EFFECT OF PUBLIC FINANCIAL MANAGEMENT REFORMS ON PUBLIC ACCOUNTABILITY IN SELECTED MINISTRIES IN NIGERIA

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BEING A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, NASARAWA STATE UNIVERSITY KEFFI, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS OF SCIENCE DEGREE (M.SC) IN PUBLIC SECTOR ACCOUNTING.

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DECLARATION

I hereby declare that this dissertation has been written by me and it is a report of my research work. It has not been presented in any previous state diploma or degree. All quotations are indicated and sources of information specifically acknowledged by means of references.

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CERTIFICATION

This dissertation (The Effect of Public Financial Management Reforms on Public Accountability in Selected Ministries in Nigeria) meets the regulations governing the award of Masters of Science degree (M.Sc.) in public sector accounting, of the school of Postgraduate Studies, Nasarawa State University Keffi, and is approved for its contribution to knowledge.

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DEDICATION

This dissertation is dedicated to God Almighty, who has given me the strength and ability to carry out this research work to the end.

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ABSTRACT

This study investigates the effect of public financial management reforms on public accountability in Nigeria. Five federal ministries located in Abuja were selected as samples for the study. The study used both primary and secondary data to achieve its objectives. The Public Accountability (PA) is the dependent variable, while Government Integrated Financial Management Information System (GFMIS), Integrated Personnel and Payroll Information system (IPPIS) and Treasury Single Account (TSA) as PFM reforms were the independent variables. The study used a survey of 126 respondents of finance and accounts department of the selected ministries and the rate of responses was 94%. The data was analysed using multiple regression analysis methods. The results revealed that all of the independent variables (government integrated financial management information system, integrated personnel and payroll information system and treasury single account), have positive and significant effect on public accountability. Based on the findings of the study, it is recommended that GIFMIS should be sustained in all Ministries, Departments and Agencies (MDAs) to enhance openness, transparent and accountability in the management of public financial resources. IPPIS should be implemented in all government ministries and parastatals for easy management of personnel and payroll system and to eradicate ghost workers syndrome. TSA policy should be sustained in all revenue generating agencies and ministries to block revenue leakages and to enhance timely reconciliation of government cash position.

CHAPTER ONE

INTRODUCTION

1.1   Background to the Study

In the public sector, reforms are made to improve performance, ensure efficient utilization of resources both human and capital and to ensure transparency and accountability. Today, greater attention is now being paid to the development of government accounting and Public Financial Management (PFM). This is because in nearly all nations, government constitutes the greatest spender in the economy. That is why the government of Nigeria had taken some public financial management reforms initiative to address some of the problems created by government of pre-democracy era.

However, despite various public financial management reforms put in place since year 2000, there are reports of wrong practices in the public service. There are stories of ghost workers on the payroll of ministries, extra-ministerial departments and parastatals, fraudulent practices, misappropriations of fund, burning of offices and important documents and large scale corruption are all over the country. Huge amount of money is lost through one financial malpractice or the other in Nigeria, which drains the nation's meagre resources through fraudulent means (Bello, 2011; Okwoli, 2012).

The fraudulent practices are rampant in the public sector that almost all part of the public service, is involved directly or indirectly in these nasty acts. Some of the problems associated with public financial management include; fiscal indiscipline, over bloated public service, endemic corruption, embezzlement of public fund, diversion of public fund, lack of transparency and accountability to mention but a few (Appah & Appiah, 2010; Bello, 2011; Dikwa, 2014).

Among the Public Financial Management (PFM) reforms implemented by federal government are Government Integrated Financial Management Information System

(GIFMIS), Integrated Personnel and Payroll Information System (IPPIS) and Treasury Single Account (TSA). These three PFM reforms are the focus of this study.

GIFMIS is computerisation of public financial management system from budgeting process to financial reporting so as to enhance accountability. IPPIS is a computer application designed to manage centrally public personnel records and to enhance prompt process of monthly emoluments of civil servants. TSA is a central account with Central Bank of Nigeria designed to accommodate and manage all revenues accruing to federal government. These reforms are designed to improve public financial management (Dorotinsky, 2003; Hendriks, 2102; OAGF 2015).

The success or otherwise of any government program depends on its implementation. The ministries are the tools of government in designing and implementing government policies. Hence, there is need to conduct study about the effect of PFM reforms in the ministries. The selected ministries for this study are Ministry of Finance, Ministry of Budget and National Planning which are directly involved in the adoption, design and implementation of these PFM reforms. Other ministry are Ministry of Education, Ministry of Foreign Affairs and Ministry of Information and Culture. They are all involve in the implementation of PFM reforms initiative of government.

The management of foreign reserves, public debts, finances, taxation, borrowing, foreign exchange and liquidity level in the economy for the purpose of achieving the set objectives is known as public sector financial management. It could be described as a way by which public financial resources are managed in a transparent and accountable manner (Ekpung, 2001; Pandey, 2009 & Coker, 2010).

The people have the right to know the actions government has taken in their name. When government acts in a wrong way, people should have the ways of enforcing corrective actions. Public accountability is giving accounts of policies, programs,

resources and activities that are entrusted to the public officer. This is crucial in any government system as it helps government to understand why programs may fail and how to make such programmes perform better (Adegite, 2010; Achua, 2012).

The emphasis on accountability by people is one area of promoting transparency and accountability in government. It is about being answerable to someone or some community for something that has been done. However, accountability in Nigeria is a big challenge because of large scale corruption that is prevalent at all levels of government. This study therefore is an attempt to examine the effect of public financial management reforms on public accountability in Nigeria.

1.2   Statement of the Problem

Public financial management is a vital part of the development procedure. At the beginning of democracy in 1999, Nigeria was known for poor fiscal management. Lack of reliable accounting source documents to prepare annual financial statements. Inconsistency in the treatment of financial transactions from MDA to MDA and from time to time. Lack of dependable and complete data for the public service and growing wage-bill with increased unemployment. There are cases of sharp practices and fraud in the management of public financial resources (Appah& Appiah, 2010; Bello, 2011; Okwoli, 2012; Dikwa, 2014).

Reform of public financial management process began in 2000 by the federal government putting in place procedures to improve the quality of spending and accountability. Among the financial reform initiatives of government at the centre are GIFMIS, IPPIS and TSA which were put in place to ensure accountability in the government financial management (Nwosu, 2010; Charles, 2015; Fatile & Adejuwon, 2017).

However, years after the introduction and implementation of these reforms and many others, the issue of corruptions and embezzlement of public fund still persist. Poor implementation of budget and misappropriation of public fund is of increase. Late preparation of government annual financial statements still continue. ((Behn, 2001; Akpakpan, 2010; Okoh, 2010).

Openness, transparency and accountability in the management of nation resources remain a big challenge. There are still cases of variation in staff's monthly emoluments and negative balances on GIFMIS platform. There are still reports of ghost workers on the payroll of most MDAs, destruction of important documents and frauds are all over the country (Bello, 2011; Okwoli, 2012).

Many studies on public financial management reforms like GIFMIS, IPPIS and TSA have been carried out. Nwosu, 2010; Hendriks, 2012; Ibrahim and Dauda, 2014; Hawo, 2015 conducted studies on GIFMIS.Haruna, Joseph and Samson, 2015; Moses and Solomon, 2016; Agboola, 2018 carried out studies on IPPIS. Bashir, 2016; Kanu, 2016; Joseph and Okike, 2016; Udo and Esara, 2016 Nazareen, 2017 and Fatile and Adejuwon, 2017 carried out research on TSA.

These studies mentioned above were conducted in South Africa, Kenya and some states in Nigeria. They all concentrated in one of the reforms as their variable. To the limit of researcher's review, no related study has been carried out on this topic, in the ministries in Abuja using more than one reforms as the variables, so it calls for further study. This brings out the gap in knowledge this particular study intends to fill.

1.3   Research Questions

The research questions of the study are stated below

(i). How effective is the Government Integrated Financial Management Information System in achieving public accountability in Nigeria?

(ii). How relevant is the Integrated Personnel and Payroll Information System in achieving public accountability in Nigeria?

(iii). To what extent has the Treasury Single Account influences public accountability in Nigeria?

1.4   Objectives of the Study

The broad objective of this study is to evaluate the effect of public financial management reforms on public accountability in Nigeria.

Other specific objectives are to:

(i). investigate the effect of Government Integrated Financial Management Information System on public accountability in Nigeria.

(ii). evaluate the effect of the Integrated Personnel and Payroll Information System in achieving public accountability in Nigeria.

(iii). examine the effect of the Treasury Single Account to public accountability in Nigeria.

1.5   Statement of Hypotheses

The following hypotheses are formulated for testing for the purpose of achieving the set objectives,

Ho1: Government Integrated Financial Management Information System has no significant effect on public accountability in Nigeria.

Ho2: There is no significant effect of Integrated Personnel and Payroll Information System on public accountability in Nigeria.

Ho3: Treasury Single Account has no significant effect on public accountability in Nigeria.

