

**Public Financial Management and Performance of selected Federal Research
Institutes in Oyo State, Nigeria**

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(MSc) Degree in Accounting**

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Certification

This is to certify that this dissertation was carried out by Fadare Oludare Oladimeji with Matric Number LCU/PG/0000490 of the Department of Management and Accounting, Faculty of Environment, Management and Social Sciences, Lead City University, Ibadan.

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Dedication

This thesis is dedicated to the Almighty God and my late father, Mr. Roland Olalekan Fadare.

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Acknowledgement

First, I express my sincere gratitude to the Almighty God for the successful completion of this Thesis. May His Grace and Mercy continue to be upon us. Amen.

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Abstract

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This research examined the effect of Public Financial Management on Performance of federal research institutes in Nigeria. This research is conducted to examine the extent to which TSA implementation affect the performance of federal research institutes in Nigeria; investigate the influence of IPPIS on the performance of federal research institutes in Nigeria and ascertain the relationship between GIFMIS and performance of federal research institutes in Nigeria. Primary data is used to carry out this work. The population were the personnel of the selected federal research institutes. 360 copies of questionnaire were fielded out of which two hundred and ninety-eight (298) were adequately filled. The data was analyzed using descriptive and inferential statistics technique and Pearson's correlation test. The result revealed that the implementation of TSA positively affect the performance of federal research institutes in Nigeria with ($B= 0.374, t= 1.981, p<0.05$). The correlation coefficient shows that TSA had a positive but weak significant association with the performance of selected federal research institutes in Oyo state, Nigeria; ($r = 0.114, p< 0.05$). It also depicts that IPPIS positively influence performance of federal research institutes in Nigeria with ($B= 0.376, t= 6.091, p<0.05$). The correlation coefficient shows that IPPIS had a positive weak significant relationship with the performance of federal research institutes in Nigeria ($r =0.334, p<0.05$). Finally, it shows that there is a strong positive relationship between GIFMIS and performance of federal research institute in Nigeria (PERF) ($r = 0.526, p<0.05$). The study recommended that government should strengthen the systems in place to accelerate government operations in executing its function and also fosters transparency and accountability in government activities. The government should support the law enforcement apparatus to effectively manage and curb revenue leakages. Also the government must improve the public sector accounting and auditing standards, and restructure the public account committees to enhance accountability of public resources.

Keywords: Performance, TSA, IPPIS, GIFMIS and Public financial management.

Word Count: 298

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Chapter One

1.1 Background to the Study

The need for efficient utilization of resources over a wide range of government activities led to the development of public financial management. In the 1980s the influx of reforms and innovative ideas has revolutionized the Public financial management from the interdisciplinary combination of political science, public administration, economics and accounting constantly seeking to address some of the potential challenges of government monies. Public Financial Management systems are defined as the fine art of budgetary system in which public resources are planned, directed and controlled to enable efficient and effective delivery of good governance dividends like better infrastructures, manpower development, and wealth generation among others¹. Globally, Public financial management reforms have been implemented like in the USA, the development of public sector accounting standards also, in Turkey, the tax reforms have revolutionized the tax system like the mutual responsibility for fairness, effectiveness and simplification to align to the development of the economy^{2,3}.

Public financial management (PFM) is an important phenomenon which serves as a means of survival for any economy that wants to achieve sustainable growth and development⁴. Government is saddled with the responsibility of ensuring that quality resources are available to enhance the social welfare of the citizens and these must be provided in an effective way irrespective of divergences in the value system and ideologies of the regime or administration

in power. The differences in ideology serve as a basis for ensuring optimal allocation and distribution of resources effectively and efficiently. Public financial management ensures optimal use of resources over a wide range of government activities. Public sector organization can only earn the trust of the citizens when there are accountability and transparency in the use of public funds and resources⁵.

A healthy and strong institutional framework can be judged based on how effective the public financial management system put in place are, in terms of its fiscal discipline, accountability, redistributive power, allocation, efficiency and equity⁶. Part of the framework put in place to aid transparency and accountability are the Integrated Personnel Payroll Information System (IPPIS), Government Integrated Financial Management Information System (GIFMIS), and Treasury Single Account policy. Government Integrated Financial Management Information System (GIFMIS) was put in place to achieve an effective budgeting system. This system provides prompt access to financial data efficiently and accurately. It also strengthens government financial control and promotes the provision of social welfare facilities by the government⁷.

This system is put in place to accelerate government operations in executing its function and also fosters transparency and accountability in government activities. Integrated Personnel Payroll Information System (IPPIS) is another form of public financial management system put in place by the government, charged with the task of managing and handling government personnel database and salaries of federal workers in Nigeria⁸. The Integrated Personnel Payroll Information System (IPPIS) helps the government effective monitoring of human resource management from recruitment, separation of payroll system, pension and gratuity collection. IPPIS has also helped in eliminating ghost workers to a reasonable extent by creating an avenue for the federal government to save over one hundred and twenty billion (120,000,000,000:00) from 2007⁹. This system has

further helped to streamline recruitment of personnel; the payroll process and also helped in capturing overvalued personnel cost. The system of IPPIS was also introduced to streamline the recurrent expenditure of MDAs which is eating so deep to the little income generated by the government¹⁰.

Before the adoption of IPPIS in Nigeria, a warrant was issued by the budget office for computing monthly salaries of workers and duly signed by the minister of finance which gives automatic authority to the accountant general of the federation to disburse money to the MDAs to carry out social service and also used in the payment of salaries of workers in various MDAs¹¹. The process was however cumbersome and gave ways for some manipulations to be carried out. The TSA policy was initiated by the Federal government in collaboration with the Central Bank of Nigeria (CBN) and other key stakeholders through the IMF/World Bank assisted programme in 2004¹². It was introduced and adopted in Nigeria in 2011. It was proposed and partially implemented by the federal government of Nigeria in 2012 under the Jonathan led Administration - and fully implemented by the Buhari led Administration to aggregate revenues from all MDAs into a single account at the Central Bank of Nigeria¹³. Treasury Single Account (TSA) is an integrated structure of government bank accounts that gives an aggregated view of government cash balances. It is an account or a set of combined accounts through which the government transacts all its inflows and outflows. It is essentially a tool for consolidating and managing the government's cash resources¹⁴. Effective government banking arrangements are very key factors for efficient appropriation and control of the government's revenues. This requires ensuring that all cash received is available for effecting government expenditure programs and making timely payments. TSA is strictly a cash management tool for proper control and accountability of government cash balances¹⁵. An effective PFM system will help to improve budget performance and

also help to fund more capital projects effectively by enhancing a higher level of transparency, especially in revenue-generating MDAs like federal institutions such that they will not be able to deprive the federal government of due revenue¹⁶. The benefit of these systems has also been said to be huge as it will help to eliminate all forms of organization secrecy around public funds accruing from the collaboration of politicians and financial officers in executing personal business causing a delay in the execution of projects¹⁷.

Despite all these systems like treasury single account (TSA), alongside whistle-blower and bank verification number policy to enhance the high level of transparency and public accountability especially in revenue-generating MDAs, it was submitted that the country still experiences a high rate of corruption, thus this study, therefore, investigate the impact of public financial management on the performance of selected federal research institutes in Nigeria¹⁸.

1.2 Statement of the Problem

The major macroeconomic concern of every nation is how to achieve allocative, distributive and stabilization efficiency and this has led to the emergence of different policy measures to ensure effective management and utilization of public resources especially public funds¹⁹. Despite confirmed oil reserves volume of about thirty-eight and half billion barrels (38.5), eight largest oil exporter in the world, millions of acres of arable land for agriculture, immeasurable gas reserves, the wealth of human capital among others; The Nigerian government has for a long time experienced lack of progress and dwindling growth in its development due to challenges occurring from lack of transparency, accountability, corruption and poor service delivery resulting from lack of good governance²⁰. In 2004, Nigeria introduced economic and governance reform and

presently introducing international public sector accounting standard and accountability index to aid transparency and accountability but the impact is relatively low²¹.

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Despite the implementation of various government reforms in Nigeria, the submission was that even though TSA which saves the government about 24 billion naira monthly and have closed over 20,000 bank accounts of MDAs the country still experience several financial leakages due to the federal government's poor stance on the policy and lack of ownership²². Therefore, it is important to note here that a standard public financial management strategy and good governance to coordinate government activities, enhances the efficiency of government in carrying out its activities which in turn strengthens accountability, transparency and also propel efficient and effective use of resources with a sound decision- making framework is paramount. An effective reporting system also helps to improve public confidence and provides better outcomes to the entire populace. When there is no public financial management and effective reporting system, the country is subjected to waste and all other adverse social vices.

This poor public financial management which is attributable to corruption by top officials has led to inadequate funding of federal research institutes; as funds allotted to federal research institutions was relatively small to meet their needs resulting to inadequate infrastructure, poor learning environment and lack of effective teaching aid and resources for research²³. This situation has placed research institutes under the pressure of how to get some project done to complement the fund allotted to them by the federal government²⁴. This, therefore, led to sourcing of funds by federal research institute by establishing commercial ventures and others as a means of generating funds internally. It is observed that Nigeria has never allotted up to 20% of its annual budget on education since 1960. The highest budget allocation on education stood at 17.59% while the common rate is around 8%, of which if this figure is allocated and spent effectively there would be a great improvement in the affairs of the research institute²⁵.

In Nigeria, there have been reported cases of ghost workers on the payroll of ministries and government parastatals, fraud, corruption practices by government officials, collection of bribes before official duties are being carried out, diverting government funds or resources for personal use²⁶. A huge sum of government funds had been lost to corruptive activities of top government officials²⁷. It was argued that the fraudulent activities were rampant virtually in all government parastatals in Nigeria²⁸. Due to poor financial management, lack of transparency, corruption, misplacement of priorities in MDAs and Nigeria government at large, these identified problems led to socio-economic underdevelopment. There is, therefore, a need to establish systems that will curb excesses and negligence such as weak institutional quality, absenteeism, the lateness of workers to work, personal use of government properties, ghost workers. For example, six thousand (6000) workers were identified as ghost workers out of 26017 workers from the 2013 audit), lack of basic infrastructures and conducive environment for learning, diversion of grants and scholarships for personal use, especially in federal institutions in Nigeria²⁹.

Hence, to reverse the rising ugly and persisting trends in the public financial management in Nigeria, the federal government embarked on the formulation, implementation and evaluation of various canons of public financial management practices and initiatives among which are Integrated Personnel Payroll Information System (IPPIS), Government Integrated Financial Management Information System (GIFMIS), and Treasury Single Account policy implementation (TSA) in Nigeria. Nevertheless, the effectiveness of these canons put in place for public financial management remains questionable. Concerning corruptive practices displayed by various government agencies or has it promoted transparency and accountability of top government officials. How has the measure put in place by government improved the quality of public financial management in federal research institutes in Nigeria? These are the question which this research work seeks to provide

answers to.

It was suggested that the government should adopt policies and systems that would aid public financial management tools such as IPPIS, GIFMIS and TSA in federal institutions³⁰. It is pertinent therefore to evaluate the level of compliance of federal institutions and the extent to which PFM and its tool have improved the performance of the federal research institute in Nigeria. While Tilley highlighted that effective public financial management can be achieved when systems are put in place to encourage fiscal discipline, efficient allocation and distribution of resources and quality operational management³¹. The question here is to examine the extent to which these systems (TSA, IPPIS, GIFMIS) has helped in achieving these objectives. It is also important to examine if the system put in place can effectively capture all the activities of a federal research institution and how it has also aided PFM in federal research institutions. Has these systems reduced mismanagement in any way or has it improved efficiency in funds allocated to them by the federal government. Are there loopholes in this system which has hindered its effectiveness in federal research institutions? These would be addressed within the framework of this study.

1.3. Objective of the Study

The broad objective of this study was to evaluate the influence of public financial management on performance of selected federal research institutes in Nigeria. The specific objectives of the study were to:

1. examine the effect of Treasury Single Account (TSA) policy implementation on the performance of federal research institutes in Oyo state. Nigeria;

2. investigate the influence of Integrated Personnel Payroll Information system (IPPIS) on the performance of federal research institutes in Oyo state. Nigeria; and
3. ascertain the relationship between Government Integrated Financial Management Information System (GIFMIS) and performance of federal research institutes in Oyo state. Nigeria,

1.4. Research Questions

The following research questions were addressed in this study.

1. What is the effect of TSA implementation on the performance of federal research institutes in Nigeria?
2. How does IPPIS affect the performance of federal research institutes in Nigeria?
3. What is the relationship between GIFMIS and performance of federal research institutes in Nigeria?

1.5 Hypotheses

The following stated hypotheses were tested to obtain the result analyzed:

H₀₁: There is no significant effect of TSA policy implementation on the performance of federal research institutes in Nigeria;

H₀₂: IPPIS has no significant influence on the performance of federal research institutes in Nigeria;

H₀₃: There is no relationship between GIFMIS and performance of federal research institutes in Nigeria;

1.6 Justification for the Study

Substantial studies have been carried out in the area of public financial management in Nigeria. A similar study have investigated accountability and public sector financial management in the country³². Recently, scholars have investigated audit practices and public

financial management in Rwanda and Nigeria, empirically analyzed the poor public financial management in the country^{33,34}. The major justification for this study is that there are scanty scholarly articles on public financial management and performance of federal research institutes in Nigeria.

Public Financial Management systems are prerequisites to improved service delivery, poverty reduction and achievement of the MDGs³⁵. PFM systems maximize financial efficiency, improve transparency and accountability which theoretically contribute to the long-term economic success of a nation^{36,37}. Public financial management (PFM) is an important phenomenon which serves as a means of survival for any economy that wants to achieve sustainable growth and development³⁸. Government is saddled with the responsibility of ensuring that quality resources are available to enhance the social welfare of the citizens and these must be provided in an effective way irrespective of divergences in the value system and ideologies of the regime or administration in power. The differences in ideology serve as a basis for ensuring optimal allocation and distribution of resources effectively and efficiently.

Public financial management ensures optimal use of resources over a wide range of government activities. Public sector organization can only earn the trust of the citizens when there are accountability and transparency in the use of public funds and resources³⁹. The major macroeconomic concern of every nation is how to achieve efficient allocation, distributive and stabilization efficiency and this has led to the emergence of different policy measures to ensure effective management and utilization of public resources especially public funds⁴⁰. However, Nigeria has for a long time experienced lack of progress and dwindling growth in its development due to challenges stemming from lack of transparency, accountability, corruption and poor service delivery resulting from lack of good governance⁴¹.

1.7. Significance of the Study

This study will add to the existing body of literature on the impact of public financial management, IPPIS, GIFMIS, on the performance of federal research institutions in Nigeria. The findings of this study are considered significant in that it will provide useful information for government and policymakers to appraise the adoption of the TSA policy; understand its applications and mechanisms; and improve on disclosed lapses and serve as a springboard for other future studies. Although it has been fully implemented for more than four years now, it is not yet totally free of challenges and irregularities of some sorts as demonstrated by this study. The result is useful to the management of the various research institutes and the government concerning the proper management and optimal use of allocated funds as budgeted. Ultimately, the findings of this study are important to research institutes authorities in so far as the smooth running, efficient operations and achievement of set goals by the institution, rest heavily on the availability of funds. The findings of this work are also helpful because it does not only highlight the various challenges facing the smooth implementation and application of TSA policy in the research institutes but also, it suggested ways to overcome them to fully reap the designed benefits of TSA policy.

This work is of immense help to persons willing to venture into research on TSA. Due to its infancy of age in the academic sphere in Nigeria, it serves as a springboard for further research work and also a reference material in other contexts. The result of the work will contribute to the general body of knowledge and give light for further exploration into the TSA policy in Nigeria. This study will also aid government activities in terms of carrying out effective decision and implementation through financial management. In line to ensure a higher level of transparency and accountability in the public sector, this study will also give insight to the government on the various manipulations of MDAs as various

forms of fraud and corruptive activities by a top official would be detected. Also, IPPIS system put in place will ensure easy access to accurate database of government workers which will help the government to easily identify ghost workers such that the revenue recovered from this would be diverted to productive use for the general welfare of the populace.

It will also aid effective auditing. It was revealed that the reason behind the delay in executing capital as identified as the common practices of MDAs in which these ministries hide public fund into a different bank account⁴². For example, diversion of money approved by the government for projects for self-benefiting short term investments, thereby causing a delay in project execution. This study is therefore important as it borders more on the need for prudence and accountability in the use of government resources and the benefit thereof.

1.8 Scope of the Study

The scope of this study is based on four diverse angles which are: the geographical coverage, research design, population and sample size. In terms of geographical location, this study was focused on Nigeria simply because Nigeria is known to be the principal economy in Africa hence, reflections in the economy of Nigeria may, to some degree, reflect the experience of the continent. Also, the study chose five out of the ten (10) research institutes Ibadan because of the accessibility to obtain information. Also, they represented the major research institutes with the exception of International Institute for Tropical Agriculture (IITA). This study investigated public financial management in federal research institutes in Nigeria. A case study of research institutes in Ibadan, Oyo State. The research design adopted in this study is survey because survey research design gives the researcher the opportunity to generate information in order to adequately answer the question of what, how, who, where and when, concerning public financial management and performance of selected federal research

institution in Nigeria. As regards the sampling size, purposive sampling technique was employed to select five federal research institutes in Oyo State because these research institutes have enrolled with these economic reform programmes right from their inception. Unlike what obtains from MDAs where they were either reluctant or forced to enrol long after the economic reform programs have become fully operational. It is worthy of note that the purposive sampling technique was employed to select two hundred and ninety eight (298) out of one thousand, two hundred employees of the federal research institutes in which the questionnaires the respondents were from the accounting, finance and administrative sections of the research institutes.

1.9 Limitation of the study

The extent of work carried out in the course of this research work was hampered to some extent by time constraint within which this work has to be completed. Hence, a research assistant was engaged in addition to other support solicited from my supervisor and others. Also, the availability of secondary data was either not adequate or non-existent which confined us to the use of questionnaire and purposive sampling method of population size. At the same time, the limited financial resources prevented us from the inclusion of federal research institutes in a wider geographical area. To that end, five federal research institutes were selected for this work. Finally, the recency effect of the TSA, IPPIS and GIFMIS also contributed to the limited volume of related empirical literature available to work with. Nevertheless, the available journals were optimally researched and used for the purpose of this work.

1.10 Operationalization of Variables

The purpose of this study was to evaluate the influence of Public Financial Management on

Performance of selected Federal Research institutes in Nigeria. To achieve this, two types of variables were involved in this study, these are: the explanatory variables and the explained variables. The explanatory variables in this study are Treasury single account (TSA) policy, Integrated Personnel Payroll Information System in Nigeria (IPPIS) policy and Workings of Government Information Management Information System GIFMIS policy. The regressed variable in this study is the performance of federal research institutes in Nigeria.

Thus,

$$Y = f(X)$$

$$Y = y_1$$

$$X = x_1, x_2, x_3$$

Where:

y_1 = Performance of selected federal Research institute (PSF)

X = Public Financial Management

x_1 = Treasury single account (TSA)

x_2 = Integrated Personnel Payroll Information System in Nigeria (IPPIS)

x_3 = Workings of Government Information Management Information System (GIFMIS)

Functional Relationships

$$PSF = f(TSA) \dots \dots \dots F1$$

$$PSF = f(IPPIS) \dots \dots \dots F2$$

$$PSF = f(GIFMIS) \dots \dots \dots F3$$

The functional relationships of this study used F1-F3 to assess and test the hypotheses

previously formulated. The associated regression models were developed in chapter three where the methodology of the study was discussed.

1.11 Operational Definition of Terms

Accountability – the obligation of an individual or organization to account for its activities, accept responsibility for them, and to disclose the results transparently. It also includes the responsibility for money or other entrusted property⁴³.

Government Integrated Financial Management Information System (GIFMIS): this is an information system implemented by the federal government as one of the public financial management measures to aid budget management and accounting to enhance transparency and accountability in MDAs Integrated Payroll and Personnel Information System (IPPIS): Integrated payroll and personnel information system is a public financial management measure which has to do with an information communications technology project adopted by the federal government so as improve the efficiency and effectiveness of payroll administration of MDAs which is also to eliminate the activities of ghost workers.

Performance: the extent to which the government employ systems, rules and policy measures in carrying out their activities to aid the desired result.

Public Financial Management – it can be defined as rules and systems put in place by the government to mobilize revenue, perform efficient allocation and distribution of public funds and also to have a transparent account for public funds. It also has to do with effective administration and management of funds collected and spent by the government and also including government agencies and parastatals.

Research Institute – A higher institution of learning where inquiry into specialized knowledge areas of science and economics is conducted.

TSA- Treasury Single Account, a unified, set of linked bank accounts or consolidated

banking and financial arrangement set up by the government to plug revenue leakages and rev up revenue for the national coffer.

Transparency – actions, methods or procedures that lack hidden agenda and conditions that complies with the disclosure requirements of transparency in word and intention⁴⁴.

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Endnotes

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- ¹ IMF (2013). Public financial management and emerging architecture. Washington, D. C ISBN 9781475531091
- ² A Gereek,, & F. B Titregim,. (2020). Tax system and tax reforms in Turkey. Springer ISSN 25097873. Retrieved from <https://doi.org/10.1007/9789811519147>.
- ³ S. Kioko, D. S. T Matkin, J. Marlowe, & Z. J Zhan,. (2011). Why public financial management matters. Journal of Public Administration Research and Theory, 21, 13-124.
- ⁴ <https://norad.no/en/front/thematic-areas/macroeconomics-and-public-administration/public-financial-management/>
- ⁵ The Association of Chartered Certified Accountants (ACCA), 2010. Improving public sector financial management in developing countries and emerging economies
- ⁶ IMF, 2010. Preserving debt sustainability in low-Income countries in the wake of the global crisis, IMF Policy Paper (Washington)
- ⁷ <https://gifmis.gov.ng/gifmis/index.php/about-gifmis>
- ⁸ <https://www.ippis.gov.ng/>
- ⁹ <https://www.thenigerianvoice.com/news/122891/fg-saves-n120bn-through-ippis-reduces-ghost-workers-person.html>
- ¹⁰ <https://www.thenigerianvoice.com/news/122891/fg-saves-n120bn>
- ¹¹ B.G Aji. (2013). “Only 235 MDAs on IPPIS-HOS”.www.nigerianbestforum.com/index.php?topic=300432.0
- ¹² A.B. Yusuf,. & S . Mairafi, (2015). Treasury Single Account Implementation in Nigeria: Potential implications for Deposit Money Banks. Paper presentation in a conference in Nassarawa State University, Keffi
- ¹³ Bassey (2016). Premium Times. "15 things to know about Treasury Single Account (TSA)".
- ¹⁴ S . Pattanayak, & I. Fainboim. (2010). Treasury Single Account: Concept, Design, and implementation issues International Monetary fund, 1-30.

- 15 S . Pattanayak, & I. Fainboim. (2010).
- 16 T. Oyedele,. (2016). Treasury Single Account and Taxation. Retrieved from PWC.
<http://pwc.com/nigeriataxblog>
- 17 <https://allafrica.com/stories/201604150687.html>
- 18 A. Rogers, (2018). Controversies crippling FG’s treasury single account policy. Retrieved from
<https://www.vanguardngr.com/2018/12/controversies-crippling-fgs-single-account-policy/>
- 19 <https://www.britannica.com/topic/government-economic-policy>
- 20 A. Oteh,, 2010. The role of entrepreneurship in transforming the Nigerian economy. Being
A Paper delivered at the 4th Convocation in Igbinedion University, Okada, 2(1): 3 – 4.
- 21 <https://www.ifac.org/knowledge-gateway/contributing-global-economy/discussion/how-strong-public-financial-management-nigeria-will-support-sustainable-growth>
- 22 A. Rogers, (2018). Controversies crippling FG’s treasury single account policy. Retrieved
from <https://www.vanguardngr.com/>
- 23 O. Aina, (2002). Alternative Mode of Financing Higher Education in Nigeria and
Implication for University Governance Research Source from Sub-Saharan Africa.
Bolabay Publications.
- 24 M., Nwadiani, & Ofoegbu F. (2005) Level of Perceived Stress Lecturers
in Nigerian Universities. *Journal of Instructional Psychology* 33(1), 66-74.
- 25 UNESCO. (2010). Education for all global monitoring report. UNESCO. Available on:
<https://files.eric.ed.gov/fulltext/EJ1092383.pdf>
- 26 A. Okwoli (2004). “Towards Probity, Accountability, and Transparency in Revenue
Generation in the Nigerian Public Sector”, *Nigerian Journal of Accounting Research*, Vol. 1(1):
1-9.
- 27 S. Bello (2001). „Fraud Prevention and Control in Nigerian Public Service: The Need for
A Dimensional Approach”, *Journal of Business Administration*, 1(2): 118-133.
- 28 E. Appah & K. Appiah (2010). “Fraud and Development of Sound Financial Institutions
in Nigeria”, *Nigerian Journal for Development Research*, 1(1): 49 – 56.
- 29 I. Haruna, A. Joseph, A. J. Samson, Integrated Personnel Payroll and Information System
(IPPIS): Panacea for Ghost Workers Syndrome in Nigerian Public Service. *International
Journal of Public Administration and Management Research (IJPAMR)*. 2015;2(5):55-64.

- 30 Abdulkadir Abdulrashid Rafindadi & Olashinde Joseph Ogidan, 2018. "Empirical Analysis of Poor Public Financial Management in Nigeria: Causes, Implications and Remedies," *Asian Development Policy Review*, Asian Economic and Social Society, vol. 6(4), pages 178-197, December.
- 31 C. Tilley (2014). Public sector cuts require strong management, *Financial Management*, pp. 6-65.
- 32 O. A. Chi-Chi (2012). Accountability and public sector financial management in Nigeria. *Arabian Journal of Business and Management Review*, 1(6), 1
- 33 A. N. Nwaobia, G. O. Ogundajo, & N. Theogene, (2016). Internal audit practices and public financial management in Rwanda and Nigeria: Bridging the transparency gap in public sector financial reporting. *International Journal of Advanced Academic Research*, 2(10), 39-77.
- 34 A. A. Rafindadi, & O. J. Ogidan, (2018). An empirical analysis of poor public financial management in Nigeria: causes, implications and remedies. *Asian Development Policy Review*, 6(4), 1-7
- 35 Nick York, (2008) Preface to Pretorius, C. and Pretorius, N. (2008) A Review of PFM Reform Literature. London: DFID
- 36 Nick York, (2008) Preface to Pretorius, C. and Pretorius, N. (2008) A Review of PFM Reform Literature. London: DFID
- 37 IMF (2013). Public financial management and emerging architecture. Washington, D. C. ISBN 9781475531091. Retrieved from <https://www.e.library.imf.org/page/226?language=en>
- 38 <https://norad.no/en/front/thematic-areas/macro-economics-and-public-administration/public-financial-management/>
- 39 The Association of Chartered Certified Accountants (ACCA), 2010. Improving public sector financial management in developing countries and emerging economies
- 40 <https://www.britannica.com/topic/government-economic-policy>
- 41 A. Otey 2010. The role of entrepreneurship in transforming the Nigerian economy. Being A Paper delivered at the 4th Convocation in Igbinedion University, Okada, 2(1): 3 – 4.
- 42 Y. Bashir (2016) Effects of Treasury Single Account on Public Finance Management in Nigeria. *Research Journal of Finance and Accounting*. Vol.7, No.6

43 <http://www.businessdictionary.com/definition/accountability.html>

44 <http://www.businessdictionary.com/definition/transparent.html>

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Chapter Two

Review of related literature

This chapter presents a review of extant literature related to the subject matter of the study. It gives an overview of existing knowledge in public financial management and performance of the federal research institute in Nigeria. Specifically, this chapter discusses the conceptual review shedding light into the concepts of public financial management, measures of public financial management, TSA policy, IPPIS policy and GIFMIS policy, Performance of selected Federal Research institutes in Nigeria, the theoretical review with emphasizes. The empirical reviews and gaps in the literature conclude in this chapter.

2.1. Conceptual Review

2.1.1 Public Financial Management

Public financial management is germane to basic economic governance and critical in establishing the performance, lawfulness and answerability of MDAs and also a functional country. It entails the effective utilization of public funds collected and spent by the government. Public financial management (PFM) is an important phenomenon which serves as a means of survival for any economy that wants to achieve sustainable growth and development¹. A healthy and strong institutional framework can be judged based on how effective the public financial management system put in place are, in terms of its fiscal discipline, accountability, redistributive power, allocation, efficiency and equity. Public Financial Management systems are defined as the fine art of budgetary system in which public resources are planned, directed and

controlled to enable efficient and effective delivery of good governance dividends like better infrastructures, manpower development, and wealth generation among others².

Government is saddled with the responsibility of ensuring that quality resources are available to enhance the social welfare of the citizens and these must be provided in an effective way irrespective of divergences in the value system and ideologies of the regime or administration in power. The differences in ideology serve as a basis for ensuring optimal allocation and distribution of resources effectively and efficiently. Checks and balances system are put in place to curb wastages and to accelerate government operations in executing its function and also fosters transparency and accountability in government activities such as Integrated Personnel Payroll Information System (IPPIS), Government Integrated Financial Management Information System (GIFMIS), and Treasury Single Account policy, treasury single account (TSA) all charged to with the task of curbing corruption, managing and handling government financial resources and personnel database and salaries in Nigeria.

2.1.2 Treasury Single Account

Treasury Single Account (TSA) is a policy enforced in Nigeria to resolve difficulties encountered in public financial management³. It was introduced to eradicate financial misappropriation, promote accountability, consolidates all government accounts, thereby facilitating transparency and blockade of revenue loss in the MDAs⁴. It was initiated in Nigeria by the federal government in collaboration with the Central Bank of Nigeria (CBN) and other stakeholders through the IMF/World Bank Assisted programme. Besides, the Treasury Single Account (TSA) gives a consolidated view of government cash resources. It is an account or a set of combined accounts through which the government transacts all its inflows and outflows⁵. It is

a form of centralized accounting system adopted by the government whereby all revenue inflows and outflows are performed from a single pool of Consolidated Revenue Account (CRA) at the Central Bank of Nigeria (CBN)⁶.

In an emerging economy like Nigeria, inefficient treasury management presents to Government, a situation where unexpended budgetary allocation is piled up in fragmented bank accounts while the government goes borrowing to finance budgets⁷. Over the years, developing countries with low income handle government receipts and payments through disjointed banking arrangements⁸. According to the former Accountant General of the Federation, before the adoption and implementation of TSA, Nigeria had fragmented banking arrangements for revenue and payment transactions. He further declared that the establishment of government consolidated cash balance per time and the deployment of the aggregated cash balances by the government for other use was not possible due to the multiplicity of bank accounts run by the MDAs prior to the adoption of the TSA policy⁹. Another evidence revealed that deposit money banks loss of idle and active governments deposits in Nigeria may hit over two trillion Naira (N2,000,000,000,000) by the end of the third quarter of 2015¹⁰. Hence, the ministry of finance/ treasury lacked a unified view and centralized control over the government's cash resources.

