=ALPHA.	
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	Elapsed Time		00:00:00.05

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Scale: Financial Fraud SCALE

Case Processing Summary			
		N	%
Cases	Valid	96	96.0
	Excluded ^a	4	4.0
	Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.823	5