1.6   Significance of the Study

This research work will be very useful to federal government as it will reveal the importance of GIFMIS, IPPIS and TSA in addressing the problem of accountability in the management of public resources. The findings and recommendations of this study will be useful to government and development partners in the area of solving corruption problem in Nigerian public sector, creating strong economy through improved and effective public accountability. It will serve as literature material to students who may want to know or carryout research on related topic.

Also, this study will be of great help to public financial managers in the arrear of public financial management policies formulation. The study will benefit the law makers in deliberating on the impact of financial reforms on public accountability in Nigeria public sectors and studying the current trends of financial management in the public sector in Nigeria.

1.7   Scope of the Study

This study covers the effect of public financial management reforms on public accountability in Nigeria from year 2000 to 2017. This is to show whether there have been any significant contributions of GIFMIS, IPPIS and TSA in reducing corruption and enhancing accountability in Nigerian public sector.

1.8   Definition of Terms

Public Financial Management: is a way by which public financial resources are managed in an openness and transparent way for the purpose of economic, efficient and effective utilization of public resources to achieve set objectives.

Public Accountability: is a duty of rendering account by public office holders to the people who have put their trust, faith, and resources in them.

Financial Management Reform: are the transformations that had happen in the area of public financial management system over time so as to bring openness, accountability and transparency in the management of public funds and to align with global best practice.

GIFMIS: Government Integrated Financial Management Information System.

IPPIS: Integrated Personnel and Payroll Information System.

TSA: Treasury Single Account.

PFM: Public Financial Management.

MDA: Ministry Department and Agencies.

PA: Public Accountability.

CHAPTER TWO

LITERATURE REVIEW

2.1   Conceptual Framework

2.1.1 Concept of Public Financial Management (PFM)

The managerial activities of planning and controlling of the organisation's financial resources is called financial management (Pandey 2009). Ola and Offiong (2008) on their part, see public financial management as a system of controlling public finance. The public are the people and finance means money or fund. Therefore, public financial management is the management of public funds.

Ekpung (2001) argues that public financial management is the management of inflow and outflow of public financial resources. Inflow simply means revenue that is accruing to the government while outflow means expenditure of government. NOUN (2013) public financial management can be summarised as the procurement and disposal of financial resources by the government and it agencies through annual budget and through developmental plans for a specific period.

Kanayo and Harrison (2013) assert that a well-functioning public financial management system would guarantee that the financial resources of government from all sources would be used in a transparent, effective and productive manner. Potter and Diamond (1999) argue that public financial management is the techniques put in place by law for the management of public fund. It involves budget formulation process, execution, reporting and analysis. Prakash and Cabezon (2008) opine that public accountability is one of the important aspect of public financial management because it provides for the measurement of impact of budget and economic policy.

Anyafo (2011) argues that financial management is part of total management which is primarily concerned with the financial affairs of an entity and the change of actions, both past and planned, into meaningful and important information for use in the management process. The accounting, reporting, analysis and interpretation of the financial significance of past actions and future plans, together with budgeting are all part of financial management. Olowe (2012) concludes by defining public financial management as planning and controlling of government funds to achieve the set goals.

From the reviews presented above, it is glaring that public financial management is a way by which public financial resources are managed in an openness and transparent way for the purpose of economic, efficient and effective utilization of public resources to achieve set objectives. It involves planning, provision and effective utilization of public funds which ensures that financial resources are obtained economically and used efficiently and effectively in the accomplishment of desired goals.

2.1.2 Public Financial Management Reforms

According to Oxford Advanced Learner's Dictionary 6th edition page 983, "reform is a change that is made to a social system, an organization e.t.c in order to improve or correct it". It means to form something again, especially into a different group or pattern. It is a way through which a falling and unstable finance and economy are transformed to bring economic and financial growth.

Caiden (1968) argues that "reform is centred on the idea that man should seek to speed, by artificial means, developments in the world order instead of waiting for changes to take place naturally." Institute of economic affairs (2002) opines that financial management reforms means improvements or amendments on the management of expenditures, revenues and liquidity level in the economy to achieve the set objectives.

Block, Hirt, and Danielson, (1978) opine that financial management reforms are the improvements and changes overtime in the area of finance. To them, financial management reforms are crucial because they enhance prudent allocation of financial capital for the acquisition of real capital. It also enables restructuring of financially distressed entities. The reforms enhance ideal management of inventory, cash and development of suitable dividends policies.

Pretorius and Pretorius (2008) state that public financial management is crucial to reduce poverty, improved service delivery and to achievement of the millennium development goals. Sound public financial management adds to long-term economic achievements and improve transparency and accountability.

Dikwa (2014) identifies some of the objectives of PFM reforms in Nigeria which include; to maintain a sustainable fiscal position, to ensure efficient services delivery, to promote transparency and accountability, to ensure responsive governance and to ensure effective allocation of available resources.

Some of challenges that led to the implementation of public financial management (PFM) reforms which include but not limited to the following: no reliable accounting source documents to prepare annual financial statements; inconsistency in the treatment of financial transactions from MDA to MDA and from time to time; non-automation in accounting processes; lack of comprehensive and reliable database for the public service; growing wage-bill with increased unemployment; lack of synchronization of civil servants' records with pension administration; delays in remittances of revenue into consolidated revenue fund; idle cash balances held in MDA accounts while borrowing to finance budget; multiple commercial bank accounts by MDAs; unreliable data about the previous planning activities; budget classification different from

accounting and lacks transparency and excel templates being used to prepare huge budget (Dikwa, 2014).

Therefore, Public Finance Management reforms can be described as those transformations that had happen in the area of public financial management system over time so as to bring openness, accountability and transparency in the management of public funds and to align with global best practice. In this study, these reforms include GIFMIS, IPPIS, and TSA.

2.1.3 Concept of Public Accountability

The word "accountability" has its root in the Latin word, 'Computare', com means 'together' and putare means 'count or consider' (Behn 2001). According to March and Olsen (1995) as cited by Behn (2001), Accountability as a concept has extended in several directions during the last decades. To them, accountability implies ways the citizens can control their government and the mechanism for doing this.

Another author, Amitai (1995) offers a three pronged definition to the concept of accountability as great responsibility to elected supervisors, great openness to community groups usually   meaning minority and commitment to higher standards of morality.

Canada (1979) and Obadan (1998) posit that accountability means "making public officials accountable for their actions. That those who use public resources and power in the society should be accountable for the use of that resources and power". From the above definition, it is obvious that Canada and Obadan view accountability from public sector perspective only.

Akpakpan (2010) sees accountability as the behaviour of the people or agency in performing their delegated responsibilities. It is about being answerable to someone or

some community for something that has been done, and it involves accepting responsibility for and the obligation to explain, justify and take criticism for action or inaction.

Aaehren and Lehrmanm (1974) define accountability as a process of justifying cost by presenting the positive effect derived from expenditure. Borren (2016) explains the concept of accountability as a relationship between a principal and an actor where the later has duty to explain and to justify his action. The principal can ask questions and pass judgments, and the actor may face penalties. Therefore, accountability is a social relationship of account giving or account rendering by some actor (i.e. government) to some forum (people).

On the other hand, Olowu (2002) opines that accountability has crucial elements of responsibility, reporting mechanism, system of evaluation, rewards and sanctions. It simply means giving an account of one's actions (Emmanuel 2012). Preston (1992) says accountability is a way of making public officials accountable for their conduct. It is a way by which someone is required to render an account of his actions and inaction (Lawton and Rose 1994).

According to Rouse (1997), accountability involves explanation of successes and achievements to someone. It entails showing one's conducts and actions or how one has discharged his duties. Laxmikanth (2006) opines that accountability is the obligation of the administrators to justify their performance by giving a satisfactory account of the way in which they have used powers given them.

Nkoma (2004) argues that public accountability is an obligation that those in the position of public office should account for the use of that office to public. Accountability is all about responsibility, whoever is responsible must be equally accountable. Public accountability is the firm acknowledgement of this fact that all

public office holders are in positions of trust for the citizens. It suggests that those who are in government service must be accountable to those they are serving (Akpan, 1982).

According to Bovens (2007), the concept of accountability means being responsible for your activities. Public accountability is a way of making public office holders liable to the citizens for their conducts. He further noted that accountability is synonymous with responsibility, answerability and rendering of account.

Adegite (2010) defines accountability as the duty to explain that assignment has been done in line with approved standards and the officer report on performance is fair and accurate. It implies discharging one's duties in a transparent manner. Johnson (2004) collaborates the definition by asserting that public accountability is a vital element of our political system because it means policy makers should be obliged explain their actions to the electorate.

According to Olu-Adeyemi and Obamuyi (2010), public accountability means that public office holders must report to the public on the generation and use of fund in their custody. It is important that information is opened to citizens that will help them in decisions making, thereby improving public involvement in government.