The notion of treasury single account was triggered when some agencies refused to declare and remit the twenty-five per cent (25%) of their annual revenue they generated to the treasury as demanded by law. This practice gave birth to misappropriation of huge sums of money and idle balances lying fallow in multiple accounts that serve no purpose among other vices perpetrated within the public sector. The quest to address and forestall this ugly trend paved the way for the

adoption and implementation of Treasury Single Account policy. After the initial introduction of TSA, in 2012 about one hundred and twenty billion naira (N120,000,000,000) was forcefully collected by the government from MDAs as twenty-five per cent (25%) of their gross revenue to the treasury alongside another thirty-four billion naira that were collected in 2013. Before the advent of TSA, MDAs' willingness to remit the statutorily required amount to the treasury was very questionable.

TSA policy is primarily formulated to aggregate all government funds in bank accounts within the effective control and operational purview of the treasury, to: facilitate centralized, transparent and accountable revenue management; facilitate effective cash management; promote efficient management of domestic borrowing at minimal cost; allow optimal investment and utilization of idle cash; plug drains in revenue management; establish an efficient allocation and collection apparatus for government funds; Increase liquidity reserve, and eradicate operational inefficiencies and costs connected with preserving fragmented accounts in many banks..

The Senior Special Assistant to the Vice President on Media and Publicity Laolu Akande, declared that all receipts due to the Federal Government or in lieu of any of its agencies must be remitted into the TSA dedicated account run by the Central Bank of Nigeria (CBN), except otherwise expressly instructed. This arrangement ends the previously known system of several fragmented accounts for government revenues, incomes and receipts which in some developing economies have meant the leakages or loss of legitimate income meant for the federation accounts¹¹.

It can also be said that the debt servicing cost and processes of a country would be well-managed courtesy of the implementation of TSA. It was opined that with the implementation of TSA,

government borrowing will reduce and in turn, reduce the debt servicing cost drastically¹². TSA is meant to facilitate accountability of government revenue, prudent utilization, enhance transparency and avoid misappropriation of public funds. It is to allow for transparency on unspent budgetary allocations and ensure that it is carried forward automatically to the next year¹³. TSA will help the government to aggregate cash resources in real time and reduce borrowings necessitated by perceived cash shortages arising from holding so many government banks accounts in fragmented system¹⁴.

The consolidation of revenues collected in to TSA paves way for the timely capture and payment of all due revenues into government coffers without the intermediation of multilayered banking arrangements¹⁵. Among other objectives for the implementation of TSA policy include: reducing transaction costs during budget execution, majorly by eliminating the delay in the remittance of government revenues (both tax and non tax)¹⁶. These objectives have also been pointed out in other study to include facilitating quick reconciliation between banking and accounting data; proper management and monitoring of funds allocated to various government agencies¹⁷.

2.1.2.1 Benefits of TSA

The introduction and adoption of the Treasury Single Account policy was key in eliminating the series of fragmented bank accounts operated by ministries, departments and agencies (MDAs) towards promoting financial accountability among others.

The importance of Treasury Single Account in Nigeria cannot be negotiated in ensuring that this nation is free of corruption in public offices and from their private collaborators. Also, it ensures that government can know and account for its money from all sources at a glance¹⁸.

In essence, it will assist the Accountant General to track and ascertain per time the government treasury through a consolidated view of all balances. Besides, TSA policy will bring about efficiency in revenue remittance and reporting, as well as proper cash flow management. This will foster higher transparency and cut down corrupt practices that previously plague public financial management. Centralization of treasury activities will offer a nation the ability to achieve higher efficiency, greater transparency and access to real-time information across a broad geographical area and many spending MDAs. "TSA policy is formulated, adopted and implemented to plug revenue leakages and foster a healthy public financial management practice.

First, it will remove that organizational secrecy around the management of public finances within the MDAs; the unrestricted aspect of accounting officers and politicians joining forces to do all manner of business with government finances before executing projects, thereby causing undue delays or negotiating interest rates with the banks; another one is that revenue generating agencies that have been depriving the Treasury of due revenue through a plethora of bank accounts under their control and secret to the authorities will no longer persist since all funds will be swept into the TSA. Besides transparency and accountability, the TSA introduces economy and efficiency into the overall management of public finances and in turn, leads to effectiveness of government spending since it places government in a better position to realize its overall policy goals"¹⁹.

The benefits of a TSA flow from its objectives, which includes that it allows complete and timely information on government cash resources²⁰. Information is readily made available in countries with developed e-banking system, best of technological infrastructures, and well interfaced Integrated Financial Management Information System with the banking system. As a

minimum requirement, updated balances should be made available periodically.

The TSA policy has also assigned more power to the MoF over budgetary allocations and as well strengthened the authority of the budget appropriation. Where multiple bank accounts are kept, the result is often a disjointed system, where funds provided for budgetary appropriations are augmented by additional cash resources through other extra-budgetary measures. However, where the treasury is privy to full information about cash resources at its disposal, it plans and implements budget execution in an efficient, transparent, and reliable manner. The reality of improbability regarding the sufficiency of the treasury funds to finance budgeted expenditures may lead to questionable behaviours by budget entities, like as inflating their estimates for cash needs or directing expenditures through off-budget arrangements²¹.

Also, it was asserted that a treasury single account enables efficient cash management. TSA expedites steady monitoring of government cash positions. It also allows for qualitative analysis of cash volume to be undertaken (for instance, identifying causal factors of variances and distinguishing causal factors from random variations in cash balances), reduces bank fees and transaction costs. It reduces or even eliminates the huge administrative cost of banking activities through the adoption of a unified or centralized payment system. It removes the ambiguity surrounding the volume or the location of the government funds, and facilitates precision in the monitoring of payment. It results in a significantly reduced transaction costs due to the economies of scale in involved in processing payments.

The institution of TSA has resulted in the elimination of the "float" in the banking and the payment systems, and the introduction of transparent fee and penalty structures. Many MDAs have achieved considerable reductions in their actual cost of banking services with the adoption of TSA, improved bank reconciliation and quality of fiscal data. It also allows for effective settlement between the government accounting systems and cash flow statements from the banks. This reduces the risk of errors in reconciliation processes, and improves the timeliness and quality of the fiscal accounts and lastly, lowers liquidity reserve needs. TSA reduces the volatility of cash flows through the treasury, thus allowing it to maintain a lower cash reserve/buffer to meet unexpected fiscal volatility.

Other benefits as pointed out by various scholars. The adoption and implementation of TSA policy would block leakages, where hitherto resources were usually drained. Ministry Department or Agency (MDA) that has various accounts without any particular one designated for receiving inflows can easily indulge in the illegal or corrupt act by directing his clients to pay into any of the various bank accounts to cover up their illicit track. Besides plugging loopholes, it also breeds accountability. All inflows can be effectively monitored which in turn facilitates proper documentation²². The Treasury Single Account (TSA) policy was adopted to address the lingering issues of corruption and financial leakages in the handling of government fund among the MDAs through the centralization of all government's account.

It is a silver bullet destroying all the ties among the corrupt collaborators on government's money. It is therefore expected that this policy, with its attendant benefits will restore the hopes of economic prospect by the Nigerians²³.

TSA is also deemed to remove organizational secrecy around public fund in MDAs. The notion of accounting officers and politicians collaborating to carry out all manner of business with government funds before executing projects, causing unnecessary delays or negotiating interest rates for Personal interests and gains with the financial institutions will cease while full accountability would be achieved through the elimination of fragmented banking arrangements²⁴.

TSA will facilitate effective budget planning and execution, timely disbursement of project funds and effective application of accrual accounting system on unspent budgeted fund in a government fiscal year which is currently at one trillion naira, about one-third of the federal government revenue before borrowing^{25, 26}.

In Nigeria, TSA is a key element of an efficient and effective public financial management system and an essential tool for minimizing government and frivolous spending which was introduced by the federal government of Nigeria to fight against corruption²⁷.

2.1.2.2. Accounts under TSA system

The following are the various bank accounts under a TSA system as pointed out by an IMF working paper²⁸. They are the: TSA main account; TSA Subsidiary Accounts or Sub-accounts; Transaction account, Zero-balance accounts (ZBAs). Imprest accounts; Transit accounts; and the Correspondent accounts. The TSA central account is the treasury account that consolidates the government's cash position. It is run and kept by the central bank. It is the core TSA account when the TSA organization for a country involves severally linked accounts. It is the focal account into which all revenue receipts flow into and from which all disbursements are made.

The TSA Subsidiary Accounts or Sub-accounts by design, acknowledged that they are inherently part of a whole single account, in that they do not keep separate cash balances. However, they

are just special subsets. It is an arrangement that affords the government the opportunity not only to identify but also to link the individual accounts (MDAs account) to the main TSA. This is necessary in order to achieve efficient cash management.

Concerning the transaction accounts, it has been stressed that sometimes, government bank accounts that are justified for retail transaction and banking operations are opened separately and structured as transaction accounts. These separate transactions accounts are opened for MDAs whose peculiarities and uniqueness call for it. It is also allowed when they lack direct access to the TSA's main or the subsidiary's account and/or a specific category of operation. For example, special fund etc. A transaction account could take the form of a zero-balance account or an imprest account. In the aspect of Zero-balance accounts (ZBAs), where transactional accounts are inevitable, they are commonly opened on a zero-balance basis whereby the balances in them are emptied into the main TSA account as periodically set or mandated. The principal purpose of these accounts opened in the money deposit banks is to collect revenue for the government through the MDAs and also pay for the MDAs while the banks wait to be reimbursed by the TSA, mostly overnight.

ZBAs are similar to the special credit line set-ups in that it gives the MDAs a credit limit to settle their obligations in given period. The processing time for each transaction is also shorter because the arrangement actually bypasses the regular inter-bank settlement process in a developing country like Nigeria. It also facilitates a real time reconciliation of all cash inflows and outflows channeled through this account. They are also allowed to build up cash to a particular ceiling. Regardless, the multiplicity of imprest accounts kept should be reduced and the goal should be to gradually transit these accounts into zero²⁹.

Conversely, to imprest account, transit accounts are not meant for day-to-day transaction banking operations of government units. A transit account is primarily created to monitor cash collections and contain it flow before the ultimate flow into the TSA main account. Transit accounts are essential for major revenue streams not only to monitor their inflow and remittance by the banking system and but also to facilitate revenue sharing according to constitutional provisions among the different levels of government. Concerning correspondent accounts, a separate ledger account is opened for each correspondent. The correspondent MDAs have real-time information on the cash balances it keeps in the TSA. There should be safeguards to ensure that each correspondent government is provided with the funds needed to implement its budget promptly. The central bank, which keeps the accounts in the TSA, has the responsibility to make payments up to the tune of the balances available in a correspondent's account (MDA) including the required ex-ante control for authorizing payments.

2.1.2.3. TSA structure

Despite the numerous variants of the TSA structure that conform to its objectives, they can be broadly grouped into two categories: centralized and distributed TSA architectures. The TSA system practiced in many countries reflects the stature of either of these two models, centralized or decentralized. A purely centralized model is one in which all revenue and cash disbursement of the government passes through a single account maintained by the central bank of the country.. On the other hand, a TSA could be arranged such that line agencies—down to the lowest level in the organizational hierarchy—are allowed to retain separate transaction accounts in the banking system. Nevertheless, the balances in these accounts are emptied into the TSA's main account at the close of the day³⁰.

2.1.2.3.1 Centralized Structure

Under this arrangement, (a) all payment from line agencies are passed down through the Treasury; (b) the Treasury is responsible for making payments from the TSA which is held at the Central Bank; (c) the central bank is responsible for retail banking operations associated with government payments and receipts³¹.

"The requirements for the implementation of a centralized architecture include the main treasury office at the centre, second-tier treasury offices at the state level. Line Ministries and head offices in this arrangement communicate with the central level treasury office and their subordinates spending units communicate with the nearest regional/district office to process payment transactions. Spending units send their expenditure transactions to the nearest treasury office for payment. These offices send the approved expenditure transactions to the nearest branch of the central bank where TSA is held for payment to the vendor. In other cases, Treasury has offices only at the centre. Spending unit in this situation routes their transactions to the treasury through their respective parent Ministries which then pass them to the Treasury."

In some countries, the TSA is purely a single bank account at the central bank, which is operated either by a centralized authority (such as the treasury and its regional units) or by several budget institutions. In the latter case, each MDA's budget transactions are monitored and managed through a well-designed general ledger system³².

2.1.2.3.2 Decentralized Structure

In a decentralized context, MDAs are allowed to keep separate transaction accounts. This is usually when the central bank does not have an adequate network of branches or capacity to handle large volumes of payment and receipt transactions³³. In such cases, the central bank delegates the responsibility of retail banking operations to authorized deposit money bank(s) who make payments on behalf of the Treasury, receives government revenues and make daily deposits to the TSA in the Central Bank. This process minimizes float and expedites payment when necessary.

Prerequisite for the success of this system include: the float of all payments transferred to the TSA should be as small as possible; the Bank accounts should continue to be under the surveillance and control of the Treasury, though they may be run by the agencies; account balances should be emptied to the TSA as periodically mandated to ensure that the government's cash position is readily known and to optimize borrowing strategies; and the efficient banking system with up to date technology has to be in place to support the TSA transfer and processes demands.

In a decentralized structure, there are several linked bank accounts outside the TSA main account – with their balances automatically swept off at the end of each day as it is the case with Sweden. Individual line agencies are allowed to have separate transaction accounts and operate them. The TSA in this respect is tailored to accommodate the need of the spending agencies by opening an account for them at either the CBN or the money deposits bank; in both cases, the accounts must be authorized by the Minister of Finance; these accounts are zero-balance accounts with money being transferred to the accounts as specified approved payments are made; the balances in the accounts are automatically swept at the end of each day (where the banking infrastructure allows

daily clearing) to the TSA main account; and the central bank consolidates the cash balances in all the government accounts at the close of each day³⁴.

2.1.2.4 Transaction Processing under TSA

The two main transaction processing models are the centralized or distributed TSA design³⁵.

2.1.2.4.1. Transaction Processing Model

Centralized transaction processing is a situation whereby authorities at the treasury process transactions through the TSA. In this case, the treasury (supplemented in some countries by a network of regional treasuries) provides payment services on behalf of the spending agencies (MDAs) and has the sole permission to run the TSA, including its regional treasury sub-accounts.

Hence, the spending agencies submit their payment requests to the centralized authority/treasury for approval before making payments. Such operation of TSA may be centralized as in the case of Brazil and France or decentralized as in the case of the United Kingdom. However, only the centralized authority maintains the TSA main account and transaction accounts though there may be separate transaction accounts for each regional treasury unit and/or

Decentralized payment and accounting systems exist in an arrangement whereby each spending institution processes its transactions during budget execution and directly operates the respective bank account under a TSA system. Again, this type of transaction processing model could be linked to either the centralized (e.g., India, where a single bank account at the Reserve Bank of India, the central bank, bank, is complemented by subsidiary ledger accounts to record and control payments traceable to individual line ministries) or the distributed TSA structure (decentralized) in countries like Sweden, where each decentralized budget institution keeps more

than one transaction accounts). A system where the TSA structure accommodates both the centralized and the decentralized system, an effective and efficient interbank settlement system is not negotiable. This is essential to offset numerous pending transaction accounts with the main TSA.

2.1.2.4.2 Centralized model

Under this model, requests for payments are prepared by individual budget agencies and sent to a central treasury payment unit for approval and execution. The core payment unit administers the array of pending outstanding.

This model optimizes the benefit of cash management on the one hand, and expenditure control and transaction accounting on the other hand. However, the centralization of expenditure transaction processing can also lead to inefficiencies like high transaction costs and probable grounds for corruption in countries where the control systems are inadequate.

Another subject of consideration is the autonomy granted to the spending agencies as to whether they can they can authorize commitment or not In the latter case, if the commitment control and payment systems are not well synchronized, the spending agencies (MDAs) may enter commitments well beyond the authorized cash profile that serves as the basis to process payments due to information gap. Hence, when the commitments mature, payment arrears may occur when the commitments due for payments.

Despite the fact that disbursements and other accounting functions are centralized, each of these MDAs are handled and administered separately through the treasury ledger system. Therefore, information on the individual ledger accounts of the spending agencies (MDAs) (including information on their respective transactions) is maintained and controlled internally by the

treasury and thus not visible to the banking system. Under this model, only the treasury central unit (at the CBN) deals with the deposit money banks, making payments from the TSA and receiving collected revenues into the TSA.

The central unit processes and records all revenue receipts, payment and cash balances to the appropriate ledger account in respect of each of the MDAs.

However, the maintenance of budgetary accounting may still rest heavily on individual spending agencies (particularly when commitment control is not centralized). Clear procedures should therefore be well entrenched in the system synchronize and settle the account maintained by both the spending institution and the central payment unit.

2.1.2.4.3. Decentralized model

Under this arrangement, individual spending institutions process and make direct payments to their contractors or suppliers and later settle it through the TSA system. Modern technology allows electronic links between spending agencies, the central bank, the deposit money banks, and the treasury. The treasury sets the cash limits—monthly or quarterly—for the total amount of disbursements to be made by a particular MDAs, but does not control individual transactions.

Therefore, an arrangement of centralized cash control but decentralized responsibility for commitments, payments among accounting functions. This model confers on the spending agency, the responsibility of internal control and management while keeping central control of cash through the TSA. The authority to make commitments is granted to the budget agencies periodically (quarterly) by the budget office, and cash limits are set by the treasury, often every month.

Another form of a decentralized model is a situation whereby TSA sub-accounts for line ministries and zero-balance accounts for individual spending agencies within each line ministry

are combined. Under this arrangement, the ministries/departments maintain sub-accounts of the TSA at the central bank. Various sub-accounts would be set up for different institutional types and each may have different operating rules, For example, ministry of education would maintain a sub-account of the TSA at the central bank under the directive of the minister of finance while various sub-accounts would then be set up for each institution within the ministry with different rules governing their account operation depending on their peculiarities. At the same time, individual spending agencies (the institutions, for example, a university or other educational institutions) within a parent ministry/department will have zero-balance transaction accounts authorized by the treasury, generally in deposit money banks. Hence, balances are automatically swept at the end of each day (if the banking sector can do this) into the sub-account of the TSA operated by the ministry. Daily, the central bank records the cash to the appropriate major institution sub-account in the central bank in order to reflect the government's cash balance position at the close of the day

Under the decentralized model, the process of sweeping a large number of bank accounts may breed some elements of inefficiencies. Nevertheless, this model will work well in a situation whereby fast electronic clearing of payments exists.

The efficiency of each model, including its capability for immediate reporting, is dependent on the availability of revenue and expenditure information at different stages of the budget execution cycle.

Globally, there are other forms of decentralized system that do not qualify to be categorized as a TSA models. For instance, in some countries, budget institutions maintain their bank accounts in the central bank or a deposit money bank to which cash transfers are made from the central bank. These transfers are recorded as expenditures even when they are paid to the final recipients at a

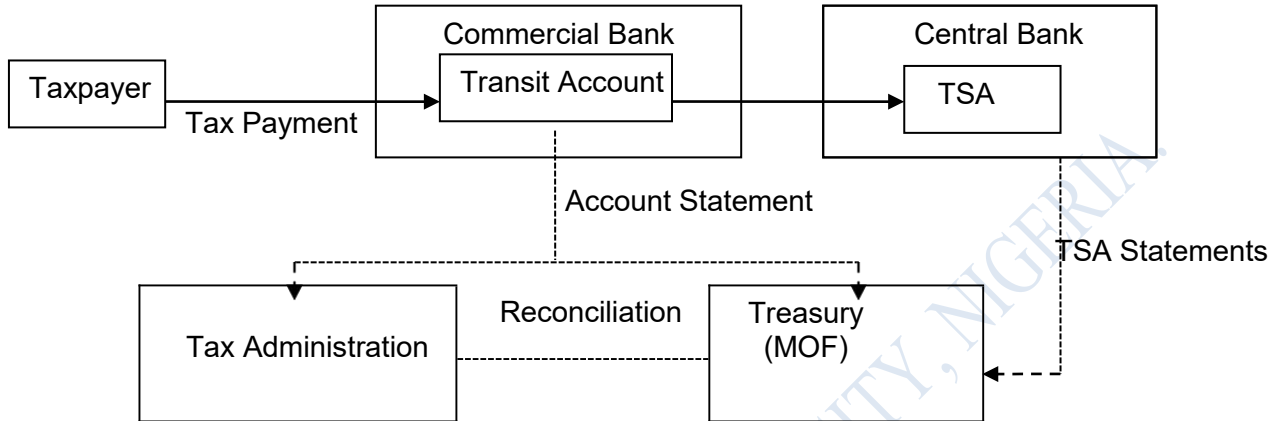
later period. This implied that funds can be kept at the spending agencies bank account. Since this model permits the maintenance of idle balances in bank accounts, it is not a TSA³⁶.

2.1.2.5. Receipt and payment under a TSA system

Unprecedented improvement in banking system across the world due to technological advancement is, without doubt, one of the reasons central to the effective working of TSA³⁷. This improvement includes accelerated and electronic payment systems expanded; the availability of electronic banking networks at commercial banks allows for very effective, virtually cost-free sweeping of balances daily.

In so far as banks are by the government to collect revenue in most countries for a fee, international best practice demands that banks transfer the collected revenue to the TSA account daily. By so doing, floating revenue in transit is therefore eliminated. However, in some countries of the world like Colombia, banks are allowed to float revenue for some days before actually remitting to the main TSA account. The banks, in turn, invest the revenue collected in interest-bearing securities to make again for the revenue services rendered to the government, a process that is said to distort the structure of TSA and its concept.

Figure 1. Revenue circuit for a decentralised payment structure



Source: IMF manual

The taxpayer makes the payment to a transit account in a commercial bank. The funds are automatically remitted to the TSA in the central bank at regular intervals (for instance, at the end of the business day or more frequent intervals if an RTGS is used). Each day the bank submits an account statement (ideally in electronic format to facilitate reconciliation) to the tax authority and to the treasury, which is used for reconciliations against taxpayer records (tax authority) and the TSA (MoF/treasury). As mentioned above, an RTGS could enable within-the-day transfers from taxpayers' accounts to the TSA, via commercial bank accounts.

In countries where the banking system does not have a network of branches with ample coverage and the communication infrastructure is inadequate, the treasury

might have to collect revenues through its regional offices. In some countries, the treasury contracts with private sector companies (non-banking companies) for the collection of government revenues in geographically dispersed areas. These difficulties significantly compromise the TSA concept but can only be improved as the electronic banking infrastructure is developed³⁸.

2.1.2.5.1. A centralized payment system

The broad objectives of a disbursement system are to pay the government's obligations in a timely and cost-effective manner and to minimize rooms for fraud and theft among other corrupt vices³⁹. Introduction of TSA in Nigeria has the objectives of blocking revenue leakages, revving up revenue for the government and consolidating all government revenue for view at a glance. This is not possible without an effective payment system through which taxpayers and other fees can be paid into the government's coffers.

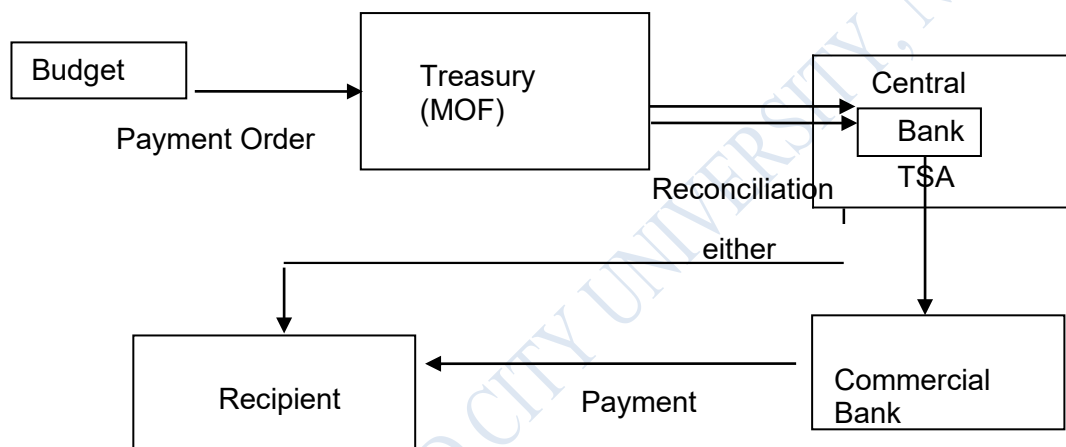
"A computerized treasury system (like IFMIS) and an advanced communication devices permits electronic fund transfers from the TSA to the beneficiary's account, thereby eradicating payment delays and idle balances.

With respect to revenue collection, one of the goals of the treasury should be to eliminate payment delays. The good international practice has been to automate the payment processes and adopt an electronic payment system, with direct payments to the bank account of the beneficiary.

The feasibility of a daily settlement between the ZBAs of budget institutions and the TSA main account depends upon the technology used for interbank settlements (e.g., settlements and reconciliations performed electronically) and the type used by the central bank itself for clearing of collections and payments with

the money deposit banks (Appendix II). A procedure for centralized payments by the treasury is described in Chart 2. The spending units submit payment requests (payment order (PO)) to the treasury, which checks them against the authorized limits and processes them for payment from the TSA through one of the interbank payment systems. The funds are deposited in the recipient's account in deposit money banks.

Figure 2; Centralised payment by the Treasury from the TSA



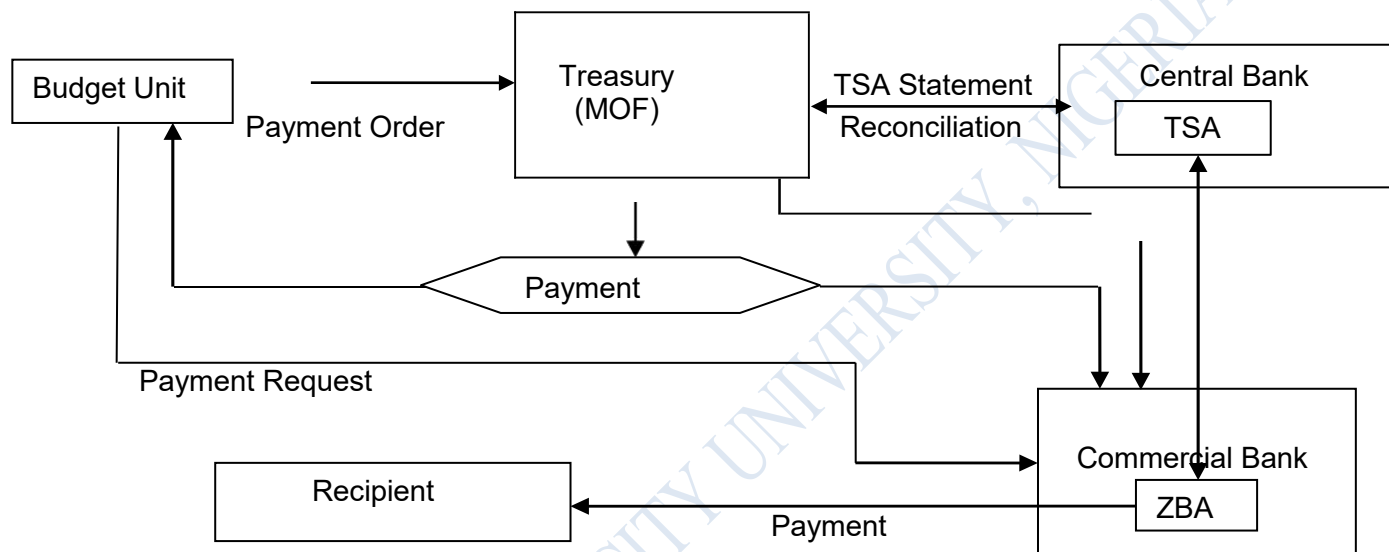
Source; IMF manual

2.1.2.5.2 Decentralized payment system

In a decentralized system, the respective spending agencies verify the POs and directly submit them to the deposit money banks for payments to be made from the ZBAs, as described in Chart 3 below. In lieu of this form, the operation of individual payment transactions is disjointed or decentralized. Meanwhile, the centralized cash control is enforced through total cash

disbursement ceilings set by the treasury or ministry of Finance on each of these ZBAs. These limits are notified both to the respective deposit money banks and the payment controllers in spending agencies⁴⁰.

Figure 3: Decentralised payment structure through the ZBAs



Source: IMF manual

"If commercial banks provide transaction banking services, strategies for obtaining payment processing and revenue remittance services from them should be carefully formulated keeping in view the reach, quality of service, and risk exposure of the commercial banking network. In cases where the authorities want the taxpayer to be able to remit taxes at any bank of his choice, the strategy for revenue remittance services would differ from that for payment processing services. For example, the remuneration of banks providing revenue remittance services could be based on the unit price per electronic transaction instead of being linked to

the turnover value of transactions and penalties should be charged for delays in the transfer of government funds to the TSA"⁴¹.

2.1.2.6. Envisaged Challenges of TSA

As laudable and promising as TSA policy is, the introduction and implementation were not without some challenges and difficulties from the Nigerian tertiary institutions especially the academic sector. Despite the numerous benefits of the adoption of TSA, its challenges abound⁴². Yusuf stated that the head of revenue-generating agencies and their parent ministries are not comfortable with the TSA regime because it will limit their control over the funds⁴³. Another scholar cited the notorious bureaucratic processes common with the public sector at various levels of approvals as possible causes of the envisaged delays⁴⁴.

Analysts have also suggested that the policy could lead to delay in operations of governmental agencies given delays and time lost between payments and appropriations for spending⁴⁵. The National President of the Academic Staff Union of Polytechnics (ASUP), Comrade Chibuzo Asomugha claimed that Treasury Single Account policy introduced to block financial leakages in government will hamper the smooth running of Nigeria's tertiary institutions.

Also, at the NEC meeting of the Union, Academic Staff Union of Universities (ASUU) national chairman, Nasir Isa Fagge alluded that TSA could constitute a bottleneck in the smooth running of Nigeria University system⁴⁶. Similarly, the Academic Staff Union of Universities (ASUU) criticized President Muhammadu Buhari's Treasury Single Account (TSA) policy, barely a month after the Academic Staff Union Polytechnics condemned it. According to ASUU, the TSA would create bottlenecks in the smooth running of the Nigerian University System if speedily implemented⁴⁷.

Another scholar posited that if the political willingness to see it through is achieved, the chances of successful implementation will be great. The second challenge improbability surrounding enforcement of the TSA on the big shots of the Nigerian economy like the Nigerian National Petroleum Corporation (NNPC). It is a big corporation with big tickets and challenges and issues that need responses on a day-to-day basis. It may be expedient to set up special rules and conditions to guarantee that they comply with the TSA⁴⁸.