Adegite (2010) also notes that accountability has three pillars - integrity, transparency and accountability. Accountability can be grouped into four. Financial accountability, which is the obligation to report on the proposed and actual use of the public funds in one custody. Administrative accountability, which include a strong internal control system that ensures proper checks and balances. Political accountability, which starts with free and fair elections. Through transparent elections, the elected public officers are made answerable for their actions and inaction while in office. Social accountability, which involves citizens and groups demanding greater accountability for public actions and outcomes.

Augustine (2012) argues that accountability is improved by the method of rendering account. The weakest method of accountability is the discharge of responsibility in oral or verbal form. Accountability becomes stronger when account is rendered in writing form with supporting documents.

Coker (2010) concludes by grouping accountability into two approaches according to the language of account. Process based accountability which involves compliance with set standard and formally defined outcomes and Performance based accountability which is the measurement of performance against the objectives.

In view of the forgoing literature reviewed one can deduced that, public accountability is a duty of rendering account by public office holders to the people who have put their trust, faith, and resources in them. It is a way by which the actions of public office holders are subject to oversight so as to ensure that government programmes meet set objectives. For government programmes and initiatives to meet the set goals and respond to the wants of the citizen, there is need for proper accountability from those who handle such programmes.

2.1.4 Government Integrated Financial Management Information System (GIFMIS)

In the word of Dorotinsky& Cho (2003) and Kasumba (2009), E-government has brought about the implementation of GIFMIS. The essence is to enhance fiscal discipline and accountability, strategic allocation and utilisation of resources and probity in the use of public resources.

Chêne (2009) states that developing countries are discovering systems and ways to advance public financial management. One of these ways is the introduction of the Government Integrated Financial Management Information System (GIFMIS) aimed at

promoting accountability, transparency, comprehensive financial reporting and security of data management.

OAGF (2015) sees GIFMIS as one of the components of the economic reform and governance project (ERGP) that enhance public resource management through modernising fiscal processes using modern information technology. GoK (2011) and Casals & Associates (2004) define GIFMIS as a computerization of public financial management (PFM) processes. It cut across budget preparation and execution to accounting and reporting. It refers to the automating of government financial operations.

Dorotinsky (2003) and Rozner (2008) see GIFMIS as a system that summarises financial information and tracks financial events. It aids timely management reporting and the preparation of financial statements. GIFMIS has enhance public financial management in many areas, but generally seeks to enhance credibility and confidence of the budget process through comprehensive and transparent information (Chêne, 2009).

OAGF (2015) argues that GIFMIS through the use of automated and integrated information systems, aimed at improving the acquisition, allocation, utilisation and conservation of public financial resources. It aids management of public financial resources to enhance accountability, transparency, economic growth, poverty reduction efforts and cost effective public service delivery.

The office further states that the main goal of GIFMIS is to adopt a computerised public financial management information system that is user friendly and effective. Other objectives are:

(i). To increase federal government ability to control and monitor receipts and expenditure of MDAs centrally.

(ii). To increase access to information on financial and operational performance.

(iii). To prevent and detect potential and actual fraud through strong internal controls.

(iv). To increase access to information on economic performance and government cash position.

(v). To increase the ability of government to demonstrate transparency and accountability to the cooperating partners and public (OAGF, 2015).

According to Ministry of Finance (2015), the essence of GIFMIS is to help the federal government to improve management and performance of public finance. GIFMIS allows quick access to dependable financial information and helps in firming government's financial controls and increase transparency levels of budgeting process (Peterson, S. C., Kinyeki, J. M, & Kipsang, S. W. 2008).

Kiilu and Ngugi (2014) contend that GIFMIS has led to efficient management of public financial resources in Kenya national treasury. GIFMIS has improved record keeping and reporting, automation and integration of government financial processes, communication and customization of government financial processes. It has also increases transparency and effectiveness of public financial management system and offers accurate financial information (Nzuve, 2012).

Hove and Wynne (2010) argue that GIFMIS helps government in guaranteeing accountability, effectiveness and efficiency in the use of public resources. Hendriks (2012) opines that GIFMIS will increase public sector financial management by providing real-time financial information to enhance decision-making.

Hendriks (2012) argues that the main advantage of GIFMIS is its impact on corruption, as its increases the risk of detection. GIFMIS has enable prompt and efficient access to reliable financial data and help strengthen government financial controls, improving the provision of government services, raising the budget process to higher levels of

transparency and accountability, and expediting government operations (Transparency International, 2013).

According to Transparency International (2013), many performance reports like sources and uses of funds, cash flow forecasts, statement of financial position, budget variances, cost reports e.t.c can be produced from GIFMIS. Reports can also be tailored to meet the reporting requirements set by external agencies and international institutions like the IMF.

Therefore, GIFMIS is an integrated information technology solution that improves efficiency, economy and effectiveness in the use of public resources through real-time online accounting, monitoring and control of public funds. It is a uniform reporting and monitoring system, which merges all the information needs of a government into one database. Federal government of Nigeria began full implementation of GIFMIS in April, 2012.

2.1.5 Integrated Personnel and Payroll Information System (IPPIS)

Tan, Andrew and Malcolm (2003) argue that the most vital computer application in organization is payroll management because it calculates each employees monthly gross salary, bonuses, tasks, national insurance and pension contributions.

Before the introduction of IPPIS in Nigeria, government was operating manual file-based personnel system where it was very difficult to get a reliable data about the public workforce. There were high rate of ghost workers and sharp practises in personnel and payroll management. The World Bank and federal government estimated that over ₦1 billion was being lost annually to ghost workers (Public Service Institute of Nigeria, 2015).

According to Kenya DPM reports (2014) as cited by Charsel (2015), the Integrated Payroll and Personnel Database (IPPD) was introduced to solve the problems of manual payroll administration. It is a computerized system that was introduced in 2004 to replace manual and semi-manual human resource and payroll processes. Before Implementation of IPPD, salary processes were burdensome, causing salary delays, inaccuracy in determining staffing levels and leading to poor accountability of personnel cost.

The government of Rwanda since 2008 established and applied an IPPIS. The IPPIS substituted the legacy payroll system plus extra-functions to help in the management of human resource. Comprehensive user guides and advanced technical documentation were written and modelled using internationally accepted standards (Charsel, 2015).

The IPPIS was conceived in October 2006 by federal government, to provide a robust information about public service, to eradicate fraud in record and payroll management, to assist storage and retrieval of personnel records and to enhance accurate and timely salary payment. In April 2007, the IPPIS was first piloted in six ministries. These ministries are: Ministry of Education, Ministry of Foreign Affairs, Ministry of Finance, Works, Information and Communications and National Planning Commission (Public Service Institute of Nigeria, 2015).

According to Office of Accountant General of the Federation (2014), IPPIS is among the transformation program of the government aiming at forming a central database system for Nigerian public sector. The integrated payroll and personnel information system (IPPIS) is an information communications technology (ICT) project initiated by government to improve the effectiveness and efficiency of payroll administration for its ministries, departments and agencies. IPPIS is an oracle HCM solution that enables the end to end management of all staff personnel and payroll management system. The

system performs all gross-to-net calculations, including computation of the tax deductions, union dues, PFA etc (OAGF, 2015).

World Bank (2002) opines that IPPIS involves managing network of institutions and organizations compensation system through the modernization of record and information systems. Integrated personnel and payroll information system (IPPIS) is a public financial management reform aimed to enhance effectiveness and efficiency in the area of monthly payroll administration and personnel records storage of the federal public servants (Dikwa, 2014).

According to OAGF (2015), IPPIS was introduced to achieve the following objectives: facilitating human resources planning; providing platform for accurate budgeting of annual personnel expenditure; monitoring of staff emoluments payment against government's annual estimate to reduce wastage; eliminating payroll and personnel fraud like payment of monthly salary to a non-existing employee or multiple payment of emoluments to single employee; facilitating easy keeping and retrieval of personnel records; ensuring integrity in database management and enhance assurance in the process of calculating staff emolument cost. Those objectives can be summarized as to ensure sanity and accountability in the payment and management of public workforce.

Idris, Adaja and Audu (2015) argue that both IPPIS and GIFMIS have been able to improve transparency in the management of government funds. They have reduced fraud in the public service, widened employment opportunities and minimised personnel costs. They have increased the level of efficiency in transacting government business.

Hall and Torington (1998) and Uzochukwu (2015) argue that IPPIS has enhanced management reporting and information; increase the confidence in payroll costs and budgeting; upgrading public confidence; job security and creating conducive work environment. The quality of public payroll system has greatly improved, ghost-worker

syndrome and corruption in public payroll system has reduced. (Public Service institute of Nigeria, 2015).

According to OAGF (2015), IPPIS is committed to efficient and effective service delivery. It currently responsible for payment of salary to 263,385 federal government employees in 388 MDAs. It has saved the FGN over N208 billion as at 31 December 2014 due to elimination of ghost workers and improved budget management reporting. As at May 2016, IPPIS had captured 447 MDAs with about 295,271 staff on the platform (Mrs Kemi Adeosun- Minister of Finance, 2016).