2.1.2.7. TSA implementation in Nigeria

The introduction of the Treasury Single Account policy, therefore, was necessary in reducing the proliferation of fragmented bank accounts operated by ministries, departments and agencies (MDAs) towards promoting financial accountability among governmental organs. The compliance with the policy in Nigeria is a challenge for the majority of the MDAs⁴⁹. The National President of the Academic Staff Union of Polytechnics (ASUP), Comrade Chibuzo Asomugha claimed that Treasury Single Account policy introduced to block financial leakages in government will hamper the smooth running of Nigeria's tertiary institutions while addressing journalist in Abuja. Asomugha said though ASUP is fully in support of Buhari's effort to block financial leakages and prevent mismanagement of government's revenue, there is a need for special consideration for educational institutions in the country. According to him, if the revenue generated by tertiary institutions, which are needed for their day-to-day running is to be remitted as prescribed by the TSA policy, the effect would be counterproductive⁵⁰.

“The tertiary sub-sector is purely service-oriented and its revenue is specifically tied to the daily running of the institutions and for the provision of consumables needed for teaching and learning.

"The TSA, though well-intended, will tie down the processes of the provision of daily needs of the institutions and therefore hamper efficient service delivery"⁵¹.

NEC meeting of the Union, Academic Staff Union of Universities (ASUU) national chairman, Nasir Isa Fagge alluded that TSA could constitute a bottleneck in the smooth running of Nigeria University system⁵². In the same vein, Academic Staff Union of Universities (ASUU) has criticized President Muhammadu Buhari's Treasury Single Account (TSA) policy, barely a month after the Academic Staff Union of Polytechnics (ASUP) expressed similar concerns. According to ASUU, the TSA could constitute bottlenecks in the smooth running of the Nigerian University System if hurriedly implemented. Nevertheless, some quarters of the economy also backed the adoption and implementation of TSA policy in Nigeria. The former Accountant-General of the Federation (A.G.F), Jonah Otunla, also backed the implementation of TSA stressing that it would bring about transparency, efficiency and accountability. This is because TSA is bound to improve transparency and accountability in public finance management. First, it will remove that organizational secrecy around the management of public finances.

The discretionary aspect of accounting officers and politicians collaborating to do all manner of business with government finances before executing projects thereby causing delays or negotiating interest rates with banks for private gains will be over. The second is that revenue generating agencies that have been depriving the Treasury of due revenue through a plethora of bank accounts under their purview and which is not known to the authorities will no longer be able to defraud the revenue since all funds will be swept into the TSA. Thus, beyond transparency and accountability, the TSA will introduce economy and efficiency into the overall

management of public finances and this will, in the long run, lead to effectiveness of government spending since it places government in a better position to realize overall policy goals⁵³.

Studies have shown that economic watchers believe that the implementation of TSA policy will resolve the problems identified by scholars as the policy will enable the government to centralize government revenues in one account or a set of accounts in the Central Bank of Nigeria (CBN)⁵⁴.⁵⁵. Another scholar in his study reacting to the TSA policy said: "with TSA leading to the closure of about ten thousand (10,000) multiple bank accounts operated by MDAs in commercial banks will wake them up from their slumber. This is because the era when the government's money is either lent back to government or invested in forex speculations is over"^{56, 57}. Implementation Strategies and Government Account management at CBN. The implementation guidelines further outlined the following Accounts which shall be maintained at the CBN for the associated purposes to facilitate implementation, reconciliation and appropriate reporting.

Federation Account- All revenues to be shared among the three tiers of government are to be deposited into this account in line with Section 162 of the Constitution. The Federation Account is a distributable pool account that already exists at the CBN.

Consolidated Revenue Fund (CRF/TSA) – This is the Federal Government pool account into which all receipts of the Federal Government and its MDAs shall be paid in line with Section 80 of the Constitution. Following the existing TSA structure, this account has been designed as the Main TSA account. The CRF/TSA currently exists at the CBN.

MDA Sub-Accounts—All receipts in favour of MDAs under Categories 2 – 5 and 7 - 8 not being revenue or other monies meant for the CRF under extant laws, rules and regulations; are to be

deposited directly into their respective Sub-Accounts. Qualifying MDAs will be granted access to withdraw funds based on their approved budget. The Sub Accounts will be linked to the TSA.

Table 1 MDA Category

S/N	MDA Category	Examples	Implementation Strategy
1.	MDAs fully funded through the Federal Government Budget	All Ministries, Departments, Agencies and Foreign Missions etc.	<ul style="list-style-type: none"> i. All Collections from these Agencies to be paid directly into the CRF/TSA ii. Expenditure to be drawn from CRF/TSA based on Annual Budget
2.	MDAs -partially funded through the Federal Government Budget but generate additional revenues	Teaching Hospitals, Medical Centers, Federal Tertiary Institutions, etc.	<ul style="list-style-type: none"> i. All Collections from these Agencies to be paid directly into the CRF/TSA, except for extra-budgetary receipts which are be paid into Sub-Accounts at CBN, which are linked to TSA ii. The platform will be configured to allow access to funds based on the approved budget

3. MDAs not funded CBN, SEC, CAC, through the Federal NPA, NCC, Agencies to be paid into Sub-Budget but expected to FAAN, NCAA, Accounts at CBN, which are linked pay to operate NIMASA, NDIC, to TSA surplus/25% of Gross NSC etc.

Earnings to the CRF

i. All Collection from these
ii. The platform will be configured to allow access to funds in the Sub Account(s) based on the approved budget

4. MDAs that are funded NNPC, FIRS, from the Federation NCS, MMSD, Account DPR Account

i. All Federation revenues generated by these Agencies to be paid into the Federation Account at CBN

ii. All Independent Revenue generated by these Agencies to be paid into CRF/TSA

iii. FGN Share of Federation Account to be paid into CRF/TSA

iv. Statutorily approved cost of Collection to be deducted from

Federation Account and paid into Sub-Accounts at CBN which are linked to TSA

v. The platform will be configured to allow access to funds in the Sub Account(s) based on the approved budget

5.	Agencies funded through the Special Accounts (Levies)	NSC, PTDF, etc.	RMRDC, NITDA,	i. Sub-Accounts linked to TSA to be maintained at CBN.
				ii. All IGR collected to be directly into the CRF/TSA
				iii. The platform will be configured to allow access to funds in the Sub Account(s) based on the approved budget
6.	Profit oriented Public Corporations/Business Enterprises	BOI, BOA, Hilton, etc.	NEXIM, Transcorp	Dividends from these agencies to be paid into the CRF/TSA

7.	Revenue Generated under Public Private Partnership	All Incomes from PPP arrangement e.g. Production of International Passports, Seaport, Concession Arrangement etc.	<ul style="list-style-type: none"> i. TSA Sub-Account ii. FG portion of the collection to be paid into CRF/TSA iii. Partners portion of the revenue to be transferred to the partner's account
8.	MDAs with Revolving Funds and Project Accounts	Drug Revolving Funds, (Teaching Hospitals, Universities) Fertilizer Revolving Fund, Roll-Back Malaria, SURE-P, etc.	<ul style="list-style-type: none"> i. Project Account (Revolving Funds) to maintained at CBN ii. Collection (IGR) from these Agencies to be paid to CRF/TSA iii. The platform will be configured to allow access to funds in the Sub Account(s) based on the approved budget

Source: A working guideline for TSA implementation in Nigeria

2.1.2.8 E – Payment in Nigeria

It is defined as electronic payment as a form of financial exchange occurring between the buyer and seller facilitated using electronic communication⁵⁸. The value of electronic payment goes way beyond the immediate convenience and safety of cards to a greater sphere of contributing to overall economic development⁵⁹.

E-payment is also defined as electronic transfer of cash via online transactions for business-to-business (B2B), business-to-consumer (B2C), person-to-person (P2P), and most recently administration-to-consumer (A2C) purposes. A2C payment addresses the payment of taxes toward the government⁶⁰.

The payment system is an operational network governed by-laws, rules and standards that links bank accounts and provides the functionality of monetary exchange using bank deposits⁶¹. The payment system is the infrastructure consisting of institutions, instruments, rules, procedures, standards and technical means established to effect the transfer of monetary value between parties discharging mutual obligations. Its technical efficiency determines the efficiency with which transaction money is used in the economy and risk associated with its use⁶².

A national payment system is, therefore, a set of interactive elements, operational mechanisms and institutional arrangements for domestic currency payments in an economy. Electronic payment system involves the arrangements for automated processing of transactions, through information technology for the finality of payment without recourse to physical evidencing in the first instance⁶³. It is faster and swifter than the traditional model as well as the paper-based mode of payment. As funds are transferred electronically and value is immediately given, e-payment enables large value transaction to be undertaken and payments effected within seconds, thus facilitating business transactions and commerce in general as well as reducing payment system risks.

2.1.2.9 Remita

Remita is a software developed by System Specs. It is an indigenous professional software company founded by John Tani Obaro. A Central Bank of Nigeria (CBN) licensed platform, developed in Nigeria and helps organisations and individuals receive and make payments. The software, which has become the flagship creation of the company, is used by the Central Bank of Nigeria for payment and collections of funds on behalf of the Federal Government of Nigeria for the treasury single account (TSA). In October 2011, Remita was selected by the federal government to provide the electronic payment technology needed to power the Treasury Single Account (TSA) scheme⁶⁴.

Remita can be used to make payments from all accounts in all banks on a Single platform, receive funds through Debit credit cards, Branches of all banks nationwide and automate payroll and deliver payslips to all staff of the organization⁶⁵. It is a multi-channel funds collection platform that supports all types of biller organizations. It can be used to collect various types of revenue for the government. It was pointed out that the agreement with SystemSpecs is that one per cent (1%) of all collected sums from MDAs would be deducted and shared among SystemSpecs, the affected bank and the CBN in the ratio of, fifty per cent, forty per cent and ten per cent respectively⁶⁶.

2.1.2.10 TSA Payment Infrastructure

TSA operations are conceptualized and designed to be operated on a full end-to-end basis across various approved electronic channels, for all payment and collection transactions⁶⁷.

Following a review of options, Remita was adopted as the Payment Gateway for the federal government's TSA in October 2011 and commenced operations in January 2012⁶⁸. E-Collection

is an electronic initiative for the collection of FG revenue such as fees, taxes, duties, tariffs etc⁶⁹. It serves as the receipt element of the TSA concept. The initiative was adopted by CBN through the formation of an inter stakeholder implementation committee set up in 2003, comprising the office of the Accountant General of the Federation, representatives of DMBs and payment service provider (system specs) to develop modalities for its operation⁷⁰.

-Speaking extensively on the role of a secure and efficient gateway for the TSA, Igbalajobi holds that the electronic gateway bridges the government system (TSA) with the commercial banks so that people can pay the government electronically and from different locations. It also provides payers with multiple channels to make payment to Government and makes the TSA available for round the clock transactions⁷¹.

FGN e-collection scheme is a comprehensive electronic solution for the remittance, management and reporting of all federal government receipts (revenue donations, transfers, refunds, grants, fees, taxes, duties, tariffs etc) into the TSA and sub-accounts maintained and operated at the CBN.

2.1.3 Integrated Personnel Payroll Information System in Nigeria (IPPIS)

IPPIS is one of the public financial management reforms in the economic reform programme initiated by the World Bank in 2004⁷². It is a department under the Office of the Accountant-General of the Federation responsible for payment of salaries and wages directly to Government employee's bank account with appropriate deductions and remittances of 3rd party payments such as; Federal Inland Revenue Service, State Boards of Internal Revenue, National Health Insurance Scheme, National Housing Fund, Pension Fund Administrator, Cooperative Societies, Trade Unions Dues, Association Dues and Bank Loans.

The federal government of Nigeria conceived the idea of IPPIS in 2006 in a bid to war declare on corruption within the civil service payroll system. It was designed to provide efficient and effective database and thereby prevent payroll frauds in all forms, foster manpower planning, ease of update and retrieval of personnel records, seamless transition of personnel across MDAs, with minimal wastes and leakages⁷³.

The programme experimented in six ministries: Education, Foreign Affairs, Finance (including the Budget Office of the Federation), Works, Information and Communications (as it was then known), and the National Planning Commission. Nine additional MDAs were added in 2009. These include Aviation, Health, Agriculture, Petroleum Resources, Transport, the Office of the Accountant General of the Federation, Office of the Head of the Civil Service of the Federation, Office of the Secretary to the Government of the Federation and the Federal Civil Service Commission⁷⁴. The trial was a huge success.

IPPIS is a reform that is committed to efficient and effective service delivery. Its main aim is to pay accurately and on time within statutory and contractual regulations; provide a payroll service that is customer-focused and that utilizes technology wherever possible; be responsible for processing and payment of salary to over Three hundred thousand (300,000) Federal Government Employees across the 459 MDAs and; enroll into the platform, all federal government MDAs that draws personnel cost fund from the Consolidated Revenue Fund⁷⁵.

2.1.3.1 Importance of IPPIS

It was a game-changer for the federal ministry of finance when it published in 2011, a savings of over twelve billion naira (N12,000,000,000) from the implementation of IPPIS in sixteen (16) MDAs between 2007 and 2010⁷⁶. The pilot phase experimented on the back of the fact that salaries and wages constituted about fifty-eight per cent (58%) of the federal government total

recurrent budget in any given year⁷⁷. In another dimension, the implementation of the programme saved the government over one hundred and sixty billion naira (N160,000,000,000) due to the detection and purging of sixty thousand (60,000) ghost workers from government's payroll. Forty-six thousand, eight hundred and twenty-one (46,821) ghost workers were also detected and purged from the records of two hundred and fifteen (215) MDAs in 2013⁷⁸.

The illegality surrounding the corruption born out of ghost workers syndrome, by far plagued the unemployment statistics in Nigeria. The record has it that unemployment rate chronicled a rise from 14.6% in 2006 to 21% in 2010, to 23.9% in 2011. The worst happened when 80% of Nigerian were unemployed by the year 2014. However, the audit exercise necessitated by the introduction of IPPIS has continuously saved the nation of billions channeled into the corruptible end of ghost workers saga. In 2013, six thousand (6,000) out of the 26,017 workers in FCT were phonies⁷⁹.

The importance of IPPIS was again buttressed by the fact the previous regulation in place to combat corruption in payroll failed to achieve its aim. Financial regulation (2009), Part 1, (1503) (i) provided that all public servant shall have their salaries and allowances paid through a named bank on completion of Treasury Form (4). Despite this in place, there is no debate as to how woefully it has failed in this regard.

The federal government has achieved a great milestone in the effort to transit all MDA into the IPPIS programme. With the recent success of the migration of ASUU, IPPIS has come to stay for good and all. Also, the implementation at this stage is alongside human resource management component of IPPIS. There is no gainsaying in the fact that the quality and standard of payroll

administration in Nigeria has immensely improved due to transition from manual to electronic payroll administration⁸⁰.

2.1.4 Workings of Government Information Management Information System (GIFMIS)

The introduction of the Integrated Financial Management Information System (IFMIS) is one of the most common financial management reform practices, aimed at the promotion of efficiency, effectiveness, accountability, transparency, the security of data management and comprehensive financial reporting. The scope and functionality of an IFMIS vary across countries, but normally it represents an enormous, complex, strategic reform process^{81, 82, 83}.

IFMIS is an information system that tracks financial events, summarizes financial information and different from an accounting system configured to operate according to the needs and specifications of the local environment^{84, 85}.

IFMIS refers more specifically to the computerization of public financial management (PFM) processes, from budget preparation and execution to accounting and reporting with the help of an integrated system for the financial management of line ministries, spending agencies and other public sector operations^{86, 87, 88, 89}. In the Nigeria context, GIFMIS will support the management of the public resources and targeted anti-corruption initiatives area through modernizing fiscal process using better methods, techniques and information technology^{90, 91}. GIFMIS role is to connect, accumulate, process and then provide information to all parties in the budget system continuously. It is therefore imperative that the system should be able to provide the required information timely and accurately because if it does not it will not be used and cease to fulfill its central function as a system^{92, 93}.

This is to strengthen economic management and to deal with weak governance and corruption. The budget function has been consolidated in a strengthened budget office and greater

transparency has been introduced to Public Expenditure Management (PEM) through regular publication of allocations of federation revenues to all tiers of governments and widespread dissemination of information on budget allocations and execution^{94, 95}.

GIFMIS is concerned with institutional building and improving economic governance which improves the capacity to address issues of poverty, gender and social^{96, 97}.

It will also aid strategic management of public financial resources for enhanced accountability, transparency, cost-effective public service delivery, and economic growth and poverty reduction efforts. Its implementation will facilitate tremendous improvement in efficiency in operations as the FG continues in its quest for a new Nigeria positioned to achieve vision 2020^{98, 99, 100}.

2.2 Theoretical Review

2.2.1. Rational Choice Theory

The 18th century ushered in the rational choice theory¹⁰¹. It was initiated by a sociologist who laid the foundation for exchange theory, as demonstrated in hypotheses drawn from behavioural psychology¹⁰². The theory has since then been expanded upon and extended to include other perspectives, such as deterrence, situational crime prevention, routine activity theory among other types of discipline. It is also called **rational action theory** or **choice theory**. The rational choice theory states that individuals use rational calculations and estimations to make rational choices and achieve outcomes that are in line with their own desired objectives. Rational choice theory is expected to result in outcomes that provide people with the greatest benefit and satisfaction given the choices at their disposal¹⁰³. Rational choice theory is often discussed and associated with the concepts of rational actors, the rationality assumption, self-interest, and the invisible hand.

The invisible hand theory rests on three canons: self-interest, rationality and rational choice theory. It states that a person will make a win-win decision for everyone when he is prompted by self-interest and rationality. The rational agent is believed to have factored in information available, likelihood of actions, possible costs and benefits when making decisions consistently¹⁰⁴.

The main ideas of the theory can be traced back to the works of Adam Smith among others whose works border on moral. Though this has been later developed by what is now known as neoclassical economics. Three assumptions are important: individuals have selfish preferences; they maximize their utility, and they act independently based on full information. Rational choice theorists are concerned about the results and pattern of choices made as against the process of making it. Another hypothesis added to the rational choice model is that humans are homo economicus because their choices are self-willed. It was claimed that such individuals act as if they are balancing costs against benefits to arrive at actions that maximize results when in fact, it is not completely so¹⁰⁵.

A scholarly argument between two people, suggested that rationality-principle was a powerful tool that was useful for explaining behaviour. She claimed not only to have used it in analyzing, observing and gathering data but also to have benefited immensely from using it to understand the rationale behind parent support for their children and spousal issues among others¹⁰⁶. Another proponent of rational choice theory argued that "In choosing between alternative actions, a person will choose that one for which, as perceived by him at the time, the value, V , of the result, multiplied by the probability, p , of getting the result, is the best chances of getting the result"¹⁰⁷.

Another scholar noted that individual actions and social actions are optimally chosen by ultimately by the individual^{108, 109}. He stated the essence of rational choice theory when he said that -when faced with several courses of action, people usually do what they believe is likely to have the best overall outcome. Michael claimed that competition for scarce resources both in politics and economics exist¹¹⁰. Also, that the similitude between market competition for goods and political competition for power and its privileges had stimulated a large number of scholars, especially social scientists, the impression that the economic models can also be profitably employed in the political.

"In the book, *The Calculus of Consent: Logical Foundations of Constitutional Democracy*, claimed that in the study of political science, it is assumed, that "the representative or the average individual decides or chooses based on the same overall value scale when he is faced with market decision and political decision"¹¹¹. A proponent confirmed this when he proclaimed that "Voters and customers are fundamentally the same people. Mr. James buys and votes; he is the same man in the supermarket and the voting booth"¹¹².

Many economists do not believe in the rational choice theory and are not proponents of the invisible hand theory. Nonconformists have pointed out that individuals do not always make rational utility-maximizing decisions. Geoffrey stated that at least six critics of rationality have been awarded Nobel prizes in economics¹¹³. Therefore, across the field of behavioural economics, economists can study both the processes and results of rational and irrational decision making. In another article, "The Failure of Rational Choice Philosophy," argued that as

a philosophy, rational choice fails because it is not ethically neutral. One of the dissidents of rational choice theory, believes that some choices are not economically driven even though, people tend to maximize their preferences by acquiring wealth and power, while preferences can be maximized based on the determination of other values¹¹⁴.

It has also been argued that the empirical outputs of the rational choice theory have been limited. They oppose that much of the relevant literature, at least in political science, was done with weak statistical methods and that when corrected many of the empirical outcomes no longer hold¹¹⁵.

When considered on this ground, the rational choice theory contributes very little to the general understanding of political interaction - and in this sense, has little justification in relation to its appearance in the literature. Pierre Bourdieu aggressively opposed rational choice. Bourdieu contended that humans do not continuously employ rational and economic criteria in making choices. According to him, social agents operate according to an intrinsic practical logic—a practical sense—and bodily dispositions. Social agents behave in line with their "feel for the game" (the "feel" being, roughly, habitus, and the "game" being the field)¹¹⁶. To further buttress the limitation of rational choice theory, bounded rationality, which says that humans cannot have access to all the information pertinent to making the best possible decision was proposed¹¹⁷.

Moreover, economist idea of mental accounting shows how people behave irrationally by placing greater value on some dollars than others, even though all dollars have the same value. They might drive to another store to save ten dollars \$10 on a twenty dollars \$20 purchase but they would not drive to another store to save ten dollars (\$10) on a thousand dollar (\$1,000) purchase¹¹⁸.

Within the parlance of government, state treasury and the agencies (MDAs) acting on behalf of the federal government, it can be inferred that everyone tends to rationally act in his or her favour as already suggested by the postulates of rational choice theory. Nevertheless, the sole

aim of establishing these agencies and institutions may not align with the selfish motives of the representatives of these agencies. This has been buttressed by the various scales of corruption perpetrated in different dimensions over the years. These take the forms of unholy alliances between the MDA's and the banks, a plethora of bank accounts where cash is stashed up while the government goes borrowing at extra cost. The rational choice theory comes in handy to checkmate and restore sanity within the financial clime of the nation. The federal government in his bid to block revenue leakages, rev-up revenue and foster compliance with budgetary allocations, therefore rationally initiated and enforced treasury single account policy.

2.2.2 Incrementalism theory

Incrementalism, the theory of public policy making, follows a trajectory in which policies result from a process of interaction and mutual adaptation among a multiplicity of actors advocating different values, representing different interests, and possessing different information (Britannica). It is also a method of working by adding to a project using many small incremental changes instead of a few well planned big leaps. Logical Incrementalism suggests that the steps in the process of making decisions are sensible¹¹⁹. It was derived by American political scientist in 1953 as another theory to making policies and decisions on the basis of rational analysis and value-maximization. It utilizes past policies and gradual changes in public policy, especially on controversial issues¹²⁰. Olofu opined that it is a theoretical policy of rationality advanced by Lindblom in order to act as the midpoint between the rational actor model and bounded rationality, since neither the long term, goal-driven policy, rationality nor satisficing were considered important. He also emphasizes the plurality of actors involved in the

policy-making process and predicts that policymakers will build on past policies, focusing on incremental rather than wholesale changes¹²¹. This did not imply that policy actors lack the intent to be rational: in fact, their decisions are goal orientated and procedures were followed to achieve those goals. But many factors work against scientific rationalism¹²².

Scholars that contributed to the experientially-based theories of decision making that took their roots in the recognition that human problems are extraordinarily complex, while human analytic capacities and resources are quite limited^{123, 124}. A proponent argued that policymakers can study how well current policies perform and they can properly adjust the policies to do better. He said further that public policy making theory looks at previous policies and offers alternatives that are marginally different. He stressed again that through gradually changing public policy, policymakers can discern which decisions are viable and which require reflection. Hence, judging by the nature of this theory of public policy making, large changes can be gradually introduced into society without using very many resources and it prevents backlash. Also, he argued that the process of Incrementalism is an appropriate way to gradually approach reform through trial and error. With incremental changes, public policy will not greatly suffer from errors in policy and it allows for flexibility¹²⁵.

He opined that rational decision making is not attainable. To function appropriately, rational-comprehensive decision making must meet two requirements that are not feasible for most issues: agreement on objectives and a sufficient knowledge to inform proper decision. And then, when these conditions are not fulfilled, the rational choice offers no support or clue for the policy makers. Hence, Incrementalism scales these hurdles, by providing defensible policies where the rational method has collapsed¹²⁶. Simon also gives as to why complete rationality is impossible

to attain can be summarized as follows: Acting rationally presupposes that one has not only complete knowledge but also an expectation of the consequences the final decision will have. However, the fate of the knowledge of the consequences is but momentary.

Further, a fully rational decision requires taking into account all possible and available options. The latter is, however, in actual behaviour never the case, since the entire range of alternatives is hardly ever fully exploited¹²⁷. The Scholar introduced the idea of "bounded rationality" in decision making: humans desire true rationality, but due to cognitive limitations and the incompleteness of knowledge our decision-making behaviour is "satisficing" rather than maximizing benefits over costs. He contended that the limitations of analysis also mean that decision-makers ordinarily must "satisfice", that is satisfying the immediate need with the minimum sufficing solution, rather than optimizing through choosing among policy options. Charles Lindblom applied Simon's philosophy of decision making to the policy process and claimed that policymakers "muddle through" by making incremental adjustments to policies rather than engaging in a comprehensive, one huge leap, rational process and expressing clearly defined policy goals^{128, 129}. Instead, successive comparisons are made to already existing policies and policymakers seek agreement where they can or where they have specific knowledge. Humans rarely agree on almost anything and have no agreeable analytic method for resolving disparities in perceptions and priorities into mutual choices^{130, 131}. Incrementalism is a result of several issues¹³². It is regularly used in the field of politics, engineering, software design, planning and industry. Though it is often criticized as "fire fighting", the progressive and steady improvement of product designs as in the case of Japanese engineering can create steadily improving product performance, which in some situations performs greater than the conventional

planning systems. The benefit of this theory is that it wastes no time planning for an unlikely outcome¹³³.

Incrementalism, Intelligent Trial-and-Error, and the Future of Political Decision Theory stated that eight scholars criticized Incrementalism for being too hard on analysis¹³⁴. Though some scholars have tried some means of adjusting systematic analysis to the limitations of human cognitive processes and time. Another critic in his work on "large-scale" policy making, especially the space program, has argued that there are circumstances under which non-incremental policy-making is inevitable and perhaps desirable^{135, 136}. Arrow argued that it leads to accepting our imperfections and complacency and that it is insufficiently goal-oriented and ambitious¹³⁷. A critic said it is a policy of no effort¹³⁸. Also, Incremental steps are said to mean proceeding "without knowing where we are going"¹³⁹. Another group of critics claimed that incrementalism is an overly conservative approach, which "would tend to neglect basic societal innovations"¹⁴⁰.

A related set of research, initiated by a critic work on "large-scale" policy making, especially the space program, has argued that there are circumstances under which non-incremental policy-making is inevitable and perhaps desirable^{141, 142}. Another carried out analysis on policies where fragmented incrementalism and partisan mutual adaptation is not relevant i.e. where correctness of analysis and centralized action is inevitable, such as where especially damaging errors could result if policymakers do not get the right answer the first time"¹⁴³. Logsdon cited that incrementalism does not take sufficient "account of crucial issues that are not strongly and visibly represented in the negotiation process, for example, the future"¹⁴⁴. Several scholars criticism holds that incrementalism is appropriate in only a narrow range of decision situations: where the environment is stable, no crisis is impending, the organization's survival is

not at stake, available resources are not desperately short, and where current policy problems resemble previous ones for which the organization has experienced^{145, 146, 147}.

However, other scholars in their work, Incrementalism, Intelligent Trial-and-Error, and the Future of Political Decision Theory refuted these criticisms in the following ways. They posited that nothing in the logic of Incrementalism would lead to such conclusions¹⁴⁸. Political participants have goals, use analysis where convenient, formulate policy trials as best they can, given their partisan aims and skills, engage in learning, and try to improve outcomes that matter sufficiently to them. Also, they cited some scholars that conservatism critique also seems mistaken to suppose that incremental analysis and partisan mutual adjustment were imagined to be the only inputs to societal policy making^{149, 150, 151}. And that along with incremental analysis of the type done by mainstream government officials and those who seek immediate influence over them, a complex society need a wide array of both professional social inquiry and lay inquiry.

It should be "broad-ranging, often highly speculative, and sometimes utopian." Finally, they opined that it is very clear that unstable decision contexts would systematically disadvantage disjointed incremental analysis relative to realistic alternative methods of analysis and policy making.

It should be expressed that the TSA did not just emerge as a happenstance; it fell on the back of a buildup of several reforms from the previous administration. In recognition of the need to resolve challenges and to strengthen the management of government expenditure under the Obasanjo led administration, the Federal Government instituted the Economic Reform and Governance (ERG) Programme in 2004 in collaboration with the World Bank. As part of the components of ERG are Government Integrated Financial Management Information System (GIFMIS) and the Integrated

Payroll and Personnel Information System (IPPIS). the government's transition towards a more robust electronic payment (e-payment) system to conduct all of its financial activities reach its height in 2008. GIFMIS, a subset of the Economic Recovery and Growth Plan was formulated to sustain the public resource management and targeted anti-corruption initiatives area through improvement of fiscal processes, techniques and information technology while IPPIS main aim is to pay accurately and on time within statutory and contractual regulations while facilitating proper human resource planning for the federal government.

Hence, the AGF (Accountant General of the Federation) issued a treasury circular for its commencement on January, 1st 2009 in all Ministries Departments and Agencies¹⁵². The trend highlighted above exhibited the incrementalist's sense of governance as demonstrated by the Nigerian government. The sequence of reforms and developments before 2009 naturally paved the way for the introduction, adoption and implementation of TSA policy. Also, the TSA is a part of the public financial management (PFM) reforms which fall under Pillar 3 of the National Strategy for Public Service Reforms towards Vision 20:20:20 to address impediments to effective and efficient cash management as published in 2015. Hence, it should be noted that final transition from the sluggish approach due to lack of political will towards the full implementation of TSA by the Jonathan led administration to the irrevocable implementation of TSA under Buhari led administration was made possible due to the structure which has been put in place on an incremental basis by the previous administrations.

2.2.3 Theoretical Framework

The theoretical framework for this study was based on rational choice theory. This is because it resonates with the title of this research work, public financial management and performance of selected federal research institute in Nigeria. The theory's three assumptions are important for

this study: individuals have selfish preferences; they maximize their utility, and they act independently based on full information. Rational choice theorists are concerned about the results and pattern of choices made as against the process of making it. Another hypothesis added to the rational choice model is that humans are homo economicus. This justifies the curb of various corrupt practices through public financial management like the treasury single account which fosters singleness of government monies to mitigate financial leakages and other policies to curb ghost workers.

2.3 Empirical Review

2.3.1. TSA and the Performance of Federal Research Institutes in Nigeria

A study on Imperative of Treasury Single Account. The researcher's objective is to review the adoption and workings of Treasury Single Account in Nigeria as it affects major economic variables and its influence on macro-economic development, financial management and accountability. He adopted Meta-Analysis in conducting his research. He found out that the adoption of Treasury Single Account will help to ensure proper cash management by eliminating idle funds usually left with different commercial banks and in a way to enhance reconciliation of revenue collection and payment. Also, it will curb corruption in public finance and that it will ensure adequate fund flow that will be channeled to critical sectors of the economy to catalyze development¹⁵³. Another researcher questioned the implications of TSA on the economy in his report titled: Counting Cost of Treasury Single Account, through interviews. He found out that the adoption of TSA impacted on the liquidity level of the banking industry, resulting in a surge in money market rates during the period as banks scrambled for funds to cover their liquidity positions¹⁵⁴. Also, he concluded that the banking industry would be affected in terms of deposits and funding cost structure¹⁵⁵. Some scholars in their work: Treasury Single Account (TSA) and

the Performance of the Federal Ministry of Education, Abuja¹⁵⁶. Their specific objectives were to: identify the aims and objectives of Treasury Single Account (TSA); examine the quality and quantity of service offered by Federal Ministry of Education after the implementation of Treasury Single Account (TSA); examine the challenges affecting the implementation of Treasury Single Account (TSA) in Federal Ministry of Education; and suggest measures to improve service delivery by Federal Ministry of Education in the presence of Treasury Single Account (TSA) policy. Data for the study was collected from both primary and secondary sources. The primary source of data was obtained from the questionnaire while the secondary data was gotten from textbooks, journal articles, internet sources, newspapers and official publications. The study revealed that the Treasury Single Account has improved expenditure management in the federal Ministry of Education, Abuja. It also revealed the challenges affecting the implementation of Treasury Single Account (TSA) in the ministry to include: inadequate guidelines on the implementation procedure, no provision for the ministry to maintain impress among others. They concluded that the Treasury Single Account (TSA) is a good policy aimed at improving funds available to the government. However, it has to take into consideration the administrative needs of government agencies. The study, therefore, recommends the review of the policy to include the maintenance of a sub-account for agencies impress, training and retraining of public organization financial officials among others as measures for effective implementation of Treasury Single Account (TSA) in Federal Ministry of Education in particular, and the Nigerian public service in general.

The study of Treasury Single Account and University Administration in South East, Nigeria investigated the recently introduced treasury single account on university administration in south-east Nigeria, three federal universities were selected: Nnamdi Azikiwe University, Awka, University of Nigeria, Nsukka and Federal University of Technology, Owerri. The survey research method was adopted. The Taro Yamane formula was employed to determine the sample size of 203: Primary data were collected with the aid of a questionnaire. The data were analytically regressed. They found out that the newly introduced treasury single account has, so far, among other challenges, affected financial operations in the bursary units and consequently slowed down activities in the universities. It revealed that there is a sharp departure from the past when planned programmes were executed as planned in the universities. They, therefore, recommended that tertiary institutions should be excluded from TSA implementation to achieve the all-important objective of research and development in the university system and the federal government should immediately carry out a comprehensive review of the policy implementation to be properly guided on the appropriate organizations where TSA is required¹⁵⁷.

In a similar study on: Treasury Single Account Policy and Government Revenue in Nigeria, the main objective was to examine the impact of Treasury Single Account policy on government revenue remittance in Nigeria and their specific objectives were: to determine how treasury single account policy can assist in blocking government revenue leakages and to ascertain the impact of treasury single account policy on curbing mismanagement and misappropriation of government revenue. The survey research design was adopted for the study and copies of questionnaire were administered to respondents. The population comprises of the Nigerian Civil Aviation Authority, Aviation House, Ikeja, Lagos and Federal Inland Revenue Service (FIRS) regional office in Ikoyi, Lagos. Purposive sampling method was used to arrive at a sample size

of One hundred and fifty (150) respondents. Their study revealed that TSA policy has increasingly helped to support the collection and remittance of all government revenue but yet to safeguard close monitoring of government expenditure. They recommended close monitoring of government expenditure¹⁵⁸.

A research study on –TSA: A catalyst for Public Financial Management in Nigeria, workshop by Association of National Accountants of Nigeria. The study described TSA as a unified arrangement that enhances the fungibility of the government cash resources. The study also affirms that the adoption of TSA policy affects banks liquidity and employment negatively. The author believes the TSA will help to tame the tide of corruption and enhances transparency. While believing that there is no single TSA model or design, He, however, emphasized that the model be implemented in each country depends on the stage of development of the quality of public institutions, financial management systems, it's technological and development and communications, infrastructure and degree of maturity of its banking system¹⁵⁹.

The research work on: Implementing the treasury single account, submitted that treasury single account implementation is meant to enhance accountability for public funds and transparency. In their submission, there is societal anxiety about the success and sustainability of the policy which will be dependent on the stakeholders' role in the policy drive. The authors also opined that the implementation of TSA should be founded on legal ground. "Being legally recognized is, therefore, an important pre-requisite especially in those countries where the presumed autonomy of some institutions is an obstacle to implementation". it was also identified possible structural obstacles to the successful implementation which include an uncooperative attitude of civil

servants and politicians who have benefited from the former accounting system, political unrest, power/network congestion and inadequate training of TSA stakeholders¹⁶⁰.

Scholars have also examined the effects of the implementation of Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (IPPIS), and Integrated Financial Management Information System (IFMIS): Application and Implementation Effects on Fraud Management in the Public Sector 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 a questionnaire administered on respondents randomly selected from the studied Ministries. Results of the statistical test reveal that TSA, IPPIS, and IFMIS have a positive and significant relationship with Fraud and fraud management as well as jointly impact the performances of Public Interest Entities¹⁶¹.

A similar study on Integrated Payroll and Personnel Information System (IPPIS): The Journey So Far, adopted an empirical approach in evaluating the impact of IPPIS implementation so far. Secondary data was used, relying on published works and government reports. He concluded that IPPIS is an efficient strategy and mechanism to fight corruption. He claimed there are some prevailing challenges in the full implementation process, and that resolving these challenges will bring about, the full utilization of the system. He, therefore, recommended that the IPPIS office should carry out a regular screening to authenticate its enrolled personnel¹⁶². Another researcher also reported that TSA and its implication for the Nigerian economy, he opined that in the short run the rate of exchange of the naira to the world's major currencies will appreciate as excess liquidity will be mopped up from the system, thereby stimulating various sectors of the economy.

The Nigerian Stock Exchange would be negatively impacted as a hike in deposit rates would reduce returns from the equities market thereby leading to investors shifting their investments to the money market¹⁶³.

There would be a spike in the inflation rate even as the returns on real estate investments will fall and the manufacturing sector will also be affected negatively. The rate of unemployment will increase even as short-term interest rates will rise thereby threatening the existence of SME's who already find it difficult to borrow money from financial institutions at 'crazy' rates. In a similar work on Impact of Treasury Single Account on Liquidity assesses the positive effect of the implementation of TSA on the Economy, the public accounting system and the undesired consequences on the liquidity base and performance of banking sector in Nigeria¹⁶⁴. He administered questionnaires to the Management staff of the ten banks selected for his study. He employed Chi-square as a statistical tool for analysis of the data. The results obtained confirmed that the implementation of the Treasury Single Account in the public accounting system impacted negatively on the liquidity base and the performance of the banking sector in Nigeria.

An Analysis of Pros and Cons Treasury Single Account Policy in Nigeria, discussed the objectives, pros and cons of a Treasury Single Account recently introduced by the Buhari administration¹⁶⁵. The study posited that for an administration to succeed, it has the obligation to aggregating states' resources to provide services and amenities promised to the people. And that any step was taken in the direction aimed at plugging leakages in revenue-generating agencies should be seen as a step in the right direction. In a related work on Prospects and Challenges of Treasury Single Account In a Developing Economy: Case Study Of Nigeria examined the prospects and challenges and identify the effectiveness of TSA¹⁶⁶. The work on Treasury Single Account: Issues and Challenges examined what TSA is, its efficiency,

challenges and multiplier effects on the overall financial system. The author found out that it: reduces dichotomy between fiscal and monetary policy; improved efficiency and accountability on the part of revenue-generating agencies; led to currency value appreciation; improved capital market through bond market development and reduced incidences of money leakages. Also, it realized the slow remittance speed of deposit money banks, non-compliance of other tiers of government, likelihood of bank crises and fewer savings and low long-term investment¹⁶⁷.

The work on Treasury Single Account and Fund Management in Nigeria: A Perception of Accounting Practitioners in Ado-Ekiti Metropolis examined the role of Treasury Single Account on Effective fund Management and also assessed the role of the Treasury Single Account on government transparency. The authors employed descriptive and inferential statistics in analyzing the data for their study. The study revealed that operationalized TSA reduces mismanagement of public fund and boost government revenues¹⁶⁸. Other scholars also worked on the contributions of reviving the Treasury Single Account policy. Their study employed secondary data methodology to effectively examine the fiscal impact of reviving the TSA policy and anchored it on an incremental model as a framework of analysis. They suggested better ways of making the policy effective amidst the dwindling oil price and the superiority of Dollar against the Naira. Hence, their study concluded that TSA will be a failure in Nigeria, except proper monitoring of government account is carried out, in all government institutions and strong punitive measure applied against defaulters and corrupt officers¹⁶⁹.

The Effects of Treasury Single Account on Public Finance Management in Nigeria has also been examined to determine the extent to which Treasury Single Account can block financial leakages, promotes transparency and accountability in the public financial management. Both primary and secondary data was employed. The study population were Ministries, Department and Agencies (MDAs) within Bauchi metropolis using a sample of seventy two (72) respondents through judgment sampling. The data were analyzed using Pearson Correlation techniques. The result showed that the adoption of a Treasury Single Account (TSA) is capable of plugging financial loopholes, promoting transparency and accountability in the public Financial System. It was recommended that for the success of this policy, the government should promulgate more legislation to make it mandatory for all the three tiers of government in Nigeria¹⁷⁰.

The concepts, essential features, and potential benefits were elaborated in the work titled Treasury Single Account: Concept, Design and Implementation Issues. Alternative models and approaches was also presented for designing a TSA that take into account specific country contexts as well as the preconditions and desirable sequencing for its successful implementation¹⁷¹. The study Treasury Single Account policy, Public Funding and Liquidity of Deposit Money Bank examined the influence of TSA implementation on MDAs funding in Nigeria; analyzed the effect of TSA implementation on the liquidity of DMBs in Nigeria; and investigated the challenges of TSA policy implementation in Nigeria. Being survey research, his emphasis was on cross-sectional and descriptive survey research. Purposive sampling method was also employed with three hundred and thirty respondents involved eventually. The results of the study showed that the implementation of the TSA policy has led to better management and control of public funds in the various MDAs; the payment for services, procurements and disbursement of funds has become difficult for MDAs; that the full implementation of TSA

policy has negatively affected the liquidity of Deposit Money Banks and that the implementation TSA policy has negatively impacted on funding in federal MDAs¹⁷².

The conceptual meaning of the TSA and also its expected benefits to the economy of Nigeria was provided in the study; The Treasury Single Account (TSA) as an Instrument of Financial Prudence and Management: Prospects and Problems. The study also analyses the objectives of the TSA systems and its various and discussed the prospects of the TSA system and its challenges¹⁷³. In a similar work on: Treasury Single Account (TSA) In Nigeria: A Theoretical Perspective theoretically examined Treasury Single Account in Nigeria to provide the way forward for the country. The study posited that TSA policy will go a long way in blocking the identified financial leakages in revenue generation and promote transparency and accountability in the public financial system if it is fully implemented. It will equally pave the way for the timely payment and capturing of all revenues going into the government treasury, without the intermediation of multiple banking arrangements. The policy will also enable the government at the center to know its cash position at any given time without any hindrance. The system will likely reduce the round-tripping of government deposits¹⁷⁴.

The effects of treasury single account policy on corruption in Nigeria was examined with a focus on analysis from 2011 to 2017. The study adopted a cross-sectional survey design and used a questionnaire to generate its data. The sample size of their study was determined at 377 staff through the use of Prof. Taro Yameme sample size method. The data were analyzed through the use of descriptive and inferential/statistics. The study found that the Treasury Single Account

(TSA) policy was introduced to block financial leakages, reduce corruption, promote transparency and prevent mismanagement of government's revenue in public sector organisations. The study revealed that the major challenges hampering the effective and efficient implementation of the treasury single account (TSA) policy include: Inability of the federal government to remit appropriately to the various MDAs, uncertainties underlying federal government inactions and actions, bottlenecks/ bureaucracy, internet platform delays, inefficient human capital development and time-wasting in the banks and payment points¹⁷⁵.

A discussion on the problems of fragmented government banking arrangements and how a treasury single account (TSA) could address them was reported in the study: Treasury Single Account: An Essential Tool for Government Cash Management. The study also provided an explanation of the concept of a TSA and describes its features; discussed the design issues that need to be considered in setting up a TSA system and discussed the preconditions and key sequencing and implementation issues that need to be addressed in establishing a TSA. It was concluded that: fragmented government banking arrangements hinder effective cash management; the design of a TSA in a particular country depends on the stage of development of the public institutions and financial management systems and the degree of maturity of its banking system, including the technology used for the interbank settlements and clearing systems; and the introduction of a TSA should not be viewed as an independent activity and should be integrated with other treasury reforms, including changes to budget execution processes¹⁷⁶.

The implications of treasury single account on the economic department in Nigeria were identified in the work: Treasury Single Account (TSA) and Transparency in Public Sector

Financial Management in Nigeria., The study also highlighted the success stories in other countries and the effects of adopting the treasury single account on the banking sector in Nigeria, the features, benefits and demerits of the treasury single account. They recommended that the legislature should enact acts to support TSA operations in line with backing Act of CRA that Treasury Single Account should be institutionalized so that successive government will not deviate from it; Government accountants and heads of state MDAs should be well trained to meet up with the challenges of TSA operation; The bureaucracy of the TSA should be corrected and reduce to a minimum level and to averts the fear from different groups; and that government should train and re-train the up and down line staff to effective and efficient use of TSA and the theory of stakeholders, management theory, and modern money theory¹⁷⁷.

Researchers have attempted to establish the impact of treasury single account on Nigeria's Economy by conducting an empirical analysis of the relationship between Treasury Single Account and economic performance in Nigeria. In their work: Treasury Single Account and Nigeria's Economy Between 1999 and 2015. The researchers engaged time-series data to obtain information because of the use of a set of economic variables over 17 years. The population of the study was determined based on the available Unified data in the Central Bank of Nigeria (CBN) Statistical Bulletin for the year 2015 on Gross Domestic Product (GDP), Money Supply (MS), Credit with CBN (CR) and Deposit to CBN (DP); where GDP depends on MS, CR and DP. The result showed that the Treasury Single Account has a positive significant impact on the country's economic growth but this impact is limited by various factors, one of them being the recent implementation of the policy in Nigeria which made the discovery of historical data difficult. Their study recommended that the federal government of Nigeria should initiate policies and various means to make sure that there are proper accounting for the funds entering

into the Treasury Single Account and that such fund should follow due process¹⁷⁸.

In the work: Treasury Single Accounting (TSA) and Public Sector Accountability in Nigeria, it ascertained the effect of treasury single account and accountability in the Nigeria Public Sector. A descriptive survey research design was used. The population of this study consisted of 600 staff of the four federal health tertiary institutions drawn from Account Departments and sample size of 250 Account Departments staffs were selected using the proportionate random sampling technique that adaptation of a treasury single account and accountability (TSA) in the Nigeria Public Sector is capable of plugging financial loopholes, promoting transparency and accountability in Federal Health Tertiary Institutions in South-East Nigeria¹⁷⁹. A similar study "Accountability and Public Sector Financial Management in Nigeria" ex-post factor research design revealed that accountability is very poor in Nigeria because the attributes of accessibility comprehensiveness, relevance, quality, reliability and timely disclosure of economic activities. It was discovered that government cash balances have a significant effect on accountability in the Nigeria Public sector. And that unexpected fiscal volatility has a significant effect on Accountability in the public sector. It was therefore, recommended among others, that for accountability to be successful in the management of public funds in Nigeria, there must be a reduction in the level of corruption, improving public sector accounting and auditing standards¹⁸⁰.

An evaluation and critique of the policy of the Treasury Single Account (TSA) adopted by the Nigerian government as an essential tool for enhancing transparency and accountability in public sector financial was carried out in the work: Treasury Single Account – Transparency and Accountability in Public Finance Management in Nigeria: The Journey So Far. The study adopts both qualitative and quantitative research design and descriptive analysis to gain an insight into

the nature and character of TSA operations in Nigeria. It was recommended among others, that the adoption of TSA in the country's public sector should progress slowly and wisely. Institutions and institutional rules should be strengthened, be accountable and made autonomous of cabals and individual who might want to manipulate the system for group or personal interests¹⁸¹.

The study of Treasury Single Account and Bank Deposits Behaviours and Economic Growth Pattern in Nigeria ascertained the behaviours and relationship existing between Treasury Single Account (TSA) and cash balances of deposit money banks (DMBs) in Nigeria and the effect of this behaviour and subsisting relationship on Nigeria's economic growth. Quarterly data on the TSA and composite cash balances were tested for stationarity (unit root) using the Augmented Dickey-Fuller test and analyzed using the Kendall tau_b correlation technique, the Granger Causality model, and both variables and loans and advances by DMBs (LSA) regressed on real Gross Domestic Product (GDP) using the Ordinary Least Squares (OLS) model. The research results show that there exists a positive and significant relationship between the TSA and composite bank balances of DMBs (BNKBL), and both have a positive long-run relationship with RGDP after the initial implementation shock on bank balances on DMBs and RGDP. The Granger causality test results further showed that TSA and loans and advances by the DMBs to the economy causes changes in RGDP but the TSA does not cause changes in bank balances of DMBs in Nigeria in the long-run¹⁸².

Scholars have also examined the effect of TSA on tertiary institution finances in the study: Effects of Adoption of Treasury Single Account on Tertiary Institutions Finances in Nigeria . Their specific objectives were to: examine the effects of TSA adoption by Nigeria. The government on the development of federal tertiary institutions in Nigeria; the impact of TSA adoption by the Nigeria Government on human resources development in Federal Tertiary Institutions; the impact of TSA adoption by the Nigeria Government on finance of extra budgeting items in Federal Tertiary Institutions; various challenges TSA adoption is placing on the development of tertiary institutions in Nigeria. They use survey research design and data were collected from primary sources through the administration of a questionnaire to respondents. Data collected were analyzed using descriptive statistics and Kolmogorow Smirnov non-parametric statistic tool. The findings reveal that adoption of TSA impacted negatively on human capital development, and also place some challenges on the smooth running of tertiary institutions mostly in the area of project implementation, Budget implementation and payment of conference or workshop allowance to the attendee. The paper concludes that TSA adoption inhibits the development of tertiary institutions in Nigeria¹⁸³. Also the adoption of the treasury single account and its effect on revenue leakages of Nigerian states was studied. In pursuance of achieving the research objective and proffering solution to the research problem, the study employed survey research. The target population was the 628 Senior and Management staff of the Ministries of Finance and Board of Internal Revenue of 6 selected states in Nigeria that have adopted the TSA. In selecting the sample size for this study, the Okpanachi (2011) restructured Yemane (1967) sampling model was employed to justify the sufficiency of the sample size. The data used for analysis are collected through the use of a Likert scale closed ended structured questionnaire. Questionnaires were distributed to the sample size of 133 staffs out of which 124 were fully completed and returned. The analysis was done using regression analysis with the aid

of SPSS 22. The result of the study revealed that 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 leakage¹⁸⁴.

Treasury Single Account: A Viable Tool for Repositioning Government Ministries, Departments and Agencies (MDAs) for Sustainable Development in Nigeria- A study carried out to assess the effects of TSA on Federal Government's Ministries, Departments and Agencies (MDAs). To achieve the objective of the study, primary and secondary sources of data were used. Questionnaires were used for the collection of primary data. A sample size of 150 was purposively drawn from the study population which comprises of Federal Government's Ministries, Departments and Agencies (MDAs). Descriptive statistic (percentages) and Chi-square (χ^2) analytical technique were utilized in the analyses of data. It was discovered that TSA has enhanced regular monitoring of government cash balances, accountability and transparency, efficient use of government financial resources, probity, reduction of cost of borrowing and help to check corruption in Federal Government's Ministries, Departments and Agencies (MDAs). Also, the study revealed that MDAs in Nigeria are yet to adequately use TSA to enhance economic development in Nigeria among others. The study recommended among others that TSA should be embraced by all Government's (MDAs) at all level of governments; federal, states and local government councils in Nigeria¹⁸⁵.

The application of the concept of treasury single account (TSA) in the management of public finances of tertiary institutions in Nigeria was examined in the research on: Dialectics of Treasury Single Account and Public Financial Management in Tertiary Institutions in Nigeria. The study adopted a descriptive survey research method. Data for their study was collected from primary and secondary sources. Forty questionnaires were distributed while thirty-two respondents properly responded. The data generated were analyzed using descriptive and inferential statistics. The findings showed, among others, that TSA finance management policy has not effectively succeeded in eliminating fraud in the management of public finances in tertiary institutions in Nigeria¹⁸⁶.

Other findings were: that the policy cannot eliminate fraud in the management of public finance; that poor internet reception on campus makes the TSA policy a waste of time; banks on campus exploit students with exorbitant charges for making payments through the TSA platform. They recommended that to alleviate defects in the operation of the TSA in our tertiary institutions and the country as a whole, there should be proper monitoring and evaluation to ensure strict compliance on the implementation of the policy; the policy should be made more flexible to accommodate the full range of electronic banking – online payments, wire transfers etc.; the issue of poor internet reception and connectivity should be addressed to improve on the effectiveness of the policy; and finally, the government should have a robust and interactive feedback channel where citizens can make inputs to better improve on the policy.

2.3.2. IPPIS on Performance of Federal Research Institutes in Nigeria

The Effect of Integrated Personnel and Payroll Information System (IPPIS) on Federal Government Recurrent Expenditure in Nigeria have been examined. The study made use of secondary sources of data obtained from Budget Office of the Federation (BOF), Annual Report

from the Office of the Accountant General of the Federation (OAGF) together with the audited financial statements and Central Bank of Nigeria (CBN) Statistical Bulletin. The relevant data were subjected to statistical analysis using t-test statistics. The study found out that there is a significant difference in Government's recurrent expenditure following the introduction of IPPIS in 2007 and was also empirically determined by the percentage of fund savings to the budgeted expenditure shows that the implementation of IPPIS has resulted in fund savings for the Federal Government of Nigeria. The researchers recommend that the training of the operators of the IPPIS should be technologically compliant. Periodic monitoring exercise of the (MDAs) should be adopted by the Office of Accountant General of the Federation to verify the active workers in service¹⁸⁷.

The Implementation of IPPIS Policy in the Nigerian Universities: Benefits and Challenges was another study that examined the benefits and shortfalls of incorporating the university system into the IPPIS programme by the federal government of Nigeria. The paper undertakes a theoretical grinding of critical issues under study, adopted a review of periodic publications, journals and related secondary materials. Hence, the researcher used a qualitative method in the study. The study found out that the university system does not reject IPPIS but argued that IPPIS did not adequately capture its flexibility and peculiarities. It also highlighted many shortfalls and benefits of incorporating university system into the IPPIS programme by the federal government. The study recommended that IPPIS software application should factor in its peculiarities to be useful to the universities. Also, that, both parties (Federal government and University system) should consider likely consequences of friction which may negatively affect the general public¹⁸⁸.

Researchers have also worked on Effect of Treasury Single Accounts (TSA) on the Performance of Ministries, Departments and Agencies (MDA) in Nigeria, they examined the effect of the TSA policy on the performances of federal government MDAs in Nigeria. The study relied basically on primary data which was obtained through a questionnaire designed and administered to 75 respondents drawn from the federal government ministries, departments, agencies and parastatals (MDA) within Anambra metropolis in the eastern part of Nigeria. The analysis was based on the Wilcoxon sign test. They found out that the institutionalization of TSA has significantly affected and improved the performance of federal government MDAs significantly and that treasury single account is capable of blocking financial loopholes in revenue generation and promoting transparency and accountability¹⁸⁹.

Studies have also been carried out to examined the possibility of the introduction of integrated personnel payroll information system (IPPIS) eradicating ghost worker from the payroll in Nigeria's public service, in their work on IPPIS and the Ghost Workers' Syndrome in Nigeria's Public Sector. The historical research method was adopted It was concluded that the implementation and deployment of Integrated Personnel and Payroll Information System (IPPIS) have to a great extent reduced the incentive, capacity and opportunity of fraudulent individuals to perpetrate payroll fraud at all levels. Nevertheless, some challenges in the form of technological barriers still exist; most of the IPPIS staff are yet to acquire oracle training; major MDA's are yet to connect to the IPPIS platform over a virtual private network. The study recommended that MDAs at all levels should key into the IPPIS platform in line with the Federal Government Public sector reform agenda to minimize payroll fraud in Nigeria¹⁹⁰.

Further, the study that examined the strategies adopted by the effectiveness of the Integrated Personnel and Payroll Information System in Addressing Ghost Worker Syndrome in Nigerian Public Sector also critically looked at the effect of ghost worker on public service salary administration and analyse the challenges facing IPPIS in the implementation of the policy in the Federal Inland Revenue Service in Nigeria. Primary and secondary sources of data were utilized to elicit the opinions of public servants in the Federal Inland Revenue Service (FIRS). Interviews were also conducted. His findings revealed that the strategies adopted by IPPIS address ghost worker in the public sector in Nigeria; the introduction of IPPIS policy into the salary administration in Nigeria improved constant payment of employees and that there are still challenges facing IPPIS in uploading monthly salary of the employees¹⁹¹.

Moreover, scholars have also worked on; Integrated Personnel Payroll and Information System (IPPIS) Panacea For Ghost Workers Syndrome In Nigerian Public Service. They examined the effects of ghost workers syndrome and how the instrumentality of the Integrated Personnel Payroll and Information System (IPPIS)] could address the menace in the public service. The researchers elicit data from both primary and secondary sources. The data were analyzed using the simple percentage, frequency tables, mean score and Spearman rank-order correlation technique. It was concluded that ghost workers syndrome is highly prominent in the public service and recommended that the (IPPIS) should be adopted in the public service to ensure a virile economy¹⁹².

2.3.3. GIFMIS and performance of federal research institutes in Nigeria

The effects of the application and implementation of Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (IPPIS), and Integrated Financial Management Information System (IFMIS) in the Public Sector in Nigeria was examined by some scholars. 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. Questionnaires were administered on respondents randomly selected from the studied Ministries. The linear regression model was employed in establishing the relationship between variables. It was revealed that TSA, IPPIS, and IFMIS have a positive and significant relationship with Fraud and fraud management as well as jointly impact the performances of Public Interest Entities. The study 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 platforms¹⁹³.

Other have also examined Adoption of Treasury Single Account (TSA) by State Governments of Nigeria: Benefits, Challenges and Prospects. Their study aimed to examine the benefits, challenges and prospects of adoption of Treasury Single Account (TSA) by State Governments of Nigeria. A descriptive cross-sectional survey design was adopted for the study. The population for the study consisted of 200 Professional Accountants in Akwa Ibom State. Taro Yamane's statistical formula was used to select a sample size of 133. Purposive sampling technique was used to select the 133 respondents/samples. The data obtained from questionnaire administration were analyzed using descriptive statistics and t-test statistics. The finding revealed that TSA adoption and full implementation by the state governments will be of immense benefit as showed in the weighted means scores of 4.20 and t-cal of 24.87; there will be

challenges in the short-run but the benefits at a long-run will out-weigh the challenges. The study concluded that State Governments of Nigeria should adopt and fully implement TSA for successful control and accountability of public funds to avoid bailout funds always from any source¹⁹⁴.

The Effect of Treasury Single Account (TSA) on Liquidity of Deposit Money Banks and Effective Control of Governments Cash Resources in Nigeria have been examined. The survey research design was employed in this study and data was obtained from the primary source. The study used both descriptive and inferential statistics as the person's moment coefficient of correlation as a statistical tool for its data analysis. The study revealed that there is a significant relationship between the TSA and the Liquidity of Banks; the implementation of TSA has negatively impacted on the Liquidity of Banks. Hence the cash crunch and eliminated float in the banking sector; the crunch through the implementation of TSA and withdrawal of idle-funds from the Banks has made a surge in the inter-bank call rate; the Liquidity problem of Bank has reduced the value and volume of credit to its customers as well as negatively impacted on economic activities in the country; and that TSA blocks loopholes and curbs corruption as it has afforded government effective control of its cash resources. The study, therefore, recommends that the TSA policy model of implementation should be reviewed by the Central Bank of Nigeria, While ensuring effective control of government cash resources should also uphold the liquidity theory to bridge the liquidity problems experienced during its implementation by the maintenance of a minimum flexible monetary policy rate of these public funds to deposit money banks¹⁹⁵.

Researchers have also explored IPPIS in Nigeria: Challenges, Benefits and Prospects by looking critically at the challenges of implementation of IPPIS, benefits to be derived when IPPIS is fully implemented and what the future holds. The study outlined that accurate and reliable personnel information, reduction or elimination of corrupt and sharp practices, facilitation of modern scientific and accurate budgeting and forecasting are the major benefits of IPPIS. Also, that these benefits are, threatened by skills transfer problem, poor supporting infrastructure, technological barriers for inter MDAs transfer, resistance from stakeholders and lack of will for accelerated implementation. He was optimistic that IPPIS implementation will serve as a platform for budgeting projection and planning, acts as a database for national statistics and enable a reduction in governance cost¹⁹⁶.

Studies have also been conducted on: Opinion and Perception of Treasury Single Account Implementation: Implications for Revenue Generation and Utilisation in Nigeria. Data were collected through the administration of a structured questionnaire. The study analyzed a total sample size of 200 purposively selected among Federal, State, Local Government and Private Sector Employees. Data were analyzed using frequency and percentages, as well as for analytic weighted mean. The result showed variation in acceptability attitude towards TSA implementation in Nigeria; 23.4% of respondents reported negative perception (non-acceptability), and 76.6% of respondents reported positive perception (acceptability). The study, therefore, recommended that it is however important to take steps to address the short-term challenges that may arise from its implementation¹⁹⁷.

The work on: Prudence in Public Institutions Management: The Strategic Financial Efficiency Challenge in Nigeria, addressed the need for fiscal prudence in Nigerian public institutions, with a deeper emphasis on the imperatives of strategic financial efficiency. It was concluded that strategic financial efficiency is possible in Nigerian public institutions, as it is desirable, practicable and sustainable. It was recommended that the key actor in Nigerian Public institutions should brace up like their private sector counterparts, synergize and make things work. They should more innovatively in sensitizing institutional stakeholders to think strategy, embrace and accentuate total quality cash flow management under the prevailing consolidated public financial control mechanism¹⁹⁸.