Therefore, IPPIS is a computer application that is used to manage the staff personnel and payroll information of public service. It was introduced to correct all the problems of manual payroll system. The system is capable of providing a comprehensive and reliable data of public service. It has been a best instrument in the hand of government in reducing the cost of governance in the area of workforce management as there is no place for ghost workers on the platform.

2.1.6 Treasury Single Account (TSA)

Section 80 (1) of the Nigeria Constitution states that all revenues, or other monies raised or received by the federation (not being revenues or other monies payable under this said constitution or any Act of the national assembly into any other public fund of the federation established for a specific purpose) shall be paid into and from one consolidated revenue fund of the federation. Past government had continually using many bank accounts for the collection of government revenue, thereby pay no attention to what constitution says regarding the remittance of all government revenue (Udoma, 2015).

However, the Nigeria government in 2012, started a pilot scheme of a treasury single account in 217 MDAs. The result indicated that, government saved about N500 billion in frivolous spending. This report inspired government to fully implement TSA and direct all deposit money banks to install the technology platform which will help to accommodate TSA scheme (Ekubiat & Ime, 2016).

CBN (2015) discloses that in full compliance with the provisions of the 1999 constitution, President Muhammadu Buhari directed that all revenues accruing to government be paid into a TSA. This directive was issued in September 2015 to mark the start of complete implementation of TSA policy in Nigeria.

Pattanayak and Fainboim (2011) define TSA as a combined structure of government bank accounts to enable merging and optimum use of government cash resources. It is a system of accounts where government receipts, revenue and income are remitted into a single account with the central bank (Yusuf, 2015). This policy was introduced to enhance accountability among all MDAs and also to minimise the number of bank accounts operated by organs of government (Sailendra, 2010).

Ekubiat and Ime (2016) argue that TSA is a set of linked bank accounts or bank account where government performs all its receipts and payments and also determines its balance at the end of each day. It is an essential instrument for consolidating and managing public's cash resources, thereby minimizing cost of borrowing. TSA is a tool that increases the revenue inflow of government. It also allows government to meet its financial responsibilities to the citizens.

According to Taiwo (2015), TSA is a merging of various governments' bank accounts to allow consolidated view of government cash balances. For TSA to work efficiently, there is need for daily clearing and merging of cash balance into the central account.

Enwegbara (2015) opines that TSA is an instrument to fight corruption and ensure sufficient cash inflow for economy development. It would block leakages that have affected the growth of the economy. Thus, government would have enough funds to execute capital projects. The adoption and full implementation of TSA by government, especially in a dwindling economy cannot be over-emphasized. This is because a TSA is aimed at ensuring accountability, improved transparency and reduced stealing of public funds (Ekubiat&Ime, 2016).

According to Adeolu (2016), the implementation of TSA has helped to improve proper cash management by eradicating idle cash kept with deposit money banks. TSA is an essential tool for combining and managing governments' cash resources, thus minimizing cost of borrowing (Pattanayak & Fainboim, 2011).

Adeolu (2016) argues that the adoption of TSA will help to ensure proper cash management, eliminating idle funds with commercial banks and enhance reconciliation of revenue collection and payment. TSA is a payment system where government revenues are paid into a single account maintained by CBN. The main objective is to enhance transparent in the management of public funds (CBN, 2015).

Since the full commencement of the TSA in September 2015, over 20,000 accounts with deposit money banks belonging to ministries, departments and agencies have been closed with a total sum of N5.24tn moved into the TSA (Accountant General of the Federation, Ali Ahmed Idris, 2017).

According to IMF (2010), the main objective of a TSA is to enhanced effective and aggregate control over government cash balances. Other advantages of TSA include:

(i). allowing timely information on government revenue, this information will be available in real time.

(ii). TSA improves budget control as it allows the ministry of finance to has total control over budget allocations.

CBN (2015) argues that TSA has three important features: First, the combined government bank account which enable the ministry of finance to have total control over government fund flows. Second, government agencies are not allowed to open bank accounts outside TSA arrangement. Third, government funds are consolidated and cut across all resources both budgetary and extra-budgetary.

Ekubiat and Ime (2016) identify three acts put in place by government to strengthen TSA in Nigeria which are:

(i) Fiscal Responsibility Acts (2007): which was designed to improve fiscal prudence. It places responsibilities on government at all levels to commit to fiscal transparent, budget practices and economic objectives that can be appraised overtime (Alok, 2007).

(ii) CBN 2015 TSA compliance guidelines for banks in Nigeria.

(iii) Section 80 of 1999 Constitution of federal republic of Nigeria.

Pattanayak and Fainboim (2010) identify some of the advantages of a government operating a TSA which include: allows accurate data on government cash position, enhances operational control over budget execution, improves efficient cash management, minimises bank charges and lower liquidity reserve needs.

In view of the above literature reviewed, TSA can be defined as a policy or platform through which government unifies all its accounts by ensuring that all monies belonging to the federal government are kept with the central bank of Nigeria for effective and transparent cash management and proper accountability. It allows government to have a consolidated view of its cash balance at any point in time. It has increase the level of accountability in the area of public cash management in Nigeria.

2.2   Review of Empirical Studies

2.2.1 Government Integrated Financial Management Information System and Public Accountability

Hendriks (2012) carries out research to identify the risks and challenges that are associated with IFMIS implementation in South Africa. The researcher used literature review method where theories are discovered and used to solve a research problem. The study reveals some challenges involved in the implementation of IFMIS. The sheer size and complexity of an IFMIS poses significant challenges and a number of risks to the implementation process. There are, however, critical success factors or best practices that can be used for the project to succeed. It is recommended that these best practices be used by the South African Public Service. However, this research was conducted in South Africa and regression analysis was not used as a tool of data analysis.

Ibrahim and Dauda (2014) try to look at the contribution of globalization in making all members of the world community shift from the hitherto manual financial management system, by accepting and embracing the new government integrated financial management information system. The paper adopts both primary and secondary methodology to see how effective GIFMIS is in Nigeria's financial management. The paper discovers that, GIFMIS is a befitting financial management system not only for Nigeria, but for the whole world in the 21st century, for it ensures accountability. But the study focused only on GIFMIS and chi-square was used as a tool of data analysis.

Odoyo, Adero and Chumba (2014) investigate the effect of IFMIS on cash management practices in the public service. The study was based on the Contingency theory and descriptive survey research design was employed. The study focused on70 staff and top management at the Eldoret West District treasury, Kenya. Questionnaires and interview schedules were used to collect primary data. Data was analyzed using descriptive

statistics, regression and correlation. Study findings showed that reliability of IFMIS, Flexibility of IFMIS positively affect cash management. The findings also showed that a reliable system is basically one that is accurate, timely, complete and consistent in collection of information and the infrastructure which supports the IFMIS is supposed to be secure from destruction, corruption, unauthorized access and breach of confidentiality so that there is efficient cash management. Flexibility of local IFMIS design can decrease chances of failure in cash management. Findings also revealed that the implementation of IFMIS has not been a success as a result of the top down management exhibited in most of the public services. There is need for public service to ensure that the information generated by IFMIS is consistent without delays and undue changes that demand further manual help. Public service should tailor information concerning IFMIS in such a way that it cannot be tampered with by others. Also, there should be sufficient IFMIS controls to curb tampering. Public service should also ensure that IFMIS easily adapts to the changes in cash management without complete overhaul of the system. But the study was done in Kenya and the focus was on IFMIS only.

John and Eva (2014) examine the factors influencing implementation of IFMIS in Kenya government ministries. The study was carried out in Ministry of Finance, Meru County. It covered all the management employees' cadres. The study adopted descriptive research design. The researcher applied correlation analysis to analyze the collected data generated by using SPSS, which provided a correlation coefficient between the variables. Inadequate funding was highlighted as challenge that is impeding the implementation of IFMIS. The study found that the cost of implementation was a challenge. It is therefore recommended that the ministry of finance should increase the budget for IFMIS implementation in order to roll out the program in all government ministries.

Hawo (2015) analyses the effectiveness of cash management and budgeting systems; financial reporting systems in GIFMIS; internal control systems in GIFMIS; and the effectiveness of organizational accountability systems in GIFMIS on public sector financial management in Kenya. The study adopted a descriptive research method with a targeted population of 18 National Government Ministries in Kenya. The study used statistical package for social sciences (SPSS) to analysis the data. The study found that organizational accountability systems, cash management and budgeting systems, internal control systems and financial reporting systems positively and significantly influenced the financial management in the public sector.

Moses and Solomon (2016) assess the influence of GIFMIS on financial management in county government. The study was undertaken in the Treasury department in the county government of Nakuru, Kenya. Descriptive research design was used in the study. Data was collected using questionnaires. Data collected from the questionnaire was analyzed using statistical package for social sciences (SPSS). The study established that financial reporting had a strong positive significant relationship with financial management in the county government of Nakuru. The study recommended that the county government should embark on the process of enhancing their usage of GIFMIS to improve on financial reporting in order to enhance financial management in the county government. But this study was conducted in Kenya and the focus was on GIFMIS.