Researchers have also looked into Public Perception of the Treasury Single Account in Nigeria. They investigated the perception of Nigerians towards the Treasury Single Account (TSA). A sample of one hundred and ninety respondents, drawn from management staff of MDAs, in the Federal and State Services as well as Deposit Money Banks in Calabar Cross River State, was studied to gauge their perception on the Treasury Single Account (TSA) being implemented by the Federal Government of Nigeria. The data were analyzed using the Chi-Square statistical technique. The results reveal a significant acceptance of the TSA policy itself but a non-significant positive perception of its operation. It argues that TSA, as operated presently, has negatively affected the socio-economic life of the people and the operation of Government Ministries, Departments and Agencies (MDA) as a result of delays experienced in releases due to bureaucratic bottlenecks. They recommended, among others, that Government should ensure timely release of operational funds to encourage MDAs to support the TSA Policy¹⁹⁹.

Furthermore, some scholars have also examined the Impact of Government Integrated Financial Management Information System (GIFMIS) on Economic Development of Nigeria. Secondary data was collected and analyzed with the use of statistical package for social science (SPSS) and t-test to test the significant difference in independent and dependent variables. The empirical findings revealed among other things, that GIFMIS has impacted positively on Nigeria's economic development through the budgeting and budgetary system, payroll management system, cash management reforms, expenditure ceiling for MDA's in Nigeria within the time under review. The study recommends, among others, that the government should strengthen GIFMIS module to achieve more in human capital development, investments and per capita income²⁰⁰.

Similarly, work on: Treasury Single Account and Public Fund Management: A Study of Selected Federal Government Parastatals in Bayelsa State. The goal of the study was to determine the impact of Treasury Single Account on Public Fund Management. Their specific objectives include; examining the impact of Treasury Single Account on Accountability of public funds; to determine the Impact of Treasury Single Account on Transparency of public funds. The survey research design was adopted using primary data with the aid of a questionnaire distributed to selected federal government parastatals in Bayelsa state. Purposive sampling technique was used in selecting the federal government parastatals used. Regression analysis and the simple percentage were used to analyze the questionnaire obtained. The study adopted three (3) proxies of public fund management which are accountability, transparency and financial leakages. It was discovered, based on the findings of the study that, Treasury Single Account has a significant relationship with Public fund management proxies combined. The study concluded that treasury Single Account expectedly improves accountability and transparency and as well reduce leakages in the financial system They recommended that TSA should be encouraged by immense

public enlightenment and clarification around the significance of the policy in other to nurture its success, the government should also enact as soon as possible the appropriate statutory support to aid the appropriate regulatory atmosphere which will drive the effective implementation of the TSA²⁰¹.

2.4. Literature Gaps

S/N	Author's name and year	Research Title	Findings	Gaps
1	Oyedokun, Godwin E, (2016)	Imperatives of Treasury Single Account Policy	Treasury Single Account will help to ensure proper cash management. It will curb corruption in Public finance. It will ensure an adequate flow of fund channeled to critical sectors of the economy.	The study cannot be generalized in that it looked at economic development, financial management and accountability.
2.	Ibrahim, Apekhade	Counting the cost of Treasury	Adoption of TSA impacted on the liquidity's	His work is limited to the

	Yusuf. (2016)	Single Account Policy	level of the banking industry in a negative sense	banking industry and cannot be generalized as it is directed at the MDAs to restore financial sanity and prudence
3	Amahalu, Nestor Okoye, Vincent Okoye, Frances, (2016)	Effect of Integrated Personnel and Payroll Information System (IPPIS) on Federal Government Recurrent Expenditure in Nigeria	The study revealed that there is a significant difference in Government's recurrent expenditure following the introduction of IPPIS in 2007. It revealed substantial savings for the federal government.	The study is limited to the effects of IPPIS on government recurrent expenditure only. Also, the study was limited to just one fiscal year.
4.	Kanu (2016)	Impact of Treasury Single Account on Liquidity	The implementation of the Treasury Single Account in the public accounting system impacted	His work is limited to the banking sector and as such

negatively on the liquidity cannot be
 base and the performance generalized to
 of the banking sector in cover its effect
 Nigeria. on the overall
 economy.

5 Effiong, Treasury the study The study
 Sunday & Single Account revealed that looked at
 Oro, Benafa & (TSA), TSA, IPPIS, fraud and
 Lorenzo, & Integrated and IFMIS have fraud
 Raphael, Payroll and a positive and management.
 Imong & Personnel significant There are
 Etop, Jacob. Information relationship many sides to
 (2017) System with Fraud and consider to
 (IPPIS), and fraud have a holistic
 Integrated management as view of the
 Financial well as jointly relationship of
 Management impact the TSA, IPPIS
 Information performances and IFMIS the
 System of Public government
 (IFMIS): Interest Entities treasury.
 Application
 and
 Implementatio

n Effects on
 Fraud
 Management in
 the Public
 Sector in
 Nigeria

5. Okechukwu et al (2015) An Analysis of Pros and Cons Treasury Single Account Policy in Nigeria He found out that every administration has to aggregate his resources to deliver on his promises. His work is based largely on assumption and opinions of people at the initiation of the policy in Nigeria.
6. Salman R.and Adeseye M (2017) Treasury Single Account and Fund Management in Nigeria: A Perception of Accounting Practitioners in Ado-Ekiti Their study revealed that operationalized TSA reduces mismanagement of public fund and boost government revenues His work is limited to the management of public fund and revenue generation. Every MDA is unique in their operation and

Hence research work focused on MDA specific has to be conducted

7 Effiong, Sunday & Oro, Benafa & Lorenzo, & Raphael, Imong & Etop, Jacob. (2017)

Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (IPPIS), and Financial Management Information System (IFMIS): Application and

the study revealed that TSA, IPPIS, and IFMIS have a positive and significant relationship with Fraud and fraud management as well as jointly impact the performances of Public Interest Entities

The study looked at fraud and fraud management. There are many sides to consider to have a holistic view of the relationship of TSA, IPPIS and IFMIS the government treasury.

Implementatio
n Effects on
Fraud
Management in
the Public
Sector in
Nigeria

8. Tari, Myatafadi and Kibikiwa (2016) The Contributions of Reviving the Treasury Single Account policy their study concluded that TSA will be a failure in Nigeria, except proper monitoring of government account is carried out, in all government institutions and strong punitive measure is put in place to caution defaulters The study was limited to the impact of reviving the policy and not necessarily on the policy itself.
9. Keneth Mela, (2019) The Implementatio n of IPPIS Policy in Nigerian The study revealed that the university specific MDA, system does not the result of reject IPPIS but which cannot
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Universities: argued that be
 Benefits and IPPIS do not generalized.
 Challenges adequately
 capture its
 flexibility and
 peculiarities.

10. Pattanayak Treasury Single Their work
 and Fainboim Account: borders on the
 (2010) Concept, recommendation
 Design and
 And practicability of
 Implementation the use of TSA
 Issues

11. Olofu, Peter Treasury Single His study showed that the The work
 (2017) Account policy, implementation of the covered a wider
 Public Funding TSA policy has led to view but cannot
 and Liquidity of better management and be generalized
 Deposit Money control of public funds in for every sector-
 Bank examined the various MDAs; the specific
 the influence of payment for services, administrative
 TSA procurements and need
 Implementation disbursement of funds has

on MDAs become difficult for funding in MDAs; that the full Nigeria implementation of TSA policy has negatively affected the liquidity of Deposit Money Banks and that the implementation of TSA policy has negatively impacted on funding in federal MDAs

12 Leyira Christian Micah and Temple Moses, (2018)

IPPIS and the Ghost Workers' Synd rome in Nigeria's Public Sector

The study revealed that the effects of IPPIS on ghost workers syndrome, one of many variables to consider achieving a holistic view of IPPIS on

the incentive, government capacity and treasury opportunity of management. fraudulent individuals to perpetrate payroll fraud at all levels.

13. Ahmed Isa (2016) The Treasury Single Account (TSA) as an Instrument of Financial Prudence and Management: Prospects and Problems His work explained the concept of TSA, prospects and problems; and the expected benefits to the Nigerian economy His work is more of conceptual insight and literary.
14. Chinedu and Okoye (2017) Treasury Single Account (TSA) In Nigeria: A Theoretical He posited that TSA policy will block the identified leakages in financial revenue other findings cannot be generalized for MDA's

	Perspective	generation; promote with special transparency and peculiarities accountability in the public financial system; pave way treasury management; foster financial position at a glance
15.	Akujuru and Effects of Treasury Single Account policy on corruption in Nigeria Enyioko (2017)	TSA blocks financial leakages, reduce corruption, promote transparency and prevent mismanagement of government's revenue in the public sector. Challenges facing TSA also, include Inability of the federal government to remit appropriately to various MDA's, uncertainties underlying federal government

			inactions and actions, bottlenecks/ bureaucracy, internet platform delays, inefficient human capital development and time- wasting in the banks and payment points.
16.	Sailendra Pattanayak and Israel Fainboim (2011).	Treasury Single Account: An Essential Tool for Government Cash Management	Fragmented banking arrangement hinders the effective implementation of TSA. The success of TSA is dependent on the Public Financial institutions and the quality of banking architecture in place The focus is on the cash management and the conditions necessary for the implementation of TSA in a country
17.	Otemu, et al (2018)	Treasury Single Account (TSA) and Transparency in Public Sector	They highlighted the impact of TSA on an economic department in Nigeria. Also, the benefits of TSA in other climes of They only provided narratives on how it worked in other

	Financial Management in Nigeria	the world	countries of the world. Also, how it impacted the banking system of other countries.
18.	Oguntodu J., Alalade Y., Adekunle Y., Adegbite F. (2016)	-Treasury Single Account and Nigeria's Economy Between 1999 and 2015. An Assessment,	Treasury Single Account significantly impacted positively on the country's economic growth but this impact is limited by various factors, namely recency of implementation. The work took place during the development phase of TSA and as such is speculative.
19.	Nwaorgu, I. et al (2017)	Treasury Single Accounting (TSA) and Public Sector Accountability in Nigeria	Adaptation of a treasury single account and accountability (TSA) in the Nigeria Public Sector is capable of plugging financial loopholes, promoting transparency and accountability in MDA in a region in Nigeria. The research is limited in scope in that it was conducted in a specialized

Federal Health Tertiary
Institutions in South-East
Nigeria

- 20 Idris Haruna,
Adaja Joseph
and Audu Joel
Samson,
(2015)
- Integrated Personnel Payroll and Information System (IPPIS) panacea for ghost workers syndrome in the Nigerian Public Service that integrated personnel payroll and information system (IPPIS) should be adopted in the public service to achieve a
- The study found out that ghost workers syndrome is highly prominent in Nigerian public service thus, one of the many variables to consider
- This study also looked at the angle of ghost workers effect in the Nigerian Public Service which is just one of the many variables to consider

21. Igbokwe- Treasury Single Account – Transparency And Accountability in Public Finance Management in Nigeria: Adoption of TSA in the country’s public sector should progress slowly and wisely. Institutions and institutional rules should be strengthened and made autonomous of cabals and individual who might want to manipulate the system. Their work suggested ways and fashion by which TSA should be adopted. However, this needs to be substantiated by empirical research work.
22. Barine Michael N (2018) Treasury Single Account and Bank Deposits Behaviours and Economic Growth Pattern in Nigeria That there exists a positive and significant relationship between the TSA and composite bank balances of DMBs (BNKBL), and both have a positive long-run relationship with RGDP after the initial implementation shock on bank balances on DMBs Similar work on performance, behaviours and trends in other sectors can also be examined in other sectors and MDAs of the federation.

			and RGDP.
23.	Ahmad A. Abubakar (2017).	Treasury Single Account: A Viable Tool for Repositioning Government Ministries, Departments and Agencies (MDAs) for Sustainable Development in Nigeria	He found out that TSA has enhanced regular monitoring of government cash balances, accountability and transparency, efficient use of government financial resources, probity, reduction of cost of borrowing and help to check corruption in (MDAs; that MDAs in Nigeria is yet to adequately use TSA to enhance economic development in Nigeria
24.	Dennis Amobi and Nneka Grace (2016).	Dialectics of Treasury Single Account and Public Financial Management in	TSA finance management policy has not succeeded in eliminating fraud and cannot eliminate fraud in the management of public
			The work has provided for further studies to be carried out on the benefits

	Tertiary Institutions in Nigeria	finances in tertiary and strengths of institutions in Nigeria; TSA policy and that; that poor internet Public Financial reception on campus Management in makes the TSA policy a Tertiary waste of time; banks on institutions in campus exploit students Nigeria. with exorbitant charges for making payments through the TSA platform
25	Agboola Theophilus Olumuyiwa (2018)	Effectiveness the finding The study of the revealed that examined the Integrated the strategies effectiveness Personnel and adopted by of IPPIS on Payroll IPPIS address ghost workers Information ghost worker in syndrome and System in the public salary Addressing sector in administration Ghost Worker Nigeria; that the in Nigerian Syndrome in introduction of public sector. Nigerian Public IPPIS policy Further study Sector into the salary can look into

administration salary
 in Nigeria administration,
 improved management
 constant of IPPIS
 payment of among other
 employees; and variables
 that there are
 still challenges
 facing IPPIS in
 uploading
 monthly salary
 of the
 employees.

26. Adebisi, J & Okike, M. (2016). The Adoption of the Treasury Single Account (TSA) and its Effect on Revenue Leakages of Nigerian States
- They found out that TSA adoption is an effective tool for curbing revenue leakage in Nigerian states.
- The work is carried out on states in Nigeria. Therefore, similar studies can be carried out on other sectors and MDAs of the federation.
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27. Udo, E. and Esara, E. (2016). Adoption of Treasury Single Account (TSA) by State Governments of Nigeria: Benefits, Challenges and Prospects. TSA adoption and full implementation by the state governments will be of immense benefit; there will be challenges in a short-run but the benefits in the long-run will outweigh its challenges. The work is a projection of what is to happen and has therefore provided further studies to be done years later to substantiate the findings stated in this work.
28. Oru, Anthony, Odu, Odumusor and Charles Joseph (2019). Effect of Treasury Single Account (TSA) on Liquidity of Deposit Money Banks and Effective Control of Governments Cash Resources in Nigeria. The study revealed that there is a significant relationship between the TSA and the Liquidity of Banks; TSA has negatively impacted on the Liquidity of Banks; caused a surge in the inter-bank call rate; the Liquidity problem of Bank has reduced the value and The work has provided room for further studies on other variables like investments portfolios, employees turnover, employees remuneration
-

volume of credit to its among others. customers as well as negatively impacted on economic activities in the country; and that TSA blocks loopholes and curbs corruption as it has afforded government effective control of its cash resources.

29 Lucky Izobo Enakirerhi and Sunny O. Temile (2017) IPPIS in Nigeria: Challenges, Benefits and Prospects in The study revealed that the benefits are threatened by skills transfer problem, poor supporting infrastructure, technological barriers for inter MDAs transfer, The study has provided for further studies on mitigating against the challenges of IPPIS, inter MDAs transfer management among others.

resistance from
stakeholders
and lack of will
for accelerated
implementation

30. Agundu, Prudence in He found out that strategic This work
Prince Umor Public financial efficiency is represented all
C. (2016). Institutions possible in Nigerian the public
Management: public institutions, as it is institutions as
The Strategic desirable, practicable and relatively the
Financial sustainable. same whereas,
Efficiency some have their
Challenge in uniqueness
Nigeria. which cannot
make them be in
sync with other
ones. Further
work can be
done by doing
the same work
in different
sections of the
-

			MDAs.
31	Omokolawole, Lamikanra (2015)	TSA and its implication for the Nigerian economy	TSA will stimulate various sectors of the economy; The Nigerian Stock Exchange would be negatively impacted; inflation rate will soar even as the returns on real estate investments will fall and the manufacturing sector will also be affected negatively.; unemployment will increase even as short term interest rates will rise thereby threatening the existence of SME's
32	Ogbonna G.Friday and Ojeaburu Friday (2015)	The Impact of Government Integrated Financial Management	The study revealed that GIFMIS has impacted positively on its sustenance and

		Information System (GIFMIS) on Economic Development of Nigeria	economic development through budgeting and budgetary system, payroll management system, cash management reforms, expenditure ceiling for MDA's in Nigeria	improvement of GIFMIS, Personnel data administration in Nigeria among others.
33.	Okechukwu et al (2015)	An Analysis of Pros and Cons Treasury Single Account Policy in Nigeria	He found out that every administration has to aggregate his resources to deliver on his promises.	His work is based largely on assumption and opinions of people at the initiation of the policy in Nigeria.
34	Russell	Treasury Single	It reduces the dichotomy	His work is

Olukayode (2015)	Account: Issues and Challenges	<p>between fiscal and limited in that it monetary policy; looked at its improved efficiency and impact on the accountability on the part overall economy of revenue-generating without any agencies; led to currency direct effect on value appreciation; sector-specific improved capital market; areas.</p> <p>reduced incidences of money leakages. Also, it realized the slow remittance speed of deposit money banks, non-compliance of other tiers of government, likelihood of bank crises and fewer savings and low long term investment.</p>
35	Bashir (2016) The Effects of Treasury Single Account on Public Finance	<p>that adoption of a His work is Treasury Single Account limited to few (TSA) is capable of respondents plugging financial across MDAs in</p>

	Management in Nigeria	loopholes, promoting transparency and accountability in the public Financial System	Bauchi; a very small geographical scope to generalize for sensitive and unique MDAs.
36.	Nkechi T. Leonard E. Francis C. (2017)	Effect of Treasury Single Accounts (TSA) on the Performance of Ministries, Departments and Agencies (MDA)	The institutionalization of TSA has significantly affected and improved the performance of federal government MDAs and some MDAs that TSA is capable of blocking financial loopholes in revenue generation and promoting transparency and accountability.
			The work categorized all the MDAs as one whereas, some MDAs have their peculiarities which cannot make them be in sync with other ones.
37.	Onuorah A. and Chigbu E. (2016)	-Accountability and Public Sector Financial Management in	Government cash balances have a significant effect on accountability in the Nigeria Public sector. And
			It is too narrow in scope as other factors should be factored in as

	Nigeria		that unexpected fiscal well.
			volatility has a significant effect on Accountability in the public sector
38.	Olurankinse Felix, Ajidagba Felix, Olaniyi Rotimi (2018).	Effects of Adoption of Treasury Single Account on Tertiary Institutions in Finances in Nigeria.	They found out that adoption of TSA impacted negatively on human capital development, and also place some challenges on the smooth running of tertiary institutions mostly in the area of project implementation, Budget implementation and payment of conference or workshop allowance to attendees.
			This work only looked at the tertiary institutions amidst many other sectors of the MDAs. Also, it failed to highlight the strengths of TSA on tertiary institutions in Nigeria.
39.	Abiola Abosede	Opinion and Perception of	The result showed The laudable variation in acceptability work looks at

Solanke (2018).	Treasury Single Account Implementation: Implications for Revenue Generation and Utilization in Nigeria.	attitude towards TSA the implication implementation in and utilization Nigeria; 23.4% of for revenue- respondents reported generating negative perception (non- agencies which acceptability), and 76.6% is just an area of respondents reported among a wide positive perception spectrum of (acceptability). MDAs and variables among many other ones like plugging of leakages to corruption, timely funding, transparency, accountability among others.
40 Effiong, Sunday & Oro, Benafa & Ogar, Godspower &	Treasury Single Account (TSA), Integrated Payroll	The study The study is revealed that limited to TSA, IPPIS, fraud and and IFMIS have fraud and a positive and management.

<p>Raphael, Imong & Etop, Jacob & Iroushu, rim. (2017).</p>	<p>Personnel Information System (IPPIS), and Integrated Financial Management Information System (IFMIS): Application and Implementatio n Effects on Fraud Management in the Public Sector in Nigeria.</p>	<p>significant relationship with Fraud and fraud management as well as jointly impact the performances of Public Interest Entities</p>	<p>Future studies can into Management of TSA, IPPIS and IFMIS in Nigeria among others.</p>
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2.5. Researcher's Conceptual Model

The model expresses the relationship between the dependent (economic performance) and independent variables (public financial management). Also, each variable has sub-variables, public financial management will be measured with TSA, IPPIS, GIFMIS on PSF

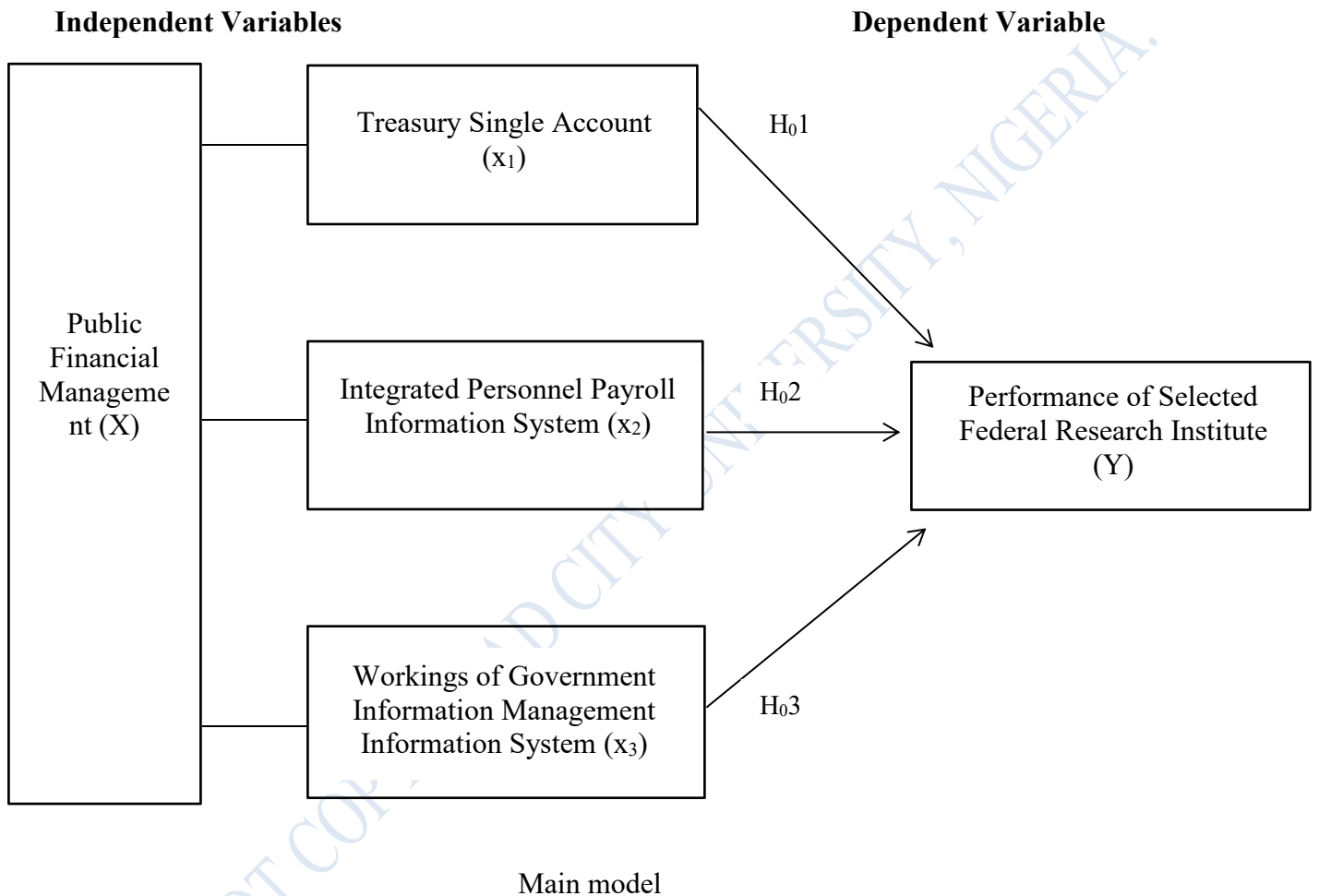


Figure Researcher's Conceptual Model

Source: Researcher's Study (2020)

Endnotes

- ¹ <https://norad.no/en/front/thematic-areas/macroeconomics-and-public-administration/public-financial-management/>
- ² C. Ian, Public financial management; a whole system approach for Ghana, 21st May 2015-the chartered institute for public finance and accountancy
- ³ P. Olofu, (2017). Treasury Single Account policy, Public funding and liquidity of deposit money Banks
- ⁴ A.B Yusuf,. & S Mairafi, (2015). Treasury Single Account Implementation in Nigeria: Potential implications for Deposit Money Banks. Paper presentation in a conference in Nassarawa State University, Keffi
- ⁵ Lienert, Ian, (2009). Modernizing Cash Management, Technical Notes and Manuals, Fiscal Affairs Department (Washington: International Monetary Fund).
- ⁶ Bassey (2016). Premium Times. "15 things to know about Treasury Single Account (TSA)". Retrieved 4 July 2016.Bassey
- ⁷ P. Olofu, (2017). Treasury Single Account policy, Public funding and liquidity of deposit money Banks
- ⁸ P. Olofu, (2017). Treasury Single Account policy, Public funding and liquidity of deposit money Banks
- ⁹ C. Obinna,(2015), Banks Face Liquidity Strain as FG Fully Enforces Treasury Single Account, Thisday Monday, 11 August, P52
- ¹⁰ Vanguard Editorial,(2015). Buhari on Treasury Single Account, Vanguard, August 28, P6.
- ¹¹ O. I., Eme, D. C. Chukwarah, and E. N. Iheanacho (2015) = ‘Analysis of Pros and Cons of Treasury Single Account Policy in Nigeria‘. *Arabian Journal of Business and Management Review* (OMAN) vol. 5 (4): 20–39
- ¹² T. Oyedele, (2016). Treasury Single Account and Taxation. Retrieved from PWC: <http://www.pwc.com/nigeriataxblog>.
- ¹³ C Kanu. 2016. Impact of Treasury Single Account on the Liquidity ABC Journal of Advanced Research, 5, 43-52.

-
- 14 http://www.sparc-nigeria.com/RC/files/5.2.11_Local_Application_of_TSA_in_Kaduna_State.pdf
- 15 Eme, Okechukwu Innocent, Chukwurah, Daniel and N. Emmanuel Iheanacho (2015). An analysis of pros and cons Treasury Single Account policy in Nigeria
- 16 Ahmed Adamu Isa (2016). The Treasury Single Account (TSA) as an Instrument of Financial Prudence and Management: Prospects and Problems Bursary Department, Federal College of Education, P.M.B 2042, Yola. Adamawa State. Nigeria.
- 17 S. Pattanayak, & I. Fainboim (2010). Treasury Single Account: Concept, Design and Implementation Issues. International Monetary Fund Working Paper #10/143
- 18 Oyedokun Godwin (2016). Imperative of Treasury Single Account (TSA) in Nigeria. Article (PDF Available) in SSRN Electronic Journal · January 2016
- 19 Onyekpere (2015). <https://guardian.ng/sunday-magazine/treasury-single-account-giving-life-to-jonathans-dead-policy-directives/>
- 20 S. Pattanayak, & I. Fainboim (2010). Treasury Single Account: Concept, Design and Implementation Issues. International Monetary Fund Working Paper #10/143
- 21
- 22 Oyedokun Godwin (2016). Imperative of Treasury Single Account (TSA) in Nigeria
- 23 Y. Bashir, (2016) Effects of Treasury Single Account on Public Finance Management in Nigeria. Research Journal of Finance and Accounting. Vol.7, No.6
- 24 Onyekpere (2015). <https://guardian.ng/sunday-magazine/treasury-single-account-giving-life-to-jonathans-dead-policy-directives/>
- 25 T. Oyedele (2016). Treasury Single Account and Taxation. Retrieved from PWC: <http://www.pwc.com/nigeriataxblog>.
- 26 Oyedokun Godwin (2016). Imperative of Treasury Single Account (TSA) in Nigeria. Article
- 27 R. Abodunrin, Oyinlola & Omole, Funmilayo, (2017). Treasury Single Account (TSA) policy and its effort in combating corruption in Nigeria International Journal of Social Sciences and Humanities Reviews Vol.7 No.2, August 2017; p.90 – 96, (ISSN: 2276-8645)
- 28 S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues

-
- ²⁹ S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues
- ³⁰ S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues
- ³¹ P. Olofu, (2017). Treasury Single Account policy, Public funding and liquidity of deposit money Banks
- ³² S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues
- ³³ P. Olofu, (2017). Treasury Single Account policy, Public funding and liquidity of deposit money Banks
- ³⁴ S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues
- ³⁵ S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues
- ³⁶ S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues
- ³⁷ S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues
- ³⁸ S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues
- ³⁹ S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues
- ⁴⁰ S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues
- ⁴¹ S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues
- ⁴² Oyedokun Godwin (2016). Imperative of Treasury Single Account (TSA) in Nigeria. Article (PDF Available) *in* SSRN Electronic Journal · January 2016
- ⁴³ Y. Bashir, (2016) Effects of Treasury Single Account on Public Finance Management in Nigeria. *Research Journal of Finance and Accounting*. Vol.7, No.6

-
- 44 V. Nwobi. (2016). The Law and Treasury Single Account: Do the gains outweigh the cost?.
Retrieved from <https://linkedin.com/pulse/law-treasury-single-account-do-the-gain-outweigh-the-cost>. March 7th
- 45 P. Olofu, (2017). Treasury Single Account policy, Public funding and liquidity of deposit money Banks
- 46 Y. Bashir, (2016) Effects of Treasury Single Account on Public Finance Management in Nigeria. Research Journal of Finance and Accounting. Vol.7, No.6
- 47 Samson Kukogho (2015). <https://www.pulse.ng/communities/student/treasury-single-account-asuu-questions-buharis-tsa-policy-warns-of-implications/2byyyhw>
- 48 Onyekpere (2015). <https://guardian.ng/sunday-magazine/treasury-single-account-giving-life-to-jonathans-dead-policy-directives/>
- 49 Ahmed, Adamu Isa (2016). The Treasury Single Account (TSA) as an Instrument of Financial Prudence and Management: Prospects and Problems. Research Journal of Finance and Accounting www.iiste.org ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.7, No.4, 2016 66
- 50 Samson Kukogho (2015). <https://www.pulse.ng/communities/student/treasury-single-account-asuu-questions-buharis-tsa-policy-warns-of-implications/2byyyhw>
- 51 Samson Kukogho (2015). <https://www.pulse.ng/communities/student/treasury-single-account-asuu-questions-buharis-tsa-policy-warns-of-implications/2byyyhw>
- 52 Ahmed, Adamu Isa (2016). The Treasury Single Account (TSA) as an Instrument of Financial Prudence and Management: Prospects and Problems
- 53 Eme, Okechukwu Innocent, C. Chukwurah, Daniel and N. Emmanuel Iheanacho (2015). An analysis of pros and cons treasury single account policy in nigeria. Arabian Journal of Business and Management Review (OMAN Chapter) Vol. 5, No.4; November. 2015 20
- 54 P. Olofu, (2017). Treasury Single Account policy, Public funding and liquidity of deposit money Banks
- 55 S. Pattanayak & I. Fainboim, (2010)
- 56 Onyekpere (2015). <https://guardian.ng/sunday-magazine/treasury-single-account-giving-life-to-jonathans-dead-policy-directives/>
- 57 <https://www.thenigerianvoice.com/news/187846/buharis-tsa-directive-is-timely.html>
- 58 K. Delali, (2010). The Challenges of Implementing Electronic Payment System: The case of Ghana's E-which payment system MBA Thesis.

-
- ⁵⁹ A. Cobb, (2004), cashless banking. Retrieved from: <http://www.ameinfo.com/50050.html>
- ⁶⁰ A. Ayodele, (2009). Electronic Payment in Nigeria.
- ⁶¹ B. J. Summers, (2012). -Payment Systems- Design, Governance and Oversight,| London: Central Banking Publications.
- ⁶² Bossone, Biagio; Casino, Massimo.2001.*The oversight of the payments systems: a framework for the development and governance of payment systems in emerging economies (English)*. Western Hemisphere Payments and Securities Clearance and Settlement Systems Research Series; no. 1 Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/646651468156578578/The-oversight-of-the-payments-systems-a-framework-for-the-development-and-governance-of-payment-systems-in-emerging-economies>
- ⁶³ Torough Terenge, (2014). <https://sueddie.wordpress.com/2014/09/05/current-government-financial-reforms-in-nigeria-a-paper-presented-by-toroughternenge/>
- ⁶⁴ <https://allafrica.com/stories/201904030729.html>
- ⁶⁵ <https://allafrica.com/stories/201904030729.html>
- ⁶⁶ C. Nweze,. (2016). Treasury Single Account: Pains, gains. Retrieved from The Nation: <http://www.thenationonline.net/treasury-single-account-pains-gains/>
- ⁶⁷ <https://www.cbn.gov.ng/out/2015/bpsd/circular%20on%20oagf%20revenue%20collection.pdf>
- ⁶⁸ <https://businessday.ng/technology/article/quality-delivery-of-e-payment-infrastructure-fasttracked-tsa-implementation-systemspecs/>
- ⁶⁹ P. Olofu, (2017). Treasury Single Account policy, Public funding and liquidity of deposit money Banks
- ⁷⁰ <https://www.cbn.gov.ng/Out/2019/RSD/2018%20AR%20KAMA1.pdf>
- ⁷¹ <https://businessday.ng/technology/article/quality-delivery-of-e-payment-infrastructure-fasttracked-tsa-implementation-systemspecs/>
- ⁷² <http://documents1.worldbank.org/curated/en/898601468298477897/pdf/479400PJPR0P08101Oficial0Use0Only1.pdf>
- ⁷³ Leyira Christian Micah and Temple Moses, (2018).IPPIS and the Ghost Workers' Syndrome in Nigeria's Public Sector. Scholars Journal of Economics, Business and Management (SJEEM).

- 74 <https://www.ippis.gov.ng/history/>
- 75 <https://www.ippis.gov.ng/what-is-3/>
- 76 Effiong, Sunday & Oro, Benafa & Ogar, Godspower & Raphael, Imong & Etop, Jacob & Iroushu, rim. (2017). Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (Ippis), and Integrated Financial Management Information System (If): Application and Implementation Effects on Fraud Management in the Public Sector in Nigeria. IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319- 7668. Volume 19, Issue 8. Ver. VII (August 2017), PP 22-30 www.iosrjournals.org DOI: 10.9790/487X-1908072230 www.iosrjournals.org 22 | Page
- 77 Idris Haruna, Adaja Joseph and Audu Joel Samson, (2015). Integrated Personnel Payroll and Information System (IPPIS) Panacea for ghost workers syndrome in Nigerian public service. International Journal of Public Administration and Management Research (IJPAMR), Vol. 2, No. 5, March 2015. Website: www.rcmss.com. ISSN: 2350-2231 (Online) ISSN: 2346-7215 (Print) Idris Haruna, Adaja Joseph and Audu Joel Samson, 2015, 2(5): 55-64
- 78 Idris Haruna, Adaja Joseph and Audu Joel Samson, (2015). Integrated Personnel Payroll and Information System (IPPIS) Panacea for ghost workers syndrome in Nigerian public service
- 79 Effiong, Sunday & Oro, Benafa & Ogar, Godspower & Raphael, Imong & Etop, Jacob & Iroushu, rim. (2017). Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (Ippis), and Integrated Financial Management Information System (If): Application and Implementation Effects on Fraud Management in the Public Sector in Nigeria
- 80 <https://www.theabusites.com/ippis-here-to-stay-asuu-misleading-members/>
- 81 M. Chêne. (2009).The Implementation of Integrated Financial Information Management Systems (IFMS). Retrieved from <http://www.u4.no/helpdesk/helpdesk/query.cfm?id=196>.
- 82 C. J. Hendriks, (2012). 'Integrated Financial Management Information Systems: Guidelines for effective implementation by the public sector of South Africa'. SA Journal of Information Management 14(1), Art. #529, 9 pages <http://dx.doi.org/10.4102/sajim.v14i1.529>
- 83 S. H. M. Phalama, (2012).Factors Affecting Implementation of Enterprise Applications Integration (EAI) with Special Reference to Corruption and Fraud in DOD. A Thesis Submitted in Partial Fulfilment of the Requirement for the Degree of Master of Philosophy (Information and Knowledge Management) at the University of Stellenbosch.

-
- ⁸⁴ C. J. Hendriks, (2012). 'Integrated Financial Management Information Systems: Guidelines for effective implementation by the public sector of South Africa'.
- ⁸⁵ World Bank Study. (2011). Financial Management Information System, 25 years of World Bank experience on what works and what doesn't.
- ⁸⁶ M. Chêne, (2009). The Implementation of Integrated Financial Information Management Systems (IFMS).
- ⁸⁷ World Bank Study. (2011). Financial Management Information System
- ⁸⁸ J. Diamond, & P. Khemani, (2005). Introducing Financial Management Information Systems in Developing Countries. International Monetary Fund.
- ⁸⁹ K. Stephen, (2009). Where New Technology Meets Socio-Economic Impasses: A Study of the Integrated Financial Management System as a Management Control in Local Government In Uganda. Accountancy Business & the Public Interest, Vol.8, No.2, 2009,1-43.
- ⁹⁰ Office of the Accountant-General of the Federation (OAGF). (2014). Federal Ministry of Finance. Annual Report. Nigeria.
- ⁹¹ Document of the World Bank. (2014). Implementation Completion and Results Report (Ida-40110), on a Credit in the amount of Sdr 93.4 Million (Us\$140 Million Equivalent) to the Federal Republic of Nigeria for an Economic Reform and Governance Project.
- ⁹² J. Diamond, & P. Khemani, (2005). Introducing Financial Management Information Systems in Developing Countries. International Monetary Fund.
- ⁹³ K. Stephen, (2009). Where New Technology Meets Socio-Economic Impasses: A Study of the Integrated Financial Management System as a Management Control in Local Government In Uganda.
- ⁹⁴ GIFMIS. (2014). Government Integrated Financial Management Information System (GIFMIS) of Federal Government of Nigeria. Retrieved from <http://gifmis.gov.ng/gifmis/>.
- ⁹⁵ H. Jessica, & T. Heidi, (2012). An analysis of fiscal space for social protection in Nigeria. Overseas Development Institute, London SE1 7JD, UK, www.odi.org.uk
- ⁹⁶ Office of the Accountant-General of the Federation (OAGF). (2014). Federal Ministry of Finance. Annual Report. Nigeria
- ⁹⁷ Document of the World Bank. (2014).
- ⁹⁸ Office of the Accountant-General of the Federation (OAGF). (2014). Federal Ministry of Finance

-
- 99 GIFMIS. (2014). Government Integrated Financial Management Information System (GIFMIS) of Federal Government of Nigeria.
- 100 African Development Bank (ADB). (2013). The Infrastructure Action Plan for Nigeria: Closing the Infrastructure Gap and Accelerating Economic Transformation Report. Retrieved Electronic copy available at: <https://ssrn.com/abstract=3363159> from African Development website: [http://www.afdb.org/en/countries/Western - Africa/Nigeria/infrastructure-and-growth-in Nigeria-an-action-plan-for-strengthened recovery/](http://www.afdb.org/en/countries/Western-Africa/Nigeria/infrastructure-and-growth-in-Nigeria-an-action-plan-for-strengthened-recovery/).
- 101 <https://www.oxfordbibliographies.com/view/document/obo-9780195396607/obo-9780195396607-0007.xml#:~:text=Rational%20choice%20theory%20originated%20during,prevention%2C%20a%20routine%20activity%20theory.>
- 102 C. Homans, George (1974) *Social Behaviour: Its Elementary Forms*. Rev. ed. New York: Harcourt Brace Jovanovich, Inc. (Book)
- 103 <https://www.investopedia.com/terms/r/rational-choice-theory.asp>
- 104 Gary Browning, Abigail Halcli, Frank Webster, 2000, *Understanding Contemporary Society: Theories of the Present*, London, SAGE Publications
- 105 https://www.rafaelwittek.eu/images/pdf/lemmas/Wittek_2013_-_Rational_Choice_Theory.pdf
- 106 Catherine Herfeld, (2012). The potentials and limitations of rational choice theory: an interview with Gary Becker Catherine Herfeld. *Erasmus Journal for Philosophy and Economics*, Volume 5, Issue 1, Spring 2012, pp. 73-86. <http://ejpe.org/pdf/5-1-int.pdf> NOTE: Catherine
- 107 C. Homans, George (1974) *Social Behaviour: Its Elementary Forms*
- 108 P. Abell 1990. Supporting industrial cooperatives in developing countries: some Tanzanian experiences. *Econ. Indust. Democracy* 11:483–504
- 109 J. Elster, (1989); *Social Norms and Economic Theory*, *Journal of Economic Perspectives*, American Economic Association, vol. 3(4), pages 99-117.
- 110 I. Michael. Ogu (2013). Rational choice theory: assumptions, strengths, and greatest weaknesses in application outside the western milieu context. *Arabian Journal of Business and Management Review (Nigerian Chapter)* Vol. 1, No. 3, 2013 90.
- 111 <https://oll.libertyfund.org/titles/buchanan-the-calculus-of-consent-logical-foundations-of-constitutional-democracy>

-
- ¹¹² G. Tullock, (1976); in I. Michael. Ogu (2013). Rational choice theory: assumptions, strengths, and greatest weaknesses in application outside the western milieu context. *Arabian Journal of Business and Management Review (Nigerian Chapter)* Vol. 1, No. 3, 2013 90.
- ¹¹³ M. Geoffrey. Hodgson (2012). On the Limits of Rational Choice Theory University of Hertfordshire Business School, UK g.m.hodgson@herts.ac.uk *Economic Thought* 1:94-108
- ¹¹⁴ John McCumber, -The Failure of Rational Choice Philosophy,| *The New York Times Opinion Pages Opinionator* (blog), June 19, 2011, <http://opinionator.blogs.nytimes.com/2011/06/19/the-failure-of-rational-choice/>.
- ¹¹⁵ P. Donald. Green and Ian Shapiro (1994). *Pathologies of Rational Choice Theory: A Critique of Applications in Political Science*. Yale University Press
- ¹¹⁶ Pierre Bourdieu (2005) *The Social Structures of the Economy*, Polity 2005
- ¹¹⁷ A. Simon, Herbert 1955. "A Behavioral Model of Rational Choice." *Quarterly Journal of Economics* 69: 99-118.
- ¹¹⁸ <https://www.investopedia.com/terms/r/rational-choice-theory.asp>
- ¹¹⁹ J. B. Quinn, 1978. Strategic change: Logical incrementalism. *Sloan Management Review* 20 (1), 7–21.
- ¹²⁰ <https://www.kibin.com/essay-examples/the-process-of-incrementalism-a-theory-of-public-policy-making-uytpe4dm>
- ¹²¹ P. Olofu, (2017). Treasury Single Account policy, Public funding and liquidity of deposit money Banks
- ¹²² Heys (2009) in Eme, Okechukwu Innocent, Chukwurah, Daniel C and Emmanuel N Iheanacho (2015).An analysis of pros and cons treasury single account policy in Nigeria. *Arabian Journal of Business and Management Review (OMAN Chapter)* Vol. 5, No.4; November. 2015 20
- ¹²³ A. Simon, Herbert 1955. "A Behavioral Model of Rational Choice."
- ¹²⁴ E. Lindblom, Charles. 1959. "The Science of 'Muddling Through'."
- ¹²⁵ E. Lindblom, Charles. 1959. "The Science of 'Muddling Through'."
- ¹²⁶ E. Lindblom, Charles. 1959. "The Science of 'Muddling Through'."

-
- 127 A. Simon, Herbert, 1997. "On the possibility of accurate public prediction," *Journal of Behavioral and Experimental Economics* (formerly *The Journal of Socio-Economics*), Elsevier, vol. 26(2), pages 127-132.
- 128 A. Simon Herber, 1955. "A Behavioral Model of Rational Choice."
- 129 A. Simon, Herbert, 1958. "[no title]," *American Political Science Review*, Cambridge University Press, vol. 52(2), pages 502-502, June
- 130 K. J. Arrow, 1951. "Alternative Approaches to the Theory of Choice in Risk-Taking Situations." *Econometrica* 19:404-437.
- 131 D. Braybrooke, and C.E. Lindblom. 1963. *A Strategy of Decision*. New York: The Free Press
- 132 C. E. Lindblom, & E. J. Woodhouse,. (1993). *The policy-making process* (3rd ed.). Englewood Cliffs: Prentice-Hall.
- 133 [https://en.wikipedia.org/wiki/Incrementalism#:~:text=Incrementalism%20is%20a%20method%20of,\(extensively%20planned\)%20large%20jumps.&text=In%20public%20policy%2C%20incrementalism%20is,larger%20broad%20based%20policy%20change](https://en.wikipedia.org/wiki/Incrementalism#:~:text=Incrementalism%20is%20a%20method%20of,(extensively%20planned)%20large%20jumps.&text=In%20public%20policy%2C%20incrementalism%20is,larger%20broad%20based%20policy%20change).
- 134 David Collingridge and Edward Woodhouse (1993). *Incrementalism, Intelligent Trial-and-Error, and the Future of Political Decision Theory* 24.49rensselaer Polytechnic Institute
- 135 R, Schulman, Paul, 1975. "Nonincremental Policy Making: Notes Toward an Alternative Paradigm." *American Political Science Review* 69: 1354-1370
- 136 Schulman, Paul. 1980. *Large-scale Policy Making*. New York: Elsevier.
- 137 K.J. Arrow, 1951. "Alternative Approaches to the Theory of Choice in Risk-Taking Situations."
- 138 Y. Dror,. 1964. "Muddling Through - Science or Inertia?" *Public Administration Review* 24: 153-157.
- 139 J. Forester, 1984. "Bounded Rationality and the Politics of Muddling Through." *Public Administration Review* 44: 23-31.
- 140 Etzioni, Amitai. 1967. "Mixed Scanning: A Third Approach to Decision Making." *Public Administration Review* 27: 387-392.
- 141 R. Schulman, Paul, 1975. "Nonincremental Policy Making
- 142 Schulman, Paul. 1980. *Large-scale Policy Making*.

-
- ¹⁴³ I. Lustick, 1980. "Explaining the Variable Utility of Disjointed Incrementalism: Four Propositions." *American Political Science Review* 74: 342-353.
- ¹⁴⁴ J. M. Logsdon, 1986. "The Decision to Develop the Space Shuttle." *Space Policy* 2:103-119.
- ¹⁴⁵ I. Lustick, 1980. "Explaining the Variable Utility of Disjointed Incrementalism: Four Propositions."
- ¹⁴⁶ M. E. Ahrari, 1987. "A Paradigm of 'Crisis' Decision Making: The Case of Synfuels Policy." *British Journal of Political Science* 17: 71-91.
- ¹⁴⁷ L. J. Bourgeois, and K.M. Eisenhardt. 1988. "Strategic Decision Processes in High- Velocity Environments: Four Cases in the Microcomputer Industry." *Management Science* 34: 816-835
- ¹⁴⁸ David Collingridge and Edward Woodhouse (1993). *Incrementalism, Intelligent Trial-and-Error, and the Future of Political Decision Theory*
- ¹⁴⁹ E. Lindblom Charles 1979. "Still Muddling, Not Yet Through." *Public Administration Review* 39: 517-526.
- ¹⁵⁰ Lindblom, Charles E. and David K. Cohen. 1979. *Usable Knowledge: Social Science and Social Problem Solving*. New Haven: Yale University Press.
- ¹⁵¹ Charles Lindblom 1990. *Inquiry and Change: The Troubled Attempt to Understand and Shape Society*. New Haven: Yale University Press.
- ¹⁵² J. O. Odia, & A. A. Odia, (2016). E-government and corruption in Nigeria: The case of the Treasury Single Account (TSA). *Afro Asian Journal of Social Sciences*. VII(1V):1-25
- ¹⁵³ Oyedokun Godwin (2016). *Imperative of Treasury Single Account (TSA) in Nigeria*.
- ¹⁵⁴ <https://thenationonline.net/counting-cost-of-treasury-single-account/>
- ¹⁵⁵ Eleng David Mbotor, (2019). *Integrated Payroll and Personnel Information System (IPPIS): The Journey So Far*. *The International Journal Of Business & Management* ISSN 2321–8916 www.theijbm.com 456 Vol 7 Issue 7 DOI No.: 10.24940/theijbm/2019/v7/i7/BM1907-034
- ¹⁵⁶ Inienger, Chia Christopher, Orban Terkula Damian & Emem Udoh (2018). *Treasury Single Account (TSA) and the Performance of the Federal Ministry of Education, Abuja*. *International Journal of Advanced Scientific Research | IJASR. International Journal of Scientific Research in Social Sciences & Management Studies | IJSRSSMS*. ISSN Print: 2579–101X | ISSN Online: 2579–1928 *Vol. 3, No. 1 April 2018*.

-
- ¹⁵⁷ Onyeizugbe Chinedu Uzochukwu, Igbodo Republic and Enaini Stella Olohi (2017). Treasury Single Account and University Administration in South East, Nigeria
Asian Journal of Economics, Business and Accounting 4(4): 1-17, 2017; Article no.AJEBA.36451 ISSN: 2456-639X
- ¹⁵⁸ Owolabi Folashade, Achugamonu Uzoma and Ojeka Stephen (2017). Treasury Single Account Policy and Government Revenue in Nigeria. *Journal of Internet Banking and Commerce. An open-access Internet journal (<http://www.icommercecetral.com>) Journal of Internet Banking and Commerce, June 2017, vol. 22, no. S8 Special Issue: Mobile banking: A service provider perspective. Edited By: Mihail N. Dudin*
- ¹⁵⁹ K. Ocheni, (2016). Treasury single account: A catalyst for public financial management in Nigeria. A paper presented at a workshop organised by Association of National Accountants of Nigeria (ANAN), International Federation of Accountants (IFAC), Office of the Accountant- General of the Federation (OAGF) and The World Bank in Abuja; 2016.
- ¹⁶⁰ V. Awusa, M. Ahmad. Implementing the treasury single account. *Punch Newspapers*; 2015. Available: <http://www.punchng.com/opinion/ implementing-the-treasury-single-account/>
- ¹⁶¹ Effiong, Sunday & Oro, Benafa & Ogar, Godspower & Raphael, Among & Etop, Jacob & Iroushu, rim. (2017). Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (Ippis), and Integrated Financial Management Information System (If): Application and Implementation Effects on Fraud Management in the Public Sector in Nigeria. *IOSR Journal of Business and Management (IOSR-JBM)* e-ISSN: 2278-487X, p-ISSN: 2319- 7668. Volume 19, Issue 8. Ver. VII (August 2017), PP 22-30 www.iosrjournals.org DOI: 10.9790/487X-1908072230 www.iosrjournals.org 22 | Page
- ¹⁶² Idris Haruna, Adaja Joseph and Audu Joel Samson, (2015). Integrated Personnel Payroll and Information System (IPPIS) panacea for ghost workers syndrome in Nigerian public service.
International Journal of Public Administration and Management Research (IJPAMR), Vol. 2, No. 5, March 2015
- ¹⁶³ O. Lamikanra, (2015). TSA and the implications for the Nigerian economy. Retrieved from <https://www.herald.ng/TSA-and-the-implications-for-the-nigerian-economy>
- ¹⁶⁴ C. Kanu, 2016. Impact of Treasury Single Account on the Liquidity
- ¹⁶⁵ Eme, Okechukwu Innocent, C. Chukwurah, Daniel and N. Emmanuel Iheanacho (2015). An analysis of pros and cons treasury single account policy in Nigeria
- ¹⁶⁶ Akinyeke, Francis (2015). Prospects and challenges of treasury single account in a developing economy: case study of Nigeria
- ¹⁶⁷ Russell Olukayode Somoye 2015. Treasury Single Account (TSA): Issues and Challenges. Presentation. <https://slideplayer.com/slide/12474402/>

-
- ¹⁶⁸ Salman, Ramat Titilayo; Adeseye, Muideen Awodiran. Treasury Single Account and Fund Management in Nigeria: A Perception of Accounting Practitioners in Ado-Ekiti Metropolis. *KIU Journal of Humanities*, [S.l.], v. 2, n. 1, p. 19-32, oct. 2017. ISSN 2522-2821.
- ¹⁶⁹ V. A. Tari, P. Myatafadi, & M. G. Kibikiwa,. (2016). Treasury Single Account (TSA) Policy in Nigeria: Reviving Jonathan_s _Dead_ Policy Directives. *Online Journal of Social Sciences Research*,5(2016),6- 12
- ¹⁷⁰ Y. M. Bashir, (2016). Effects of Treasury Single Account on Public Finance Management in Nigeria. *Research Journal of Finance and Accounting*, 7(6), 164-170
- ¹⁷¹ S. Pattanayak & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues, IMF working paper 10/143 (Washington: International Monetary Fund). Retrieved at <http://www.imf.org/external/pubs/cat/longres.cfm?sk=23927.0>
- ¹⁷² P. Olofu, (2017). Treasury Single Account policy, Public funding and liquidity of deposit money Banks
- ¹⁷³ A. I. Ahmed, (2016). The Treasury Single Account (TSA) as an Instrument of Financial Prudence and Management: Prospects and Problems. *Research Journal of Finance and Accounting*, ISSN 2222-1697, 7(4), 66-71.
- ¹⁷⁴ U. Chinedu Okerekeoti and I. Emma Okoye (2017). Treasury Single Account (TSA) In Nigeria: A Theoretical Perspective. The 2017 International Conference on African Entrepreneurship and Innovation for Sustainable Development (AEISD)
- ¹⁷⁵ C. A. Akujuru, and N. C. Enyioko, (2017). Effects of Treasury Single Account Policy on Corruption in Nigeria.
- ¹⁷⁶ Sailendra Pattanayak and Israel Fainboim (2011). Treasury Single Account: An Essential Tool for Government Cash Management. International Monetary Fund. Fiscal Affairs Department. Treasury Single Account.
- ¹⁷⁷ Otemu, Eseoghene, Rita, Estemetan and Otemu, Oghenevwogaga (2018). Treasury Single Account (TSA) and Transparency in Public Sector Financial Management in Nigeria. *Journal of Accounting and Financial Management* ISSN 2504-8856 Vol. 4 No. 6 2018 www.iiardpub.org. IIARD – International Institute of Academic Research and Development Page
- ¹⁷⁸ J. A Oguntodu, Y. S. A Alalade,, Y. A Adekunle,. and F. F Adegbeie,(2016).)Treasury Single Account and Nigeria’s Economy Between 1999 and 2015: An Assessment. *Journal of Accounting and Financial Management* ISSN 2504-8856 Vol. 2 No. 6 2016 www.iiardpub.org IIARD – International Institute of Academic Research and Development Page 61

-
- 179 Nwaorgu, Innocent Augustine, Ezenwaka, Francis Abumchukwu and Onuorah Joshua (2017). Treasury Single Accounting (TSA) and Public Sector Accountability in Nigeria. *Journal of Economics, Management and Trade* 19(4): 1-8, 2017; Article no.JEMT.37780 ISSN: 2456- 9216 (Past name: *British Journal of Economics, Management & Trade*, Past ISSN: 2278-098X)
- 180 A. Onuorah, E. Chigbu, .(2016). Federal Government Treasury Single Account, Deposit and Commercial Banks Performance. *Journal of Social and Management Sciences*. 2016; 3(11):1-13
- 181 C. J. Igbokwe-Ibeto, B. B. Nkomah,. K. O Osakede,. R. F. Kinge, (2015). Treasury Single Account – Transparency and Accountability in Public Finance Management in Nigeria: The Journey So Far. *Africa’s Public Service Delivery & Performance Review*.
- 182 N. Barine Michael (2018). Treasury Single Account and Bank Deposits Behaviours and Economic Growth pattern in Nigeria. *Aefunai Journal of Accounting, Business and Finance (FJABAF)*. www.fjabaf.org ISSN:2635-392X
- 183 Olurankinse Felix, Ajidagba Felix, Olaniyi Rotimi (2018). Effects of Adoption of Treasury Single Account on Tertiary Institutions Finances in Nigeria. *Proceedings of ISERD International Conference, Nairobi, Kenya, 10th-11th July 2018*
- 184 J. Adebisi, & M. Okike,. (2016). The Adoption of the Treasury Single Account (TSA) and its Effect on Revenue Leakages of Nigerian States. *American Research Journal of Business and Management*, 2(2)12-13
- 185 A. Ahmad. Abubakar. Treasury Single Account: A Viable Tool for Repositioning Government Ministries, Departments and Agencies (MDAs) for Sustainable Development in Nigeria. *Journal of Economics and Sustainable Development* www.iiste.org. ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) Vol.8, No.20, 2017
- 186 Dennis Amobi and Nneka Grace (2016). Dialectics of Treasury Single Account and Public Financial Management in Tertiary Institutions in Nigeria. *NG-Journal of Social Development*, VOL. 5, No. 5, October 2016. Journal homepage: www.arabianjbmr.com/NGJSD_index.php Article · October 2016 DOI: 10.12816/0033197
- 187 Amahalu, Nestor and Okoye, Pius Vincent and Okoye, Jane Frances, (2016). Effect of Integrated Personnel and Payroll Information System (IPPIS) on Federal Government Recurrent Expenditure in Nigeria (August 15, 2016). *Proceedings of NAA National Conference, Federal University, Otuoke, Bayelsa State, 2016*. Available at SSRN: <https://ssrn.com/abstract=3008572>
- 188 Kenneth Mela, (2019). The implementation of IPPIS policy in the Nigerian universities: benefits and challenges. *Global Journal of Applied, Management and Social Sciences (GOJAMSS)*; Vol.17, August 2019; P.201 – 212 (ISSN: 2276 – 9013) 201

- 189 T. Nkechi Ofor, Leonard Emeka Omaliko, Francis Chukwudi Okoli (2017). Effect of Treasury Single Accounts (TSA) on the Performance of Ministries, Departments and Agencies (MDA) in Nigeria. *Trendy Ekonomiky a Management Trends Economics and Management*. ISSN 1802-8527 (Print) / ISSN 2336-6508 (Online) 2017 29(2): 59–67 DOI: <http://dx.doi.org/10.13164/trends.2017.29.59>
- 190 Leyira Christian Micah and Temple Moses, (2018). IPPIS and the Ghost Workers' Syndrome in Nigeria's Public Sector. *Scholars Journal of Economics, Business and Management (SJEEM)*. p-ISSN 2348-8875 © SAS Publishers (Scholars Academic and Scientific Publishers) A Unit of Scholars Academic and Scientific Society, India (www.saspjournals.com) e-ISSN 2348-5302 Abbreviated Key Title: Sch. J. Econ. Bus. Manag
- 191 Agboola Theophilus Olumuyiwa (2018). Effectiveness of the Integrated Personnel and Payroll Information System in Addressing Ghost Worker Syndrome in Nigerian Public Sector. *Global Journal of Human-Social Science: Interdisciplinary Type: Double Blind Peer Reviewed International Research Journal* Publisher: Global Journals Online ISSN: 2249-460x & Print ISSN: 0975-587X Volume 18 Issue 2 Version 1.0 the Year 2018
- 192 Idris Haruna, Adaja Joseph and Audu Joel Samson, (2015). Integrated Personnel Payroll and Information System (IPPIS) Panacea for ghost workers syndrome in Nigerian Public Service. *International Journal of Public Administration and Management Research (IJPAMR)*, Vol. 2, No. 5, March 2015. Website: www.rcmss.com. ISSN: 2350-2231 (Online) ISSN: 2346-7215 (Print) Idris Haruna, Adaja Joseph and Audu Joel Samson, 2015, 2(5): 55-64
- 193 Effiong, Sunday & Oro, Benafa & Lorenzo, & Raphael, Imong & Etop, Jacob. (2017). Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (IPPIS), and Integrated Financial Management Information System (IFMIS): Application and Implementation Effects on Fraud Management in the Public Sector in Nigeria. 10.9790/487X- 1908072230.
- 194 E. Udo, and E. Esara,. (2016). Adoption of Treasury Single Account (TSA) by State Governments of Nigeria: Benefits, Challenges and Prospects. *Journal of Finance and Accounting*.
- 195 Oru, Anthony, Odu, Odumusor and Charles Joseph (2019). Effect of Treasury Single Account (TSA) on Liquidity of Deposit Money Banks and Effective Control of Governments Cash Resources in Nigeria. *IOSR Journal of Economics and Finance (IOSR-JEF)* e-ISSN: 2321- 5933, p-ISSN: 2321-5925. Volume 10, Issue 1 Ser. III (Jan. – Feb.2019), PP 49-59 www.iosrjournals.org DOI: 10.9790/5933-1001034959 www.iosrjournals.org
- 196 I. Lucky Izobo Enakirerh and O. Sunny Temile (2017). IPPIS IN Nigeria: Challenges, Benefits And Prospects. *International Journal of Social Science and Economic Research* ISSN: 2455-8834 Volume:02, Issue:05 "May 2017" www.ijsser.org Copyright © IJSSER 2017, All right reserved Page 3490
- 197 Abiola Abosede Solanke (2018). Opinion and Perception of Treasury Single

Account Implementation: Implications for Revenue Generation and Utilization in Nigeria. European Scientific Journal January 2018 edition Vol.14, No.1 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 Doi: 10.19044/esj.2018.v14n1p164 URL:<http://dx.doi.org/10.19044/esj.2018.v14n1p164>

- ¹⁹⁸ C. Agundu, Prince Umor (2016). Prudence in Public Institutions Management: The Strategic Financial Efficiency Challenge in Nigeria. *An International Multi-disciplinary Journal, Ethiopia. AFRREV @ Ten, Vol. 10(5), Serial No.44*, September, 2016: 161-180 ISSN 1994-9057 (Print) ISSN 2070-0083 (Online) DOI: <http://dx.doi.org/10.4314/afrrrev.v10i5.12>
- ¹⁹⁹ Helen Walter Mbotu, Amenawo Offiong and Bassey Ibor (2017). Public Perception of the Treasury Single Account in Nigeria. *Journal of Economics and Development Studies*. June 2017, Vol. 5, No. 2, pp. 68-77 ISSN: 2334-2382 (Print), 2334-2390 (Online) Copyright © The Author(s). All Rights Reserved. Published by the American Research Institute for Policy Development DOI: 10.15640/jeds.v5n1a7 URL: <https://doi.org/10.15640/jeds.v5n1a7>
- ²⁰⁰ G. Ogbonna .Friday and Ojeaburu Friday (2015). The Impact of Government Integrated Financial Management Information System (GIFMIS) on Economic Development of Nigeria West African Journal of Business and Management Sciences Faculty of Business Administration Imo State University, Owerri Nigerian edition vol.4 no 1 April 2015
- ²⁰¹ A. T. Ajibade., PhD, G. E. Oyedokun., PhD, O. S. Doumu., (2018). Treasury Single Account and Public Fund Management: A Study of Selected Federal Government Parastatals in Bayelsa State. *International Journal of Scientific & Engineering Research* Volume 9, Issue 12, December-2018 890 ISSN 2229-5518 IJSER © 2018 <http://www.ijser.org>

Chapter Three

Methodology

This chapter discussed the methodology employed in the study. The chapter is presented in the following sequence namely; research design, description of the population of the study, the sampling frame, sampling and sampling technique, sample size, sources of data, data analysis techniques, model specification, *Apriori* expectation, ethical consideration and expected contribution to knowledge.