Nazareen (2017) investigates the effect of GIFMIS on cash management in the Kenya using the case of Kisumu county government. In order to achieve its objectives, the study used both primary and secondary data. The descriptive analysis method was used to analyse the data. One of the findings of the study was that GIFMIS has a positive effect on cash management. Another finding was that there is seamless flow of data from budgeting to reporting hence the GIFMIS reliability positively affects cash

management. But the research was conducted in Kenya and focused on effect of GIFMIS on cash management.

Oyinlola, Folajin and Balogun (2017) analyse the effects of IFMIS on performance of public sector in Nigeria. To achieve this objective, descriptive and inferential statistics were used. The sample size was drawn from the sections of finance department that includes, budgeting, procurement and internal audits, and at public works department where the financial systems are applied. The study revealed that there was a positive relationship between the effectiveness of IFMIS on public financial management and the independent variables; financial reporting, budgeting, internal controls and projects as was revealed in the regression analysis. The study concluded that there was a relationship between IFMIS in public finance and financial reporting, budgeting, internal control and government projects as 72.4% of the effectiveness of IFMIS was accounted for by the study independent variables. The relationship gave 95% confidence level of effectiveness. The study recommended that the IFMIS be enhanced and improved at system development level so that it gives real figure and factor in more functions of operation linked to financial service for better service delivery.

Jean (2017) assesses the contribution of adoption of IFMIS on performance of Public institutions in Rwanda was carried out under the period 2012-2016. The study is descriptive in nature where raw data was used. Data were collected from 51 out of 197 total population sampled based on available respondents. Methods such as questionnaire, observation, interview and documents was used together both primary and secondary data. After data collection, SPSS Version 32 program was used to perform statistical techniques that including percentages, mean, standard deviation, and correlation.The researchers conclude that there are significant contribution of IFMIS on

performance of public institutions in Rwanda, where it generates timely, the accurate information for the management decision making.

2.2.2 Integrated Personnel and Payroll Information System and Public Accountability

Nwosu (2010) studies the IPPIS in the Nigerian public service. The research work attempts to examine IPPIS program in Nigeria, finding out the possible challenges that are likely to be encountered in the course of implementation of IPPIS. Survey method was used and data were sourced from both primary and secondary sources. It was found out from the research that integrated personnel and payroll system (IPPIS) is generally one of the offshoots of the civil service reform program to ensure transparency and accountability in the Nigerian civil service. However the study was conducted in Enugu and chi-square was used to analysis the data.

Charles (2015) carries out study to establish drivers for adoption and factors affecting implementation of integrated payroll and payroll database (IPPD) in Kenya government ministries. The study was based on the several theories including technology acceptance theory and survey research design was used. Descriptive statistics, regression and correlation methods were used in data analysis. The study findings established that the key drivers contributing to IPPD implementation are elimination of manual operations, availability of accurate and reliable data, information demanded from the system by other Government departments and supportive top management. The study concluded that IPPD has led to improvement in reporting but implementation of all modules is necessary instead of focusing only on employee data and payroll. However, the study was conducted in Kenya and the main focus is the drivers for adoption and factors affecting implementation of integrated payroll and payroll database (IPPD).

Haruna, Joseph and Samson (2015) examine the impacts of ghost-workers menace in the government service and how the tool of IPPIS could address this syndrome. The

data from both primary and secondary sources were used by the researchers. The study confirmed that ghost workers syndrome is very high in the public service. The study recommends that IPPIS could be adopted to solve this problem and enhance productivity in the public service. However, the study used frequency tables, mean score, simple percentage and spearman rank order correlation technique to analyse the data.

Sunday, Oro, Ogar, Imong, Jacob and Rim (2017) examine the effect of the implementation of TSA, IPPIS and FMIS on fraud in Public Interest Entities in Nigeria. The theoretical structure of the work anchored on the Meta theory model, circumvention innovation theory and public finance management theory which highlight the relationship between computerized innovations in government establishments and fraud management. The descriptive research design was employed, and questionnaire administered on respondents randomly selected from the studied ministries. The linear regression model was employed in establishing the relationship between variables. Results of the statistical test reveal that TSA, IPPIS, and IFMIS have positive and significant relationship with fraud and fraud management as well as jointly impact the performances of Public Interest Entities. Based on findings of the study, it was recommended among others that IPPIS be fully implemented to address the ghost workers syndrome in Public Interest Entities and that public officers be technologically trained to effectively utilize TSA, IPPIS and IFMIS platforms.

Agboola (2018) examines the strategies adopted by IPPIS in addressing ghost worker syndrome in the Nigerian public sector. Furthermore, it critically looked at the effect of ghost worker on public service salary administration and also to analyse the challenges facing IPPIS in implementation of the policy in the Federal Inland Revenue Service in Nigeria. The paper utilised primary and secondary sources of data to elicit the opinions

of public servants in the Federal Inland Revenue Service (FIRS). The study population (450) consists of senior and junior workers of administrative, finance and audit departments comprise the population of the study. The three departments are directly involved in human resources and salary administration in three senatorial districts in Lagos State, Nigeria. Secondary data were gather through the use of textbooks, academic journals, internet sources and IPPIS manuals. However, the finding revealed that the strategies adopted by IPPIS addresses ghost worker in the public sector in Nigeria. It also revealed that the introduction of IPPIS policy into the salary administration in Nigeria improved constant payment of employees. The study also revealed that there are still challenges facing IPPIS in uploading monthly salary of the employees.

2.2.3 Treasury Single Account and Public Accountability

Bashir (2016) examines the effect of TSA on the public financial management in Nigeria. The researcher uses of ministries, department and agencies (MDAs) within Bauchi city as the population of the study. The Pearson Correlation technique was used for data analyzed. The result of the study confirmed that the adoption and full implementation of TSA will promote transparency and accountability. It will also block financial loopholes in the public Financial System. Though the study was conducted in Nigeria, but the focus was on TSA only.

Udo and Esara (2016) look at benefits, challenges and prospects of implementing TSA by state governments. The researcher employed descriptive survey method for the purpose of the study. The descriptive statistics and t-test statistics methods were used to analyzed data obtained from questionnaire. The result of the study shows that, the total implementation of TSA by the governments at state level will be of greatest advantage. However, the study focus on the benefit of implement the TSA at state level.

Kanu (2016) examines the effect of adoption and implementation of TSA on the economy, the public accounting system and the impacts on the liquidity of banking sector. The questionnaires were used to get the data from ten selected bank. Chi-square was used as a tool for data analysis. The results of the study confirmed the negative impacts of TAS implementation on the liquidity base of banking sector. The researcher suggests that the government and CBN should provide solution to TSA liquidity problem. Also financial institutions should explore source of funds and avoid armchair activities. However, this study focuses on the impact of TSA on the economy and liquidity of banks, it was not linked with public accountability. It also used Chi-square as a tool for data analysis.

Joseph and Okike (2016) examine the effectiveness of the TSA in Nigerian states. Primary data were collected from via question while 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 addition, that adequate working system of the TSA should be put in place to ensure its objective is achieved. Though, the researcher used regression analysis to analyse the data, but the study only checked the effectiveness of TSA adoption in the state, it effect on public accountability was not considered.

Oguntodu, Alalade, Adekunle and Adegbie (2016) assess the impact of TSA account on Nigeria's economy. A TSA is a pool in which all government revenue is collected and controlled by the Central Bank of Nigeria, with the view to boost the economy and reduce corruption. CBN statistical bulletin (1999-2015) was analyzed using the OLS estimator. To this effect, an empirical analysis of the relationship between Treasury

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

Fatile and Adejuwon (2017) examine the implication of TSA on cost of governance with specific reference to Buhari civilian administration in Nigeria. The paper is qualitative in nature, relying on secondary sources. It is anchored on stakeholder theory. The paper observes that increase in the cost of governance is not basically as a result of over-bloated bureaucracy rather corruption can be considered major cause of the increase. TSA therefore is primarily to ensure accountability of government revenue, enhance transparency and avoid misappropriation of public funds. The paper notes that with the TSA, government is expected to block all loopholes and leakages in the management of financial resources and also ensure a robust financial management system. The paper recommends among others that successful implementation of TSA requires political will, honesty and determination on the part of government. This will help to address some of the challenges identified in the paper so as to achieve the expected benefits of the system through reduction in the cost of governance in Nigeria and revolutionize our society for better.