3.1 Research Design

This research design adopted in this study is a cross sectional survey research design. A survey design was employed in this study because of its ability to gather enormous data coupled with the fact that it is population based. The use of questionnaire allows for respondent to disclose their perception on current and emerging issues. It is also faster and relatively inexpensive to use. It gives the researcher the opportunity to generate information in order to adequately answer the question of what, how, who, where and when' concerning public financial management and performance of selected federal research institution in Nigeria. More importantly, the data structure generated through the survey method helped the researcher to draw inferences concerning the target population.

3.2 Population of the study

The population of this study consisted of all the one thousand two hundred (1,200) employees of the five research institutes selected for this work. Oyo state boasts of ten (10) out of the sixty-nine (69) research institutes in Nigeria. Also, five (5) federal research institutes were purposively selected out of the ten (10) because Oyo state is the case of the study. Also, the five selected represented the major ones among the ten (10) federal research institutes. They

were more accessible for questionnaire administration and they capture a fair representation of research the research institutes in Oyo state.

3.3 Sample size and sampling Technique

In fostering statistical efficiency, a non-probabilistic sampling technique of purposive sampling was employed to select the research institutes for this study. Purposive sampling technique allows members of a population to be selected based on some appropriate characteristics and event criterion. Five (5) research institutes were selected in Oyo State. They include Cocoa Research Institute of Nigeria (CRIN), Nigeria Institute of Social and Economic Research (NISER), Nigeria Institute of Horticulture (NIHORT), Nigeria Institute of Science Laboratory Technology (NILST) and Forestry Research Institute of Nigeria (FRIN). They were selected because these research institutes have enrolled with these economic reform programmes right from their inception. Also, they capture a fair representation of the entire research institutes in Oyo state going by their numbers of employee. Unlike what obtains from MDAs where they were either reluctant or forced to enroll long after the economic reform programmes have become fully operational. Krejcie and Morgan (1977) sampling technique was employed for this work. It recommended two hundred and ninety one (291) for a population size of one thousand two hundred (1,200). Hence, this informed the selection of three hundred (300) employees from the administration and accounting section in which the questionnaires were administered.

3.4 Method of Data Collection

Data used for this study were mainly primary data which were obtained from a structured questionnaire to obtain data from five (5) federal research institutes. One research assistant was trained

3.5 Validity and Reliability of Research Instrument

The degree to which a measuring instrument measures what it is designed to measure is known as validity. Content validity suggests that the contents of the scale are inclusive enough to cover the full range of the subject matter. To also determine the content validity of this study, a questionnaire was examined by the researcher's supervisor to ensure that it was comprehensive enough to cover the full range of the subject matter while construct validity tests the accurate measurement of the diverse phenomena associated with that construct. For the purpose of this study, the research instrument has been certified by my supervisors who are experts in the subject matter and versatile in research.

3.6 Pilot Study

Fifty questionnaires were administered out of which thirty six (36) were adequately filled and returned for the pilot study. The table below showed there is a good internal inconsistency in the structure of the designed questionnaire.

Reliability test

Table 3.6.1 Cronbach cases summary

Cases	N	%
Valid	36	100
Excluded	0	0

SPSS 24

Table 3.6.2 Reliability test

Cronbach's Alpha	Cronbach's Alpha on standardized item	Number of items.
0.747	0.802	36

SPSS 24 output

The Cronbach's alpha value of 0.747 meaning that there is a good internal consistency among the scales as it is more than the 0.70 threshold for items more than 10.

3.7. Method of Data Analysis and Estimation Techniques

The main objective of this study was to empirically investigate the effect of public financial management on the performance of selected federal research institutes in Oyo state, Nigeria; Thus, it examined a cause and effect relationship between Public financial management (explanatory variable) and performance of selected federal research institute (explained variable). To achieve this, both the descriptive and inferential statistics were employed in the study. The descriptive statistics was used to examine the means, maximum, minimum and standard deviation parameters of the variables. While inferential statistics was employed in order to test the hypothesis. The regression analysis was used to show the extent of the causal relationship between the two variables. Correlation coefficient was also used to measure the relationship between variables. All the stated hypotheses in this work were tested at 5% and 10% level of significance ($\alpha = 5\%$ and 10%) the statistical package, Stata version 10.

3.8. Variable Definition and Measurement

The purpose of this study is to examine the effect of public financial management on the performance of selected federal research institute in Nigeria. To achieve this, two (2) types

of variables were employed in this study: these are the explained variable and control variables. The explained variables in this study are the Public financial management measures: Treasury single account (TSA), Integrated Personnel Payroll Information System in Nigeria (IPPIS), Workings of Government Integrated Financial Management Information System (GIFMIS). The dependent variable in this study is the Performance of selected federal Research institute (PSF).

3.9 Model Specification

Our study adapted the model of Ocheni who investigated treasury single account as a catalyst for fostering efficient public financial management in Nigeria, thus,

$$PFM = \alpha_0 + \alpha_1 TSA_i + \mu$$

$$Y =$$

$$f(X)$$

$$Y = y_1,$$

$$y_2$$

Where Y = Public financial Management (PFM)

y_1 = Nation's revenue drive, transparency and fight against corruption (NRTFC)

y_2 = Banks liquidity and employment

(BLE) $X = x_1$

x_1 = Treasury Single account (TSA)

Model 1

$$\text{PSF} = f(\text{TSA})$$

$$\text{PSF} = \alpha_0 + \alpha_1 \text{TSA}_i + \mu$$

Model 2

$$\text{PSF} = f(\text{IPPIS})$$

$$\text{PSF} = \alpha_0 + \alpha_1 \text{IPPIS}_i + \mu$$

Model 3

$$\text{PSF} = f(\text{GIFMIS}).$$

$$\text{PSF} = \alpha_0 + \alpha_1 \text{GIFMIS}_i + \mu$$

Where,

α_0 = Constant

$\alpha_1, \alpha_2, \alpha_3$ = Model

coefficients μ = stochastic

variable

The stochastic term is included in the model to accommodate the effect of other measures of Audit committee which are not included in the model.

3.10 *Apriori* expectations

A positive relationship is expected between TSA, IPPIS, GIFMIS and PSF. Increase in PFM will bring about an increase in the PSF in Nigeria. A decline in the activities of PFM should have a negative effect on the PSF. The a priori expectation of the model is

expressed below; α_i ($i = 0, 1, 2, 3$) > 0 ; $\mu = 0$. There should be an expectation of a positive relationship between the PFM and PSF.

3.11. Model estimation and evaluation technique

The multiple regression models will be employed to obtain numerical values of the model coefficient. The student t test with p values will be used to evaluate the estimated numerical values of the coefficient for statistical significance at 5% level and thus, operationalize the research hypothesis. The strength of the variables in predicting the impact of creative accounting practices on financial reporting will be evaluated based on the R square. The f – stat. will also be used to evaluate aggregate effect of the predictor variables on the dependent variables.

3.12. Ethical consideration

In conducting research requires not only expertise and diligence but also honesty and integrity. This is done to recognize and protect the right of human subjects. To render the study ethical, the right to self-determination, anonymity, confidentiality and informed consent will be observed. Scientific honesty is regarded as a very important ethical responsibility when conducting the research. Dishonest conduct includes manipulation of design and methods, retention or manipulation of data. The researcher will try to avoid any form of dishonesty by using data as obtained with the research instrument.

Chapter Four

Results and discussion of findings

This Chapter presented the data collected from the survey. The data were analyzed and interpreted in accordance with the objectives of the study. The analysis and interpretation of data were based on the questionnaires administered and retrieved. This chapter revealed the responses of 298 respondents considered for this study, which consisted of male and female respondents from five federal research institutes domiciled in Oyo State, Nigeria.

4.1 Analysis of Demographic Features of Participants

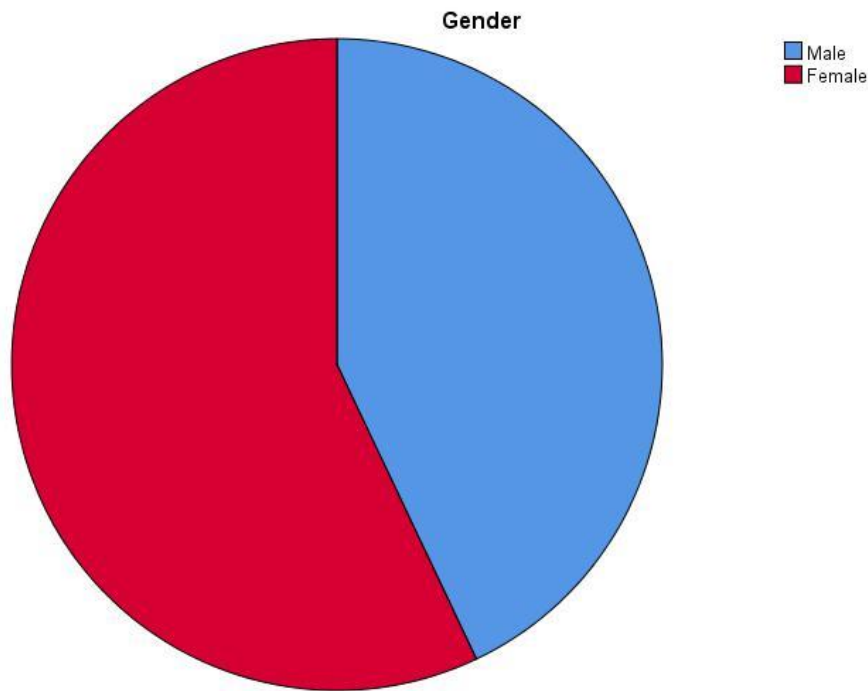
Table 4.1.1a Demographic Characteristics of Respondents

Variable		Frequency (n)	Percentage (%)
Gender	Male	128	43.0
	Female	170	57.0
	Total	298	100.0
Age	Below 30 years	63	21.1
	Between 30-50 years	102	34.2
	Above 50 years	133	44.6
	Total	298	100.0
Educational	HND	85	28.5
Background	BSC	79	26.5
	MSC	61	20.5
	Professional	73	24.5
	Total	298	100.0

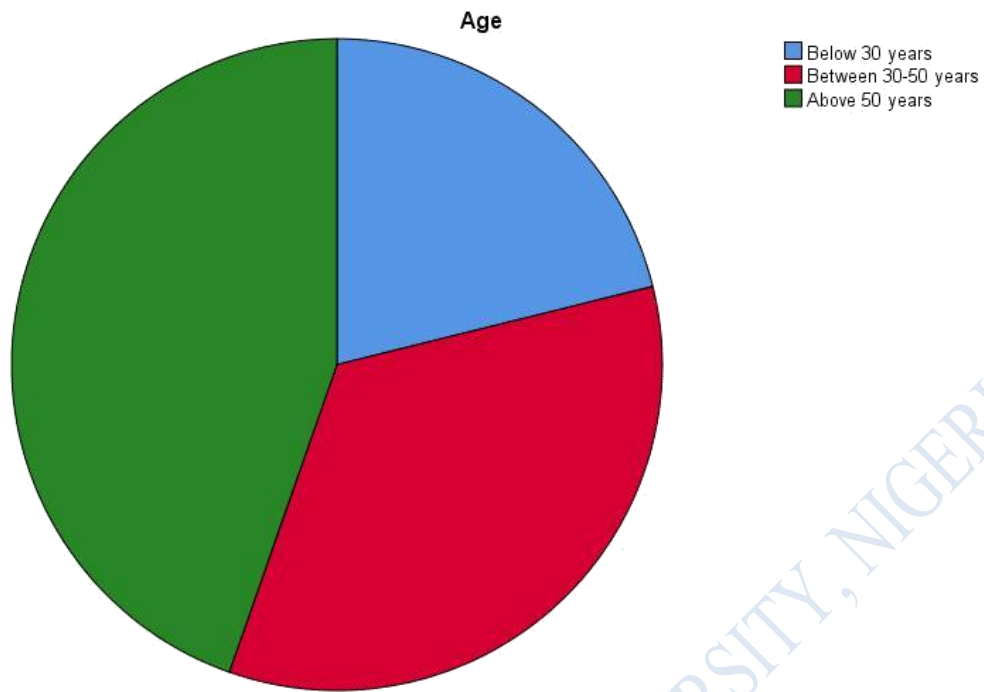
Source: Field Survey 2020

Table 4.1.1a shows that majority of the participants were female representing 57% while the

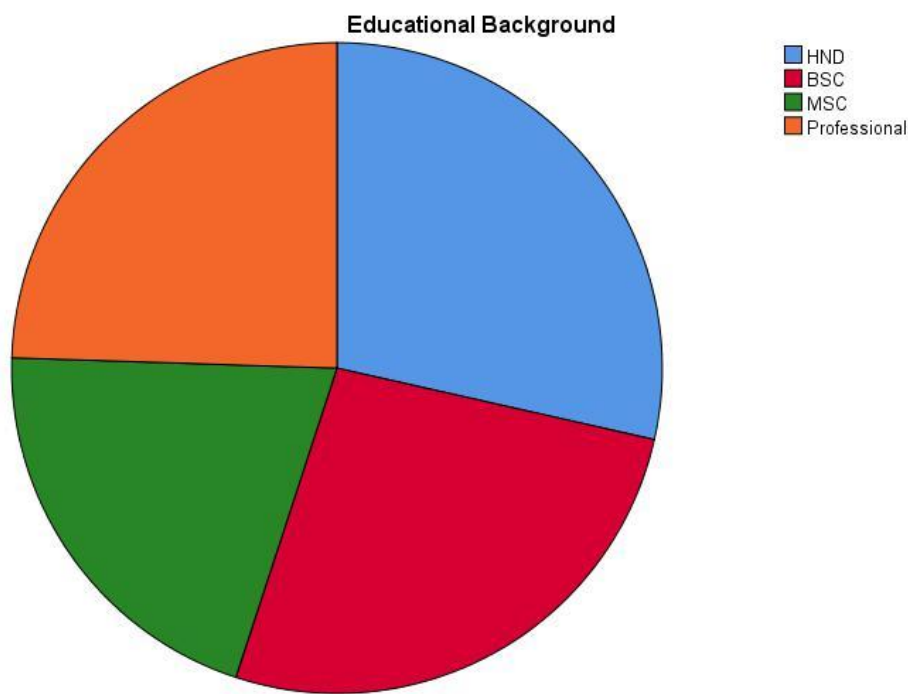
remaining 43% were male. Furthermore, majority of the participants were between the ages of above 50 years (44.6%), followed by respondents within 30-50 years age bracket (34.2%), with only 63 respondents (21.1%) falling below 30 years. In addition, majority of the respondents in this study were HND holders (28.5%), followed by BSc holders (26.5%), while participants with MSc were least represented in this study (20.5%). Table 4.1.1a is presented pictorially thus:



DO NOT COPY. LEA

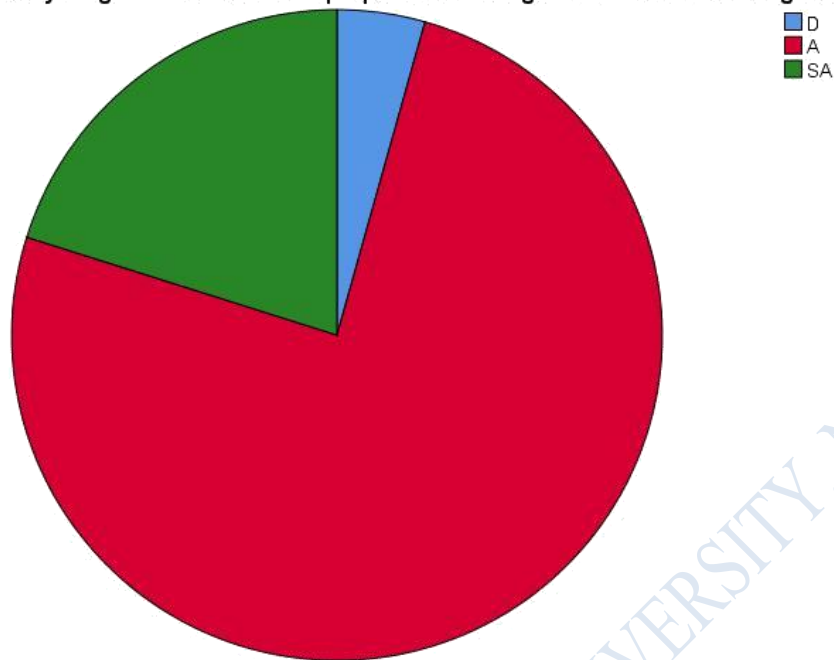


Source: Field Survey 2020



Source: Field Survey 2020

Treasury Single Account ensures proper cash management for collection of government revenue



Source: Field Survey 2020

4.2 Presentation of Descriptive Analysis

Research Question One: To what extent does TSA implementation affect the performance of federal research institutes in Nigeria?

Table 4.2.1 The extent to which TSA policy implementation affects the performance of selected federal research institutes in Oyo state, Nigeria;

Items	SA	A	D	SD	SD
	Freq.	Freq.	Freq.	Freq.	
	(%)	(%)	(%)		

	(%)					
Treasury Single Account	60	225	13	-	3.16	0.47
ensures proper cash management for collection of government revenue	(20.1)	(75.5)	(4.4)			
Efficient allocation of public funds is enhanced through the adoption of Treasury Single Account	149	105	25	19	3.29	0.87
	(50.0)	35.2)	(8.4)	(6.4)		
Treasury Single Account	743	199	19	6	3.14	0.62
greatly enhances financial discipline	(24.8)	(66.8)	(6.4)	(2.0)		
Treasury Single Account	138	58	82	20	3.05	1.00
ensures the spending of funds in line with approved budgets and financial plans of MDAs	(46.3)	(19.5)	(27.5)	(6.7)		
Introduction of TSA has led to readily availability of funds to execute projects when needed	183	89	20	6	3.51	0.71
	(61.4)	(29.9)	(6.7)	(2.0)		
There is no improvement	212	70	10	6	3.64	0.64

in financial discipline	(71.1)	(73.5)	(3.4)	(2.0)		
after the introduction of TSA						
TSA policy helps to curb	144	82	50	22	3.17	0.96
misappropriation of funds	(48.3)	(27.5)	(16.8)	(7.4)		
in my MDA						
MDA's level of Revenue	161	83	41	13	3.31	0.87
Generation has increased	(54.0)	(27.9)	(13.8)	(4.4)		
since the adoption of TSA						
Execution of projects in	223	42	16	17	3.58	0.83
MDA has been greatly	(74.8)	(14.1)	(5.4)	(5.7)		
enhanced due to the use of TSA						
The use of TSA has	242	36	13	7	3.72	0.66
improved the overall	(81.2)	(12.1)	(4.4)	(2.3)		
financial and administrative processes of the MDA						
Average Mean					3.37	0.93

Source: Field Survey 2020

KEY: SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree, *Decision Rule if mean is 1 to 1.49 =Strongly Disagree; 1.5 to 2.49 = Disagree; 2.5 to 3.49 =Agree; 3.5 to 4.49= Strongly Agree**

Table 4.2.1 shows that generally participants agreed that the TSA policy implementation affects performance of Selected federal research institutes in Oyo state. Nigeria;(= 3.37). Specifically, respondents agreed TSA policy implementation affects the performance of selected federal research institutes in Oyo state. Nigeria;in the following ways, that: Treasury Single Account ensures proper cash management for collection of government revenue (= 3.16), Efficient allocation of public funds is enhanced through the adoption of Treasury Single Account (= 3.29), Treasury Single Account greatly enhances financial discipline (= 3.14), TSA policy helps to curb misappropriation of funds in my MDA (= 3.17), Treasury Single Account ensures the spending of funds in line with approved budgets and financial plans of MDAs (= 3.05) and that MDA's level of Revenue Generation has increased since the adoption of TSA (= 3.31).

Furthermore, respondents also strongly agreed with the following statements that: introduction of TSA has led to readily availability of funds to execute projects when needed (= 3.51) , There is no improvement in financial discipline after the introduction of TSA (= 3.64) that Execution of projects in MDA has been greatly enhanced due to the use of TSA (= 3.58) and that the use of TSA has improved the overall financial and administrative processes of the MDA (= 3.72).

This analysis implies that TSA implementation on the overall affect the performance of federal research institutes in Nigeria. It specifically affects the performance of selected federal research institutes in Oyo state. Nigeria; in terms of: cash management, efficient allocation, financial discipline, budget and financial plan and increase revenue generation. In addition, the study found out that TSA implementation strongly improves availability of fund, executions of project and financial & administrative process.

Research Question Two: How does IPPIS affect the performance of selected federal research institutes in Oyo state. Nigeria?

Table 4.2.2 The influence of IPPIS on performance of selected federal research institutes in Oyo state. Nigeria;

Items	SA	A	D	SD	SD	
	Freq.	Freq.	Freq.	Freq.		
	(%)	(%)	(%)	(%)		
IPPIS tracts all financial transaction that are related and linked to personnel emolument	82 (27.5)	115 (38.6)	29 (9.7)	72 (24.2)	2.70	1.12
Accountability and transparency of Government transaction increased with IPPIS	148 (49.7)	108 (36.2)	40 (13.4)	2 (0.7)	3.35	0.73
IPPIS reduces personnel cost by eliminating ghost	79 (26.5)	123 (41.3)	90 (30.2)	6 (2.0)	2.93	0.80

Workers

IPPIS reduces multiple payments of emolument to a single employee in your ministry	213	60	16	9	3.60	0.73
	(71.5)	(20.1)	(5.4)	(3.0)		
IPPIS facilities easy storage, updating and retrieval of personnel records to reduce administrative cost	97	88	95	18	2.89	0.94
	(32.6)	(29.5)	(31.9)	(6.0)		
With the introduction of IPPIS, has your MDA made any saving from its recurrent expenditure in terms of personnel cost and overhead	101	123	55	19	3.03	0.88
	(33.9)	(41.3)	(18.5)	(6.4)		
IPPIS has made payments in terms of over-head and salary to be made on-time and more conveniently	108	182	5	3	3.33	0.56
	(36.2)	(61.1)	(1.7)	(1.0)		
IPPIS reduces wastage and financial leakages in	133	40	105	20	2.96	1.03
	(44.6)	(13.4)	(35.2)	(6.7)		

MDA recurrent expenditure in terms of personnel cost management							
IPPIS aid in having and preparing accurate and reliable information about the size of personnel in the payroll	220 (73.8)	42 (14.1)	20 (7.4)	14 (4.7)	3.57	0.82	
IPPIS aid in the reduction of corruption and sharp practices in the ministry	241 (80.9)	29 (9.7)	23 (7.7)	5 (1.7)	3.70	0.68	
Average Mean					3.21	0.83	

Source: Field Survey 2020

KEY: SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree, *Decision Rule if mean is 1 to 1.49 =Strongly Disagree; 1.5 to 2.49 = Disagree; 2.5 to 3.49 =Agree; 3.5 to 4.49= Strongly Agree**

Table 4.2.2 depicts that on the overall, the respondents agreed that IPPIS influence performance of Federal research institutes in Nigeria. Some of the respondents specifically the majority of the Participants agreed that: IPPIS tracts all financial transaction that are related and linked to

personnel emolument (= 2.70), Accountability and transparency of Government transaction increased with IPPIS (= 3.35), IPPIS reduces personnel cost by eliminating ghost works (=2.93), IPPIS facilities easy storage, updating and retrieval of personnel records to reduce administrative cost (=2.89), With the introduction of IPPIS, has your MDA made any saving from its recurrent expenditure in terms of personnel cost and overhead (=3.03), IPPIS has made payments in terms of over-head and salary to be made on-time and more conveniently (=3.33) and that IPPIS reduces wastage and financial leakages in MDA recurrent expenditure in terms of personnel cost management (=2.96). However, few respondents strongly agreed that: IPPIS reduces multiple payments of emolument to a single employee in your ministry (=3.60), IPPIS aid in having and preparing accurate and reliable information about the size of personnel in the payroll (=3.57) and that IPPIS aid in the reduction of corruption and sharp practices in the ministry (=3.70).

Research Question Three is there any relationship between GIFMIS and performance of selected federal research institutes in Oyo state. Nigeria?

Table 4.2.3 The relationship between GIFMIS and performance of selected federal research institutes in Oyo state. Nigeria;

Items	SA	A	D	SD	SD	
	Freq.	Freq.	Freq.	Freq.		
	(%)	(%)	(%)	(%)		
The GIFMIS system has helped the MDA to	182 (61.1)	64 (21.5)	44 (14.8)	8 (2.7)	3.41	0.84

achieve a target in revenue collection						
GIFMIS has reduced administrative task by reducing operating cost of hiring employees by revenue agencies	194 (65.1)	52 (17.4)	47 (15.8)	5 (1.7)	3.45	0.82
GIFMIS aids in payment of tax to Nigeria Revenue Authority	86 (28.0)	107 (35.9)	90 (30.2)	15 (5.0)	2.89	0.88
GIFMIS has re-enforced internal controls for safeguarding of public Money	80 (26.8)	80 (26.8)	114 (38.3)	24 (8.1)	2.72	0.95
GIFMIS has reduced cost of reporting budgetary and financial statements to MDAs	82 (27.5)	63 (21.1)	108 (36.2)	45 (15.1)	2.61	1.05
GIFMIS has helped to fast track personnel information generation or retrieval, updates and dissemination in the	140 (47.0)	97 (32.6)	35 (11.7)	26 (8.7)	3.18	0.95

MDA						
GIFMIS has reduced	145	62	74	17	3.12	0.98
Administrative	(48.7)	(20.8)	(24.8)	(5.7)		
bureaucratic processes						
and bottlenecks peculiar						
with MDA						
GIFMIS operates a	80	58	86	74	2.48	1.13
Single Treasury	(26.8)	(19.5)	(28.9)	(24.8)		
Accounts that reduces						
borrowing cost						
Average Mean					2.98	0.95

Source: Field Survey 2020

KEY: SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree, *Decision Rule if mean is 1 to 1.49 =Strongly Disagree; 1.5 to 2.49 = Disagree; 2.5 to 3.49 =Agree; 3.5 to 4.49= Strongly Agree**

Table 4.2.3 shows that generally participants agreed GIFMIS impacts performance of federal institutions in Nigeria (= 2.98). Specifically, respondents agreed GIFMIS impacts performance of federal institutions in Nigeria in the following ways, that: The GIFMIS system has helped the MDA to achieve a target in revenue collection (= 3.41), GIFMIS has reduced administrative task by reducing operating cost of hiring employees by revenue agencies (= 3.45), GIFMIS aids in payment of tax to Nigeria Revenue Authority (= 2.89) , GIFMIS has

re-enforced internal controls for safeguarding of public money (= 2.72), GIFMIS has reduced cost of reporting budgetary and financial statements to MDAs (= 2.61), GIFMIS has helped to fast track personnel information generation or retrieval, updates and dissemination in the MDA (= 3.18) , GIFMIS has reduced administrative bureaucratic processes and bottlenecks peculiar with MDA (= 3.12).

Furthermore, only few respondents disagreed that GIFMIS operates a Single Treasury Accounts that reduces borrowing cost (= 2.48).

4.3 Test of Hypotheses

Decision Rule

The pre-set level of significance for this study is 0.05. The hypotheses presumed that there was no significant influence between the variables under consideration. If the P-value which indicates the significance or the probability value exceeded the pre-set level of significance ($P > 0.05$), the hypothesis stated in the null form was accepted, however, if the P-value was less than or equal to 0.05 ($P \leq 0.05$), the null hypothesis was rejected.

H₀₁: There is no significant influence of TSA policy implementation on the performance of federal research institutes in Nigeria.

Table 4.3.1 a

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

1	.114 ^a	.013	.010	.84545
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a. Predictors: (Constant), TSA

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.806	1	2.806	3.926	.048 ^b
	Residual	211.575	296	.715		
	Total	214.382	297			

a. Dependent Variable: Performance

b. Predictors: (Constant), TSA

Table 4.3.1 b

Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	2.082	.636		3.274	.001
	TSA	.374	.189	.114	1.981	.048

a. Dependent Variable: Performance

Tables 4.3.1a and 4.3.1b indicate that treasury single account policy implementation had a positive significant influence on the performance of selected federal research institutes in Oyo state, Nigeria; ($B=0.374$, $t= 1.981$, $p<0.05$). The correlation coefficient shows that treasury single account had a positive but weak significant association with the

performance of selected federal research institutes in Oyo state. Nigeria; ($r = 0.114, p < 0.05$). This suggests that increased exposure to treasury single account will lead to improvement in the performance of federal research institutes in Nigeria. The model shows that treasury single account could account for only 1.3 percent variation ($R^2 = 0.013$) in the performance of federal research institutes in Nigeria. The implication of this is that treasury single account could be used to improve the performance of federal research institutes in Nigeria. Consequently, the null hypothesis which states that there is no significant influence of TSA policy implementation on the performance of selected federal research institutes in Oyo state. Nigeria; was rejected.

At a level of significance, 0.05, the t-statistics is 1.981 while the p-value of the t-statistics is 0.048 which is lower than 0.05 adopted level of significance. Hence the study rejected the null hypothesis which states that There is a significant influence of TSA policy implementation on the performance of federal research institutes in Nigeria.

H₀₂: IPPIS has no significant influence on the performance of federal research institutes in Nigeria.