Olaoye and Adebowale (2017) evaluate the effectiveness of TSA policy in federal institutions in Nigeria. Specifically the study analyzed the effectiveness of treasury single account in the selected institutions, and examined the efficacy of treasury single

account in curbing corruption in the selected institutions. The study made use on survey research design of the cross sectional type, evaluating treasury single account in the context of selected federal institutions in Ekiti state. Purposive sampling technique were used to select federal institutions including Federal Universityof Technology Akure (FUTA), Federal Polytechnic Ado Ekiti, Federal University Oye, and Federal Medical Centre, Ido, while random sampling was used to select representatives from each of the institution 30 respondents were sampled from each of the institutions with focus on staffs working out of Audit and Bursary Departments, thus making a total number of 120 respondents sampled for the study. Data were collected using self-structured questionnaire and responses were analyzed using frequency count and percentage analysis. Result showed that implementation of treasury single account is considerably effective among federal institutions, fostering better financial management, accountability and transparency, elimination of operational inefficiencies and consistency over time. In the same vein the study established that treasury single account is efficacious in curbing corruption among federal institutions, facilitation of cash management and reduction of the incidence of public fund misappropriation, which had hither-to bolstered transparency and accountability of federal institutions in the country. Hence government further harness every aspect of the policy, creating convenience through technological improved, and balancing of interest of participants in the transaction process in order to help sustain the effectiveness of the policy in the country.

Igbekoyi and Agbaje (2017) assess the implication of adoption of TSA on accountability and transparency in the Nigerian public sector; with a view to find out if the policy is capable of promoting government accountability function. The study consist of all MDAs in the public service with sample size of ten (10) MDAs involved

in revenue generation selected using purposive sampling technique. The hypotheses were tested using regression analysis (ANOVA). The finding of the study showed that, TSA significant positive impact on financial leakages, transparency and curb financial misappropriation. Hence, considering the findings of this study, it is recommended that government should continue to sustain the adoption of the policy and enact laws that will extend it to state and local governments.

Eno and Ese (2017) ascertain the effectiveness of the TSA policy implemented in ministries, departments and agencies (MDAs) of government. The study employed both qualitative and quantitative research design, using the federal Inland Revenue service (FIRS), Uyo, Akwa Ibom State as a case study. A sample size of 63 staffers from the FIRS1 was purposefully used. The mean and standard deviation was used to answer the research questions while regression was used to test the hypotheses at .05 alpha level. Consequently, the result finds that there was a high positive relationship between the implementation of TSA and the management of public funds. The research also established that the main job of the TSA is to mop up cash and not to detect fraud. It was recommended among others that Government should endeavour to sensitize the public on the implications of the TSA on government MDAs as well as other technical partners.

Ndubuaku, Ohaegbu and Nina (2017) examine the impact of TSA on the performance of the banking system in Nigeria. This research study sought to determine the impact of TSA on credit to the private sector, deposit mobilization and loans and advances respectively. Secondary and time series data were obtained from the CBN statistical bulletin 2015. The data were analysed using regression and correlation analysis. The results from the research analysis confirmed that the TSA had a significant impact on credit to the private sector, deposit mobilization and loans and advances.

However, all the above research works studied PFM reforms like GIFMIS, IPPIS and TSA as a single variable. Some of the studies were conducted in Kenya, South Africa, Rwanda and some states in Nigeria. To the best of researcher's knowledge, there was no related study conducted using five ministries in Abuja. This is the gap in knowledge that this study is trying to fill. The effect of PFM reforms on public accountability in selected ministries in Nigeria.

2.3 Theoretical Framework

Two theories were used to form sound foundation to substantiate public sector financial management reforms adoption and implementation. These are:

2.3.1 Stakeholder Theory

Stakeholder theory was proposed in 1984 by Edward Freeman. It outline how business managers can satisfy the interests of stakeholders in the organisation. This theory was adopted for this study because public financial management reforms implemented by government is as a result of the pressure from citizens majorly against lack of transparency and accountability in the management of public funds. It suggests that the government will react to the concerns and hopes of powerful citizens and some of the reactions will be in the form of strategic policies and programmes. This theory offers rich understandings into those factors that inspire government in the area of adoption and implementation of GFMIS, IPPIS and TSA. This theory was used by Fatile and Adejuwon (2017) to draw conclusion about TSA implementation which is expected to block all loopholes and leakages in the management of financial resources and also ensure a robust financial management system.

2.3.2 Public Finance Management Theory

This theory was formulated by Aman and Hildrethin 2004. The theory assumes that all phases of financial resources – revenue and expenditure should be properly managed for the benefits of the citizen. It includes resources mobilization, prioritization of programmes, the budgetary process and efficient management of public funds. Public sector financial management reforms like GIFMIS, IPPIS and TSA were implemented primarily to avoid misappropriation of public funds. Sunday, Oro and Ogar (2017), used this theory to draw conclusion about the positive effect of GIFMIS, IPPIS and TSA on fraud management in public sector.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1   Research Design

The survey method was adopted by the researcher to examine the effect of public financial management reforms on public accountability in Nigeria, with a special focus on the selected ministries in Abuja, as case studies. This method allowed the researcher to seek views of people on GIFMIS, IPPIS and TSA. The survey method allows prediction of people behaviour measuring along a broad range of opinions, attitude, feelings beliefs, ideas, information and understanding. Therefore, the survey method was considered the best for this study.

3.2   Population, Sample and Sampling Techniques

The population of this study are civil servants made up of staff of Finance and Accounts department of selected ministries in Abuja, Nigeria. Out of the current twenty three (23) core federal ministries, five (5) ministries was selected as the population for this study (see appendix A).

These ministries are chosen because they are among the first six ministries used to run IPPIS pilot scheme in 2007 and majority of them are located in federal secretarial. Some of them are involved directly in designing and implementing public financial management reforms. They are currently on GIFMIS, IPPIS and TSA platforms. The population of the study is shown in the table 3.1.

Table 3.1:
Population of the Study.

S/N	MINISTRY	TOTAL
1	Ministry of Foreign Affairs	196
2	Ministry of Budget and National Planning	37
3	Ministry of Culture and Information	31
4	Ministry of Education	185
5	Ministry of Finance	105
	Total	**554**

Source: Various Finance and Accounts Departments.

The sample size of 126 was taken from the population of 554 staff working in Finance and Account Departments of the selected ministries. The sample size is calculated using modified Taro Yamane (Yamane, 1967) sampling model:

$$n = \frac{N}{3 + N(e)^2}$$

Where:

N=Population

n= Sample size

e = (0.05)2

3 = adjusted constant.

$$n = \frac{554}{3 + 554(0.0025)}$$

Sample size = 126

The one hundred and twenty-six (126) respondents was distributed in the following ratio;

Ministry of Foreign Affairs: $\left(196/554\right)$ 126 = 45

Ministry of Budget and National Planning: $\left(37/554\right)$ 126 = 8,

Ministry of Culture and Information: $\left(31/554\right)$ 126 = 7,

Ministry of Education: $\left(185/554\right)$ 126 = 42 and

Ministry of Finance: $\left(105/554\right)$ 126 = 24

3.3   Method of Data Collection

The data for this study were generated from primary source. The design and administration of questionnaire constitutes primary source of data collection. In other words, the questionnaire method forms the major source of data collection for this study.

The questionnaire was designed to seek response, opinions and perceptions on effect of PFM reforms on public accountability in Nigeria, with the selected ministries as the focal points. The Questionnaire enables the researcher to relate with the respondents. It also allows the researcher to clarify the meaning of items that are not clear to respondents. It guarantees as much as possible, the consistency of response from the respondents

The questionnaire designed is in four sections. Section A is on public accountability, section B is on government integrated financial management information system, section C is on integrated personnel and payroll information system and section D is on treasury single account. The revised likert 5-point scale was used for this study. The likert 5-point scale is expressed as: Strongly Agreed (SA) = 5, Agreed (AG) = 4, Undecided (UD) = 3, Disagreed (DA) = 2 and strongly disagreed (SD) = 1.

3.3.1 Instrument Validity

Validity is making sure that objective questions are included in the questionnaire. It involves asking only those questions that would give relevant information related to the problem under investigation. The questionnaire used for this study was validated by experts in Finance and Accounts Department, Nasarawa State University Keffi, who are very knowledgeable in this field of study after thorough scrutiny and analysis.

3.3.2 Instrument Reliability

To ensure reliability of the instrument, pre-test study was conducted. Twenty (20) questionnaires were administered to respondents. The Cronbach alpha coefficient for each section is presented in table 3.2.

TABLE 3.2
RELIABILITY STATISTCS

VARIABLES	Cronbach Alpha
Public sector accountability (PA)	0.734
Government Integrated Financial Management Information System.	0.766
Integrated Personnel and Payroll Information System.	0.807
Treasury Single Account.	0.863

IBM SPSS Version 20 was used to analyse the data. Based on the analysis as seen above, the reliability statistics (Cronbach's alpha) for the four sections are greater than 0.7, and looking at the rule of thumb for interpreting alpha for dichotomous questions or likert scale questions, a score of $0.8 > \alpha \geq 0.7$ is acceptable.

Hence based on the analysis, the scale used here indicates a high level of internal consistency.

3.4 Technique for Data Analysis and Model Specification

The study adopted the use of descriptive statistics method and regression analysis to present and analyze the data. Dependent variable of the study is Public Accountability. The independent variables/parameters are GIFMIS, IPPIS and TSA. The function is specified as follows:

PA = f(GIFMIS, IPPIS, TSA)……………………….………(1) (Sunday, 2017).

Where:

PA = Public Accountability;

GIFMIS = Government Integrated Financial Management Information System;

IPPIS = Integrated Personnel and Payroll Information System; and

TSA = Treasury Single Account.

PA = β_0+ β_1GIFMIS + β_2IPPIS + β_3TSA + et ……………….. (2)

Where: β_0 =constant, β_1 to β_3 are the coefficients of the independent variables and Et= Error term

3.5 Justification of Methods

It is worthy to mention that the regression analysis is good in analyzing many variables, when the emphasis is on the relationship among a dependent variable and independent variables. Descriptive content method enable the researcher to access the rating of the respondents opinions in the questions asked. In other words, this study used statistical dimensions to analyze data obtained from the questionnaire.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF RESULTS

4.1 Data Presentation

The data for the dependent and independent variables of this study are presented in the appendix (B) of this study. The variables are PA, GIFMIS, IPPIS and TSA. Descriptive statistics, correlation analysis, and regression result are presented (see appendix B).

Descriptive Statistics

Table 4.1: Descriptive Statistics

.tabstat   pa   gifmis ippis tsa,   statistics(mean max min sd skewness kurtosis)

STATS	PA	GIFMIS	IPPIS	TSA
Mean	4.201681	4.361345	4.546218	4.462185
Max	5	5	5	5
Min	2	2	3	2
Sd	.819051	.5325203	.5166368	.549112
Skewness	-1.128686	-.2755053	-.3705286	-.6210314
Kurtosis	4.164091	4.232179	1.576681	4.164725

Source: Stata 13 Output

The descriptive statistics table describes the variables of the study. It covers the mean, maximum, minimum, standard deviation, skewness and kurtosis of the data. It shows a total of 199 observations which comprise of five ministries.

Descriptive statistics results from table 4.1 shows that the mean score of public accountability is 4.20. This implies that majority of respondents in the sample ministries are in support of public accountability with 0.81 deviation from the standard. In like manner, it has maximum values of 5 which means that respondents strongly agreed with public accountability and minimum value of 2 which indicates that respondents disagreed with public accountability.

From table 4.1, the mean score of GIFMIS is 4.36. This shows that majority of respondents in the sample ministries are in support of GIFMIS with 0.53 deviation from the average. In like manner, it has maximum values of 5 which means that respondents strongly agreed with GIFMIS and minimum value of 2 which implies that respondents disagreed with GIFMIS.

Also, table 4.1 shows that the mean score of IPPIS is 4.54. This implies that almost all the respondents in the sample ministries are in support of IPPIS with 0.51 deviation from the standard. In like manner, it has maximum values of 5 which means that respondents strongly agreed with GIFMIS and minimum value of 3 which indicates that respondents are undecided about GIFMIS.

Moreover, the table 4.1 reveals that the mean score of TSA is 4.46. This reveals that majority of respondents in the sample ministries are in support of TSA with 0.54 deviation from the standard. In like manner, it has maximum values of 5 which means that respondents strongly agreed with TSA and minimum value of 2 which implies that respondents disagreed with TSA.

Correlation Analysis

Table 4.2: Correlation Matrix of Dependent and Independent Variables

	PA	**GIFMIS**	**IPPIS**	**TSA**
Pa	1.0000			
gifmis	0.2784	1.0000		
ippis	0.2982	0.3238	1.0000	
tsa	0.3374	0.1486	0.1780	1.0000

Source: Stata 13 Output

Table 4.2 shows the correlation matrix of the dependent and independent variables. The table shows the highest correlation between dependent and independent variables of 0.33. This occurred between PA and TSA, which shows that there is a strong relationship between PA and TSA. Also from this table, it can be seen that the three

independent variables GIFMIS, IPPIS and TSA are positively correlated with public accountability. The table shows the highest correlation between independent variables of 0.32 and that happened between GIFMIS and IPPIS. This correlation between independent variables is not considered harmful because is below 0.8 and 0.9 (Judge, Griffiths, Hill, Luthepohl, and Lee 1985).

MULTICOLINEARITY TEST

Table 4.3: Result of Multicollinearity Test

VARIABLE	VIF	1/VIF
ippis	1.14	0.877892
gifmis	1.13	0.886601
tsa	1.04	0.959087
Mean VIF	1.10	

Source: Stata 13 Output

Multicollinearity test was carried out to confirm if there are high correlations between independent variables which will mislead the result of the study. The study checked for the existence of multicollinearity, using variance inflation factor (VIF) and the tolerance value. The rule is that if the variables have VIF over 10 and tolerance values below 0.10, there is a strong indication of the existence of multicollinearity, (Gujarati & Porter, 2009). The results from the table 4.4 indicated that the problem of multicollinearity does not exist because all the VIF are less than 10 while tolerance values are greater than 0.10.

Regression Results

Table 4.4 below shows the pool regression results for all the sampled ministries.

Table 4.4: Regression Results

. regress pa   gifmisippis   tsa

Source	SS	DF	MS			
				Number of obs =		119
				F (3, 115)	=	9.56
Model	15.7982818	3	5.26609392	Prob> F	=	0.0001
Residual	63.3613821	115	0.55096854	R-squared	=	0.3996
				Adj R-squared =		0.3787
Total	79.1596639	118	0.670844689	Root NSE	=	0.74227

PS	Coef.	Std. Err.	t	P> [t}	[95% Conf.	Interval]
gifmis	.2690916	.1362769	1.97	0.041	-.0008466	.5390299
ippis	.3047465	.1411616	2.16	0.033	.0251325	.5843605
tsa	.413507	.1270669	3.25	0.001	.161812	.6652021
-cons	-.2025097	.8314112	-0.24	0.808	-1.849375	1.444356

Source: Stata 13 Output

The table 4.3 shows that the R- squared of the regression model is 39%, indicating that the independent variables (GIFMIS, IPPIS and TSA) used in the model contribute 39% to public accountability in the sample ministries. The remaining variations is explained by other variables not captured in the model.

4.2   Data Analysis and Results.

4.2.1 Government Integrated Financial Management Information System and Public Accountability

The result of pool regression in table 4.3 indicates that GIFMIS has a standard error of 0.1362769 which is the rate of respondents that are not in support of GIFMIS. It has a coefficient of 0.2690916 which is statistically significant at the 0.041 level of

significance. This shows that every one unit increase in GIFMIS brings about 26% increase in public accountability.

4.2.2 Integrated Personnel and Payroll Information System and Public Accountability

Base on regression result in table 4.3, IPPIS has a standard error of 0.1411616 which is the rate of respondents that are not in support of IPPIS. It has a coefficient of 0.3047465 which is statistically significant at the 0.033 level of significance. This shows that every one unit increase in IPPIS brings about 30% increase in public accountability.

4.2.3 Treasury Single Account and Public Accountability

Base on regression result in table 4.3, TSA has a standard error of 0.1270669 which is the rate of respondents that are not in support of TSA. It has a coefficient of 0.413507 which is statistically significant at the 0.001 level of significance. This shows that every one unit increase in TSA brings about 41% increase in public accountability.

4.3 Discussion of Findings

Base on the pool regression result in table 4.3, GIFMIS has a coefficient of 0.2690916 which is statistically significant at the 0.041level of significance. It shows that every one unit increase in GIFMIS brings about 26% increase in public accountability. It reveals that GIFMIS has positive and significant effect on public accountability. This means the higher the implementation of GIFMIS by MDAs the higher the level of public accountability. The result reveals that adoption of GIFMIS by ministries has increases public accountability and brings about openness and transparency in the management of public financial resources. It also enhances accurate and timely reporting of government financial activities. The finding agrees with the findings of Hawo, (2015); Nazaareen, (2017); Sunday, Oro, Ogar, Imong, Jacob and Rim (2017); Moses and Solomon, (2016).

Likewise, the pool regression result in table 4.3, shows that IPPIS has a coefficient of 0.3047465which is statistically significant at the 0.033 level of significance. This means that every one unit increase in IPPIS brings about30% increase in public accountability. It reveals that IPPIS has positive and significant effect on public accountability. This means that the higher the implementation of IPPIS the higher the level of public accountability. The result reveals that adoption of IPPIS by ministries has increases public accountability in the management of public financial resources. IPPIS helps in the efficient management of personnel cost and reduces ghost workers syndrome drastically. This result agrees with the findings of Nwosu, (2010); Haruna, Joseph and Samson, (2015); Sunday, Oro, Ogar, Imong, Jacob and Rim (2017).

Also, the pool regression result in table 4.3, shows that TSA has a coefficient of 0.413507which is statistically significant at the 0.001 level of significance. This means that for every one unit increase in TSA brings about 41% increase in public accountability. It reveals that TSA has positive and significant effect on public accountability. This means that the more government implement TSA the more public accountability will be achieved. The result reveals that adoption of TSA by ministries has increases public accountability in the management of public financial resources. TSA ensures timely reconciliation of government cash position, quick remittance of revenue into central account and reduces revenue leakages. This result agrees with the finding of Joseph and Okike, (2016); Fatile and Adejuwon, (2017); Sunday, Oro, Ogar, Imong, Jacob and Rim (2017).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The study investigates the effect of public financial management reforms on public accountability in Nigeria. The study has three objectives which are to investigate the effect of GIFMIS on public accountability, to evaluate the effect of IPPIS in achieving public accountability and to examine the effect of TSA on public accountability.

In order to achieve the objectives of this study, five federal ministries located in Abuja were selected as samples for the study. Out of population of 554 staff working in Finance and Accounts Department of the selected ministries, 126 staff were taken for this study. The survey method was adopted and questionnaire used was validated by the experts in this field of study. Also to ensure the reliability of questionnaire, a pre-test study was conducted and the Cronbach alpha coefficient for all variables were above 0.70 which was considered acceptable.

The multiple regression analysis was used to test the variables. The public accountability is the dependent variable, while GIFMIS, IPPIS and TSA as public financial management reforms are the independent variable. The R- squared of the regression result is 39%, indicating that the independent variables (GIFMIS, IPPIS and TSA) used contribute 39% to public accountability in the sample ministries. The result also revealed that all the independent variables (GIFMIS, IPPIS and TAS), have positive and significant effect on public accountability.

5.2 Conclusion

The study concluded that the GIFMIS has positive and significant effect on public accountability. In other words, GIFMIS has positively contributed to accountability in the public sector as it ensures openness in the deployment and use of public financial resources, ensure timely reporting of government financial position and accurate disclosure of government financial information.

The study also concluded that IPPIS has positive and significant effect on public accountability. This means that IPPIS has contributed positively to public accountability by ensuring efficient management of personnel cost and eliminating ghost workers from the system.

Moreover, the study concluded that TSA has positive and significant contribution to public accountability by ensuring quick remittance of revenue into consolidated revenue fund (CRF) and block the leakages in the management of government financial resources.

5.3 Recommendations

The following recommendations are made based on the conclusions drawn;

i.   Government should sustain the implementation of GIFMIS in all MDAs to enhance openness, transparent and accountability in the management of public financial resources.

ii.   IPPIS should be implemented in all government ministries and parastatals for easy management of personnel and payroll system and to eradicate ghost workers syndrome.

iii.   TSA policy should be sustained in all revenue generating agencies and ministries to block revenue leakages and to enhance timely reconciliation of government cash position.

5.4 Suggestions for Further Study

The following are some of the research opportunities that could be derived from the findings of this current study:

This study focus on effect of PFM reforms on public accountability. The future studies might focus on effect of PFM reforms and economy growth.

Moreover, the current study focused mainly on government ministries in Abuja. Further study could be conducted on this topic using government agencies and parastatals in Abuja

Also, the current studies sampled five ministries only. Future studies might use more than five ministries as sample size.

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LIST OF FEDERAL MINISTRIES.

1. Federal Ministry of Budget and National Planning.

2. Federal Ministry of Agriculture and Rural Development.

3. Ministry of Defense.

4. Federal Ministry of Education.

5. Federal Ministry of Environments.

6. Federal Ministry of Finance.

7. Ministry of Foreign Affairs.

8. Federal Ministry of Health.

9. Federal Ministry of Industry, Trade and Investment.

10. Federal Ministry of information and Culture.

11. Federal Ministry of Interior.

12. Federal Ministry of Justice.

13. Federal Ministry of Labour and Employment.

14. Federal Ministry of mines and Steel Development.

15. Federal Ministry of Niger Delta.

16. Federal Ministry of Petroleum Resources.

17. Federal Ministry of Science and Technology.

18. Federal Ministry of Transportation.

19. Federal Ministry of Water Resources.

20. Federal Ministry of Women Affairs.

21. Federal Ministry of Power, Works and House.

22. Federal Ministry of Youth and Sport Development.

23. Federal Ministry of Communication and Technology.

DESCRIPTIVES TEST

```
. tabstat pa gifmis ippis tsa, statistics( mean max min sd skewness kurtosis )

    stats |        pa     gifmis      ippis        tsa
---------+----------------------------------------
     mean |  4.201681   4.361345   4.546218   4.462185
      max |         5          5          5          5
      min |         2          2          3          2
       sd |   .819051   .5325203   .5166368    .549112
 skewness | -1.128686  -.2755053  -.3705286  -.6210314
 kurtosis |  4.164091   4.232179   1.576681   4.164725
---------------------------------------------------
```

CORRELATION TEST

```
. correlate pa gifmis ippis tsa
(obs=119)

             |       pa   gifmis    ippis      tsa
-------------+------------------------------------
          pa |   1.0000
      gifmis |   0.2784   1.0000
       ippis |   0.2982   0.3238   1.0000
         tsa |   0.3374   0.1486   0.1780   1.0000
```

MULTICOLINEARITY TEST

```
. estat vif

    Variable |       VIF       1/VIF
-------------+----------------------
       ippis |      1.14    0.877892
      gifmis |      1.13    0.886601
         tsa |      1.04    0.959087
-------------+----------------------
    Mean VIF |      1.10
```

REGRESSION TEST

```
. regress pa gifmis ippis tsa

      Source |       SS       df       MS              Number of obs =     119
-------------+------------------------------           F(  3,   115) =    9.56
       Model |  15.7982818      3  5.26609392           Prob > F      =  0.0001
    Residual |  63.3613821    115   .55096854           R-squared     =  0.3996
-------------+------------------------------           Adj R-squared =  0.3787
       Total |  79.1596639    118  .670844609           Root MSE      =  .74227


------------------------------------------------------------------------------
          pa |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
      gifmis |   .2690916   .1362769     1.97   0.041    -.0008466    .5390299
       ippis |   .3047465   .1411616     2.16   0.033     .0251325    .5843605
         tsa |    .413507   .1270669     3.25   0.001     .161812    .6652021
       _cons |  -.2025097   .8314112    -0.24   0.808    -1.849375    1.444356
------------------------------------------------------------------------------
```

RAW DATA

EPENDENT	NDEPENDENT VARIABLES		
PA	GIFMIS	PPIS	SA
4	5	5	4
4	5	5	4
5	4	5	5
4	4	5	4
5	5	5	5
2	4	4	4
2	5	5	4
3	4	3	4
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2	4	4	4
2	2	4	4
3	4	4	4
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5	4	5	5

QUESTIONAIRE.

Dear Sir/ma,

I am Oyedele Kayode David, an MSc public sector accounting student of the Nasarawa state university, Narasawa state. I am undertaking a research on **Effect of Public Financial Management Reforms on Public Accountability in Selected Ministries in Nigeria.**

I request you to fill the questionnaire below to help me complete the study. The questionnaire is for academic research purpose only. Your identity shall be kept confidential and any data used in the report will not be linked to any respondent.

Note, only senior staff of Finance and Accounts department from grade level 7 and above are qualified to answer this questionnaire.

Thanks for your cooperation.

Tick the appropriate box.

Strongly Agreed (SA), Agreed (AG), Undecided (UD), Disagreed (D), Strongly Disagreed (SD).

SECTION A: PUBLIC SECTOR ACCOUNTABILITY.		SA	AG	UD	D	SD
1.	Government expenditures are incurred in accordance with the law.					
2.	Public revenues are collected and properly accounted for.					
3.	Government financial information is readily available and accessible.					
4.	Reporting of government financial position is timely and accurate.					
5.	There is openness and transparency in the deployment and use of public financial resources.					
SECTION B: GOVERNMENT INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM (GIFMIS).		SA	AG	UD	D	SD
1.	GIFMIS supports openness and transparency in government financial management.					
2.	It helps in accurate and timely reporting of government financial position.					
3.	Enhances real-time financial information for better decision making.					
4.	It has strong internal control mechanism to prevent and detect potential and actual fraud.					
5.	GIFMIS ensures accurate disclosure of government financial information.					
SECTION C: INTEGRATED PERSONNEL AND PAYROLL INFORMATION SYSTEM (IPPIS).		SA	AG	UD	D	SD
1.	IPPIS helps in efficient management of public personnel and payroll system.					
2.	It helps to eliminates ghost workers in personnel and payroll management.					

		SA	AG	UD	D	SD
3.	IPPIS makes available accurate up to date information about public workforce.					
4.	Enhances prompt payment of salary and remittance of third parties deduction.					
5.	IPPIS helps in storing and retrieving information about public workforce.					
SECTION D: TREASURY SINGLE ACCOUNT (TSA).		**SA**	**AG**	**UD**	**D**	**SD**
1.	Enhances accurate and timely information about government cash position.					
2.	It reduces corruption and misappropriation of government fund.					
3.	TSA helps in blocking the loopholes and leakages in the management of government financial resources.					
4.	TSA enhances quick remittance of revenue into CRF.					
5.	TSA ensures timely reconciliation of government cash position.					