Table 4.3.2a ANOVA & Model Summary of Test of influence of IPPIS on the performance of federal research institutes in Nigeria

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.103 ^a	.011	.007	.84651

a. Predictors: (Constant), IPPIS

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.276	1	2.276	3.176	.076 ^b
	Residual	212.106	296	.717		
	Total	214.382	297			

a. Dependent Variable: Performance

b. Predictors: (Constant), IPPIS

Model 2

$$PSF = f(IPPIS)$$

$$PSF = \alpha_0 + \alpha_1 IPPIS_i + \mu$$

Source: SPSS 26 output

Table 4.4.2a indicates the model summary of hypothesis two.

Table 4.3.2b Showing the influence of IPPIS on the performance of federal research institutes in Nigeria

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.123	.684		3.105	.002
	IPPIS	.806	.213	.103	5.782	.046

a. Dependent Variable: Performance

Source: SPSS 26 output

Tables 4.3.2a and 4.3.2b indicate that IPPIS had a positive significant influence on the Performance of selected federal research institutes in Oyo state, Nigeria; ($B= 0.376$, $t= 6.091$, $p<0.05$). The correlation coefficient shows that IPPIS had a positive weak significant relationship with the Performance of selected federal research institutes in Oyo state, Nigeria; ($r =0.334$, $p<0.05$). This suggests that increased exposure to IPPIS will lead to better performance of federal research institutes in Nigeria. The model shows that IPPIS could account for 11.1 percent variation ($R^2= 0.111$) in Performance of federal research institutes in Nigeria. The implication of this is IPPIS has the tendency to result in better and positive Performance of federal research institutes in Nigeria. Consequently, the null hypothesis which states that IPPIS has no significant influence on the performance of selected federal research institutes in Oyo state, Nigeria; was rejected.

The implication of this is that treasury single account could be used to improve the performance of federal research institutes in Nigeria. Consequently, the null hypothesis which states that there is no significant influence of IPPIS on the performance of selected federal research institutes in Oyo state, Nigeria; was rejected.

At a level of significance, 0.05, the t-statistics is 5.782 while the p-value of the t-statistics is 0.046 which is lower than 0.05 adopted level of significance, .Hence the study rejected the null hypothesis which that There is a significant influence of IPPIS on the performance of federal research institutes in Nigeria.

H₀₃: There is no relationship between GIFMIS and performance y of federal research institutes in Nigeria

Table 4.3.3a Bivariate Pearson correlation test relationship between GIFMIS and performance of federal research institutes in Nigeria.

		Correlations	
		GIFMIS	PERF
GIFMIS	Pearson Correlation	1	.526**
	Sig. (2-tailed)		.000
	N	298	298
PERF	Pearson Correlation	.526**	1
	Sig. (2-tailed)	.000	
	N	298	298

** . Correlation is significant at the 0.01 level (2-tailed).

Tables 4.3.3a show the Pearson correlation coefficient depicting the relationship that exists between GIFMIS and performance of federal research institute in Nigeria (PERF). From the table the correlation coefficient is 0.526 which signals that there is a strong positive relationship between GIFMIS and performance of federal research institute in Nigeria (PERF) ($r = 0.526$, $p < 0.05$). This implies that increased GIFMIS will lead to improvement in the performance of federal research institute in Nigeria (PERF). The implication of this is that GIFMIS could be used to improve the performance of federal research institute in Nigeria (PERF). Consequently, the null hypothesis which states that there is no relationship between GIFMIS and performance of selected federal research institutes in Oyo state. Nigeria; was rejected.

4.4 Discussion of Findings

The findings of this study are in line with the *a priori* expectation Tables 4.3.1a and 4.3.1b indicate that treasury single account had a positive significant influence on the performance of selected federal research institutes in Oyo state, Nigeria; ($B= 1.618, t= 10.717, p<0.05$). This study is in line with a related work on Imperative of Treasury Single Account¹. The author's objective is to review the adoption and workings of Treasury Single Account in Nigeria as it affects major economic variables and its influence on macro-economic development, financial management and accountability. He adopted Meta-Analysis in conducting his research. He found out that the adoption of Treasury Single Account will help to ensure proper cash management by eliminating idle funds usually left with different commercial banks and in a way to enhance reconciliation of revenue collection and payment. Also, it will curb corruption in public finance and that it will ensure adequate fund flow that will be channeled to critical sectors of the economy to catalyze development. The implications of the TSA on the economy was questioned in his report titled: Counting the Cost of Treasury Single Account, through interviews². He found out that the adoption of TSA impacted on the liquidity level of the banking industry, resulting in a surge in money market rates during the period as banks scrambled for funds to cover their liquidity positions. Also, he concluded that the banking industry would be affected in terms of deposits and funding cost structure.

The correlation coefficient of this study shows that treasury single account had a positive but weak significant association with the performance of selected federal research institutes in Oyo state, Nigeria; ($r =0.403, p< 0.05$) which supports the findings of a similar work: Treasury Single Account (TSA) and the Performance of the Federal Ministry of Education, Abuja^{3,4}. The specific objectives of these studies were to: identify the aims and objectives of Treasury Single Account (TSA); examine the quality and quantity of service offered by Federal Ministry of Education after the implementation of Treasury Single Account (TSA); examine the challenges affecting the implementation of Treasury Single Account (TSA) in Federal Ministry of Education; and suggest measures to improve service delivery by Federal Ministry of Education in the presence of Treasury Single Account (TSA) policy. Data for the study was collected from both primary

and secondary sources. The primary source of data was obtained from the questionnaire while the secondary data was gotten from textbooks, journal articles, internet sources, newspapers and official publications. The study revealed that the Treasury Single Account has improved expenditure management in the federal Ministry of Education, Abuja. It also revealed the challenges affecting the implementation of Treasury Single Account (TSA) in the ministry to include: inadequate guidelines on the implementation procedure, no provision for the ministry to maintain impress among others. It was concluded that the Treasury Single Account (TSA) is a good policy aimed at improving funds available to the government. However, it has to take into consideration the administrative needs of government agencies. The study, therefore, recommends the review of the policy to include the maintenance of a sub-account for agencies impress, training and retraining of public organization financial officials among others as measures for effective implementation of Treasury Single Account (TSA) in Federal Ministry of Education in particular, and the Nigerian public service in general.

The findings of this study assert that an increased exposure to treasury single account will lead to improvement in the performance of federal research institutes in Nigeria. The findings of this study agrees with the findings of the worked on: Treasury Single Account and University Administration in South East, Nigeria⁵. The study investigated the recently introduced treasury single account on university administration in south-east Nigeria, three federal universities were selected: Nnamdi Azikiwe University, Awka, University of Nigeria, Nsukka and Federal University of Technology, Owerri. The survey research method was adopted. The Taro Yamane formula was employed to determine the sample size of 203: Primary data were collected with the aid of a questionnaire. The data were analytically regressed. It was discovered that the newly introduced treasury single account has, so far, among other challenges, affected financial operations in the bursary units and consequently slowed down activities in the universities. It revealed that there is a sharp departure from the past when planned programmes were executed as planned in the universities. It was therefore, recommended that tertiary institutions should be excluded from TSA implementation to achieve the all-important objective of research and

development in the university system and the federal government should immediately carry out a comprehensive review of the policy implementation to be properly guided on the appropriate organisations where TSA is required.

This study agrees with the worked on: Treasury Single Account Policy and Government Revenue in Nigeria⁶. Their main objective was to examine the impact of Treasury Single Account policy on government revenue remittance in Nigeria and their specific objectives were: to determine how treasury single account policy can assist in blocking government revenue leakages and to ascertain the impact of treasury single account policy on curbing mismanagement and misappropriation of government revenue. The survey research design was adopted for the study and copies of questionnaire were administered to respondents. The population comprises of the Nigerian Civil Aviation Authority, Aviation House, Ikeja, Lagos and Federal Inland Revenue Service (FIRS) regional office in Ikoyi, Lagos. Purposive sampling method was used to arrive at a sample size of One hundred and fifty (150) respondents. Their study revealed that TSA policy has increasingly helped to support the collection and remittance of all government revenue but yet to safeguard close monitoring of government expenditure. They recommended close monitoring of government expenditure.

A related study on “TSA: A catalyst for Public Financial Management in Nigeria, workshop by Association of National Accountants of Nigeria” described TSA as a unified arrangement that enhances the fungibility of the government cash resources⁷. The study affirms that the adoption of TSA policy affects banks liquidity and employment negatively. The researcher believes the TSA will help to tame the tide of corruption and enhances transparency. While believing that there is no single TSA model or design, He, however, emphasized that the model be implemented in each country depends on the stage of development of the quality of public institutions, financial management systems, it's technological and development and

communications, infrastructure and degree of maturity of its banking system.

The work on Implementing the treasury single account, submitted that treasury single account implementation is meant to enhance accountability for public funds and transparency⁸. The study submitted that, there is societal anxiety about the success and sustainability of the policy which will be dependent on the stakeholders' role in the policy drive. The authors also opined that the implementation of TSA should be founded on legal ground. "Being legally recognized is, therefore, an important pre-requisite especially in those countries where the presumed autonomy of some institutions is an obstacle to implementation". They also identified possible structural obstacles to the successful implementation which include an uncooperative attitude of civil servants and politicians who have benefited from the former accounting system, political unrest, power/network congestion and inadequate training of TSA stakeholders.

The effects of the implementation of Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (IPPIS), and Integrated Financial Management Information System (IFMIS): Application and Implementation Effects on Fraud Management in the Public Sector in Nigeria have also been examined by a researcher⁹. 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 questionnaires were administered on respondents randomly selected from the studied Ministries. Results of the statistical test reveal that TSA, IPPIS, and IFMIS have a positive and significant relationship with Fraud and fraud management as well as jointly impact the performances of Public Interest Entities.

This study also supports the findings of a scholar, who, in his work: How Treasury Single Account may affect the economy, the implementation of treasury single account will not only

block financial leakages and loopholes, it will also ensure a robust financial management system. He believes that implementation of treasury single account will ensure better financial management and control, reduction in the cost of government borrowing and ensuring optimum utilization of government resources. He emphasized that many developing and low-income countries have fragmented government banking arrangements that hinder effective cash management and financial prudence. He also believes that the TSA will enable the government to avoid borrowing and paying additional interest charges to finance the expenditure of some agencies. In his submission, TSA has two major attributes. First is that it is a unified arrangement which enhances the consolidation of government cash resources, which implies that no other government agency should be allowed to operate bank accounts without the oversight of the treasury. Second, it is a comprehensive arrangement that encompasses all government cash (both budgeting and extra-budgetary) activities in the government.

In a similar study, reports on TSA and its implication for the Nigerian economy, the scholar opined that in the short run the rate of exchange of the Naira to the world's major currencies will appreciate as excess liquidity will be mopped up from the system, thereby stimulating various sectors of the economy¹⁰. The Nigerian Stock Exchange would be negatively impacted as a hike in deposit rates would reduce returns from the equities market thereby leading to investors shifting their investments to the money market. There would be a spike in the inflation rate even as the returns on real estate investments will fall and the manufacturing sector will also be affected negatively. The rate of unemployment will increase even as short-term interest rates will rise thereby threatening the existence of SME's who already find it difficult to borrow money from financial institutions at 'crazy' rates. Also the work on: Impact of Treasury Single Account on Liquidity assesses the positive effect of the implementation of TSA on the Economy, the public accounting system and the undesired consequences on the liquidity base and performance of banking sector in Nigeria¹¹. The researcher administered questionnaires to the Management staff of the ten banks selected for his study. He employed Chi-square as a statistical tool for

analysis of the data. The results obtained confirmed that the implementation of the Treasury Single Account in the public accounting system impacted negatively on the liquidity base and the performance of the banking sector in Nigeria.

In the aforementioned, the result of this study that TSA has a positive impact on the performance of public research institute. Similarly, the work: *An Analysis of Pros and Cons Treasury Single Account Policy in Nigeria* discussed the objectives, pros and cons of a Treasury Single Account recently introduced by the Buhari administration¹². The study posited that for an administration to succeed, it has the obligation to aggregating states' resources to provide services and amenities promised to the people. And that any step was taken in the direction aimed at plugging leakages in revenue-generating agencies should be seen as a step in the right direction. In the work; *Prospects and Challenges of Treasury Single Account In a Developing Economy: Case Study of Nigeria* examined the prospects and challenges and identify the effectiveness of TSA¹³. Also the study on: *Treasury Single Account: Issues and Challenges* examined what TSA is, its efficiency, challenges and multiplier effects on the overall financial system¹⁴. The authors found out that it: reduces dichotomy between fiscal and monetary policy; improved efficiency and accountability on the part of revenue-generating agencies; led to currency value appreciation; improved capital market through bond market development and reduced incidences of money leakages. Also, it realized the slow remittance speed of deposit money banks, non-compliance of other tiers of government, likelihood of bank crises and fewer savings and low long-term investment.

Similarly, in the work: *Treasury Single Account and Fund Management in Nigeria: A Perception of Accounting Practitioners in Ado-Ekiti Metropolis* aligns with this study¹⁵. The scholars examined the role of Treasury Single Account on Effective fund Management and also assessed the role of the Treasury Single Account on government transparency. They employed descriptive and inferential statistics in analyzing the data for their study. Their study revealed that operationalized TSA reduces mismanagement of public fund and boost government revenues.

Tari, Myatafadi and Kibikiwa worked on the contributions of reviving the Treasury Single Account policy. Their study employed secondary data methodology to effectively examine the fiscal impact of reviving the TSA policy and anchored it on an incremental model as a framework of analysis. They suggested better ways of making the policy effective amidst the dwindling oil price and the superiority of Dollar against the Naira. Hence, their study concluded that TSA will be a failure in Nigeria, except proper monitoring of government account is carried out, in all government institutions and strong punitive measure applied against defaulters and corrupt officers.

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The extent to which Treasury Single Account can block financial leakages, promotes transparency and accountability in the public financial management have also been examined in the work: *The Effects of Treasury Single Account on Public Finance Management in Nigeria*. The study employed both primary and secondary data. The study populations were Ministries, Department and Agencies (MDAs) within Bauchi metropolis using a sample of 72 respondents through judgment sampling. The data were analyzed using Pearson Correlation techniques. The result showed that the adoption of a Treasury Single Account (TSA) is capable of plugging financial loopholes, promoting transparency and accountability in the public Financial System. It was recommended that for the success of this policy, the government should promulgate more legislation to make it mandatory for all the three tiers of government in Nigeria¹⁶.

An alternative models and approaches for designing a TSA that take into account specific country contexts as well as the preconditions and desirable sequencing for its successful implementation was presented in the work titled *Treasury Single Account: Concept, Design and Implementation Issues*. The study also elaborated on its concept, essential features, and potential benefits¹⁷. This is related to the study on Treasury Single Account policy, Public Funding and Liquidity of Deposit Money Bank which examined the influence of TSA implementation on MDAs funding in Nigeria; analysed the effect of TSA implementation on the liquidity of DMBs in Nigeria; and investigated the challenges of TSA policy implementation in Nigeria. Being survey research, his emphasis was on cross-sectional and descriptive survey research. Purposive sampling method was also employed with three hundred and thirty respondents involved eventually. The results of the study showed that the implementation of the TSA policy has led to better management and control of public funds in the various MDAs; the payment for services, procurements and disbursement of funds has become difficult for MDAs; that the full implementation of TSA policy has negatively affected the liquidity of Deposit Money Banks and that the implementation TSA policy has negatively impacted on funding in federal MDAs.

Analyses of the objectives of the TSA systems and its various and discussed the prospects of the TSA system and its challenges had been done in similar studies¹⁸. Scholars have also examined Treasury Single Account in Nigeria to provide the way forward for the country. The study posited that TSA policy will go a long way in blocking the identified financial leakages in revenue generation and promote transparency and accountability in the public financial system if it is fully implemented. It will equally pave the way for the timely payment and capturing of all revenues going into the government treasury, without the intermediation of multiple banking arrangements. The policy will also enable the government at the center to know its cash position at any given time without any hindrance. The system will likely reduce the round-tripping of government deposits.

Critical examination of the effects of treasury single account policy on corruption in Nigeria was carried out. The study adopted a cross-sectional survey design and used a questionnaire to generate its data. The sample size of their study was determined at 377 staff through the use of Prof. Taro Yameme sample size method. The data were analyzed through the use of descriptive and inferential/statistics. The study found that the Treasury Single Account (TSA) policy was introduced to block financial leakages, reduce corruption, promote transparency and prevent mismanagement of government's revenue in public sector organisations. The study revealed that the major challenges hampering the effective and efficient implementation of the treasury single account (TSA) policy include: Inability of the federal government to remit appropriately to the various MDAs, uncertainties underlying federal government inactions and actions, bottlenecks/bureaucracy, internet platform delays, inefficient human capital development and time-wasting in the banks and payment points¹⁹.

An explanation of the concept of TSA and description of its features, discussions on the problems of fragmented government banking arrangements, and how a treasury single account (TSA) could

address them was studied in a similar research. The study also discussed the design issues that need to be considered in setting up a TSA system and discussed the preconditions and key sequencing and implementation issues that need to be addressed in establishing a TSA. The study concluded that: fragmented government banking arrangements hinder effective cash management; the design of a TSA in a particular country depends on the stage of development of the public institutions and financial management systems and the degree of maturity of its banking system, including the technology used for the interbank settlements and clearing systems; and the introduction of a TSA should not be viewed as an independent activity and should be integrated with other treasury reforms, including changes to budget execution processes²⁰.

Researchers have also identified the implications of treasury single account on the economic department in Nigeria. Their study highlighted the success stories in other countries and the effects of adopting the treasury single account on the banking sector in Nigeria, the features, benefits and demerits of the treasury single account. They recommended that the legislature should enact acts to support TSA operations in line with backing Act of CRA that Treasury Single Account should be institutionalized so that successive government will not deviate from it; Government accountants and heads of state MDAs should be well trained to meet up with the challenges of TSA operation; The bureaucracy of the TSA should be corrected and reduce to a minimum level and to averts the fear from different groups; and that government should train and re-train the up and down line staff to effective and efficient use of TSA and the theory of stakeholders, management theory, and modern money theory²¹.

Researchers have attempted to establish the impact of treasury single account on Nigeria's Economy by conducting an empirical analysis of the relationship between Treasury Single Account and economic performance in Nigeria. They engaged time-series data to obtain information because of the use of a set of economic variables over 17 years. The population of the study was determined based on the available Unified data in the Central Bank of Nigeria (CBN) Statistical Bulletin for the year 2015 on Gross Domestic Product (GDP), Money Supply (MS), Credit with CBN (CR) and Deposit to CBN (DP); where GDP depends on MS, CR and DP. The result showed that the Treasury Single Account has a positive significant impact on the country's economic growth but this impact is limited by various factors, one of them being the recent implementation of the policy in Nigeria which made the discovery of historical data difficult. Their study recommended that the federal government of Nigeria should initiate policies and various means to make sure that there is proper accountability for the funds entering into the Treasury Single Account and that such fund should follow due process²².

A related study ascertained the effect of treasury single account and accountability in the Nigeria Public Sector using a descriptive survey research design. The population of this study consisted of 600 staff of the four federal health tertiary institutions drawn from Account Departments and sample size of 250 Account Departments staffs were selected using the proportionate random sampling technique that adaptation of a treasury single account and accountability (TSA) in the Nigeria Public Sector is capable of plugging financial loopholes, promoting transparency and accountability in Federal Health Tertiary Institutions in South-East Nigeria²³. A similar work using ex-post factor research design revealed that accountability is very poor in Nigeria because the attributes of accessibility comprehensiveness, relevance, quality, reliability and timely disclosure of economic activities. It was found out that government cash balances have a significant effect on accountability in the Nigeria Public sector. And that unexpected fiscal volatility has a significant effect on Accountability in the public sector. It was therefore, recommended among others, that for accountability to be successful in the management of public funds in Nigeria, there must be a reduction in the level of corruption, improving public sector accounting and auditing standards²⁴.

An evaluation and critique of the policy of the Treasury Single Account (TSA) adopted by the Nigerian government as an essential tool for enhancing transparency and accountability in public sector financial was reported in other study. The study adopts both qualitative and quantitative research design and descriptive analysis to gain an insight into the nature and character of TSA operations in Nigeria. It was recommended among others, that the adoption of TSA in the country's public sector should progress slowly and wisely. Institutions and institutional rules should be strengthened, be accountable and made autonomous of cabals and individual who might want to manipulate the system for group or personal interests²⁵.

Scholars have also ascertained the behaviours and relationship existing between Treasury Single Account (TSA) and cash balances of deposit money banks (DMBs) in Nigeria and the effect of this behaviour and subsisting relationship on Nigeria's economic growth. Quarterly data on the TSA and composite cash balances were tested for stationarity (unit root) using the Augmented Dickey-Fuller test and analyzed using the Kendall tau_b correlation technique, the Granger Causality model, and both variables and loans and advances by DMBs (LSA) regressed on real Gross Domestic Product (GDP) using the Ordinary Least Squares (OLS) model. His research results show that there exists a positive and significant relationship between the TSA and composite bank balances of DMBs (BNKBL), and both have a positive long-run relationship with RGDP after the initial implementation shock on bank balances on DMBs and RGDP. The Granger causality test results further showed that TSA and loans and advances by the DMBs to the economy causes changes in RGDP but the TSA does not cause changes in bank balances of DMBs in Nigeria in the long-run²⁶.

Effects of Adoption of Treasury Single Account on Tertiary Institutions Finances in Nigeria examined the effect of TSA on tertiary institution finances. The specific objectives were to: examine the effects of TSA adoption by Nigeria. The government on the development of Federal

research institutes in Nigeria; the impact of TSA adoption by the Nigeria Government on human resources development in Federal research institutes; the impact of TSA adoption by the Nigeria Government on finance of extra budgeting items in Federal research institutes; various challenges TSA adoption is placing on the development of tertiary institutions in Nigeria. They use survey research design and data were collected from primary sources through the administration of a questionnaire to respondents. Data collected were analyzed using descriptive statistics and Kolmogorow Smirnov non-parametric statistic tool²⁷.

However, this study revealed that adoption of TSA impacted negatively on human capital development, and also place some challenges on the smooth running of tertiary institutions mostly in the area of project implementation, Budget implementation and payment of conference or workshop allowance to the attendee. The paper concludes that TSA adoption inhibits the development of tertiary institutions in Nigeria. Adebisi & Okike studied the adoption of the treasury single account and its effect on revenue leakages of Nigerian states. In pursuance of achieving the research objective and proffering solution to the research problem, the study employed survey research. The target population was the 628 Senior and Management staff of the Ministries of Finance and Board of Internal Revenue of 6 selected states in Nigeria that have

adopted the TSA. In selecting the sample size for this study, the Okpanachi (2011) restructured Yemane (1967) sampling model was employed to justify the sufficiency of the sample size.

The data used for analysis are collected through the use of a Likert scale closed ended structured questionnaire. Questionnaires were distributed to the sample size of 133 staffs out of which 124 were fully completed and returned. The analysis was done using regression analysis with the aid of SPSS 22. The result of the study revealed that 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.

An assessment of the effects of TSA on Federal Government's Ministries, Departments and Agencies (MDAs) was done in the study: Treasury Single Account: A Viable Tool for Repositioning Government Ministries, Departments and Agencies (MDAs) for Sustainable Development in Nigeria. To achieve the objective of the study, primary and secondary sources of data were used. Questionnaires were used for the collection of primary data. A sample size of 150 was purposively drawn from the study population which comprises of Federal Government's Ministries, Departments and Agencies (MDAs). Descriptive statistic (percentages) and Chi-square (χ^2) analytical technique were utilized in the analyses of data. He found out that TSA has enhanced regular monitoring of government cash balances, accountability and transparency, efficient use of government financial resources, probity, reduction of cost of borrowing and help to check corruption in Federal Government's Ministries, Departments and Agencies (MDAs). Also, his study revealed that MDAs in Nigeria are yet to adequately use TSA to enhance economic development in Nigeria among others. The study recommended among others that TSA should be embraced by all Government's (MDAs) at all level of governments; federal, states and local government councils in Nigeria²⁸.

The study: Dialectics of Treasury Single Account and Public Financial Management in Tertiary Institutions in Nigeria examined the application of the concept of treasury single account (TSA) in the management of public finances of tertiary institutions in Nigeria. The study adopted a descriptive survey research method. Data for their study was collected from primary and secondary sources. Forty questionnaires were distributed while thirty-two respondents properly responded. The data generated were analyzed using descriptive and inferential statistics. The findings showed, among others, that TSA finance management policy has not effectively succeeded in eliminating fraud in the management of public finances in tertiary institutions in Nigeria²⁹.

Other findings were: that the policy cannot eliminate fraud in the management of public finance; that poor internet reception on campus makes the TSA policy a waste of time; banks on campus exploit students with exorbitant charges for making payments through the TSA platform. They recommended that to alleviate defects in the operation of the TSA in our tertiary institutions and the country as a whole, there should be proper monitoring and evaluation to ensure strict compliance on the implementation of the policy; the policy should be made more flexible to accommodate the full range of electronic banking – online payments, wire transfers etc.; the issue of poor internet reception and connectivity should be addressed to improve on the effectiveness of the policy; and finally, the government should have a robust and interactive feedback channel where citizens can make inputs to better improve on the policy.

The model in this study shows that treasury single account could account for only 16.2 percent variation ($R^2 = 0.162$) in the performance of federal research institutes in Nigeria. The implication of this is that treasury single account could be used to improve the performance of federal research institutes in Nigeria. Consequently, the null hypothesis which states that there is no significant influence of TSA policy implementation on the performance of selected federal research institutes in Oyo state, Nigeria; was rejected.

Tables 4.3.2a and 4.3.2b indicate that IPPIS had a positive significant influence on the Performance of selected federal research institutes in Oyo state, Nigeria; ($B = 0.376$, $t = 6.091$, $p < 0.05$). The correlation coefficient shows that IPPIS had a positive weak significant relationship with the Performance of selected federal research institutes in Oyo state, Nigeria; ($r = 0.334$, $p < 0.05$). This suggests that increased exposure to IPPIS will lead to better performance of federal research institutes in Nigeria. The model shows that IPPIS could account for 11.1 percent variation ($R^2 = 0.111$) in Performance of federal research institutes in Nigeria. The implication of this is IPPIS has the tendency to result in better and positive Performance of federal research institutes in Nigeria. Consequently, the null hypothesis which states that IPPIS has no significant influence on the performance of selected federal research institutes in Oyo state, Nigeria; was rejected.

Tables 4.3.3a show the Pearson correlation coefficient depicting the relationship that exists between GIFMIS and performance of federal research institute in Nigeria (PERF). From the table the correlation coefficient is 0.961 which signals that there is a strong positive relationship between GIFMIS and performance of federal research institute in Nigeria (PERF) ($r = 0.526$, $p < 0.05$). This implies that increased GIFMIS will lead to improvement in the performance of

federal research institute in Nigeria (PERF). The implication of this is that GIFMIS could be used to improve the performance of federal research institute in Nigeria (PERF). Consequently, the null hypothesis which states that there is no relationship between GIFMIS and performance of selected federal research institutes in Oyo state. Nigeria; was rejected.

4.5 Further Discussion of Findings

Our findings from Tables 4.3.2a and 4.3.2b align with the *a priori* expectation which expected a positive relationship is expected between IPPIS and PERF. This study discovered that IPPIS had a positive significant influence on the Performance of selected federal research institutes in Oyo state. Nigeria; ($B= 0.376$, $t= 6.091$, $p<0.05$). This study supported the study that examined the Effect of Integrated Personnel and Payroll Information System (IPPIS) on Federal Government Recurrent Expenditure in Nigeria. The study made use of secondary sources of data obtained from Budget Office of the Federation (BOF), Annual Report from the Office of the Accountant General of the Federation (OAGF) together with the audited financial statements and Central Bank of Nigeria (CBN) Statistical Bulletin. The relevant data were subjected to statistical analysis using t-test statistics. The study found out that there is a significant difference in Government's recurrent expenditure following the introduction of IPPIS in 2007 and was also empirically determined by the percentage of fund savings to the budgeted expenditure shows that the implementation of IPPIS has resulted in fund savings for the Federal Government of Nigeria. The researchers recommend that the training of the operators of the IPPIS should be technologically compliant. Periodic monitoring exercise of the (MDAs) should be adopted by the Office of Accountant General of the Federation to verify the active workers in service.

The correlation coefficient of this study shows that IPPIS had a positive weak significant relationship with the Performance of selected federal research institutes in Oyo state, Nigeria; ($r = 0.334, p < 0.05$), opposed the scholarly work, the Implementation of IPPIS Policy in the Nigerian Universities: Benefits and Challenges, he examined the benefits and shortfall of incorporating the university system into the IPPIS programme by the federal government of Nigeria³⁰. The paper undertakes a theoretical grinding of critical issues under study, adopted a review of periodic publications, journals and related secondary materials. Hence, the researcher used a qualitative method in the study. The study found out that the university system does not reject IPPIS but argued that IPPIS did not adequately capture its flexibility and peculiarities. It also highlighted many shortfalls and benefits of incorporating university system into the IPPIS programme by the federal government. The study recommended that IPPIS software application should factor in its peculiarities to be useful to the universities. Also, that, both parties (Federal government and University system) should consider likely consequences of friction which may negatively affect the general public.

The correlation coefficient of this study shows that IPPIS had a positive weak significant relationship with the Performance of selected federal research institutes in Oyo state, Nigeria; ($r = 0.334, p < 0.05$)). This study is fully in support with the findings of other scholars³¹. In their work, IPPIS and the Ghost Workers' Syndrome in Nigeria's Public Sector, examined the possibility of the introduction of integrated personnel payroll information system (IPPIS) eradicating ghost worker from the payroll in Nigeria's public service. The historical research method was adopted It was concluded that the implementation and deployment of Integrated Personnel and Payroll Information System (IPPIS) have to a great extent reduced the incentive, capacity and opportunity of fraudulent individuals to perpetrate payroll fraud at all levels. Nevertheless, some challenges in the form of technological barriers still exist; most of the IPPIS staffs are yet to acquire oracle training; major MDA's are yet to connect to the IPPIS platform over a virtual private network. The study recommended that MDAs at all levels should key into

the IPPIS platform in line with the Federal Government Public sector reform agenda to minimize payroll fraud in Nigeria.

The model shows that that IPPIS could account for 11.1 percent variation ($R^2= 0.111$) in Performance of federal research institutes in Nigeria. The implication of this is IPPIS has the tendency to result in better and positive Performance of federal research institutes in Nigeria.. This study supported the study which examined the strategies adopted by the effectiveness of the Integrated Personnel and Payroll Information System in Addressing Ghost Worker Syndrome in Nigerian Public Sector³². It also critically looked at the effect of ghost worker on public service salary administration and analyse the challenges facing IPPIS in the implementation of the policy in the Federal Inland Revenue Service in Nigeria. He utilized primary and secondary sources of data to elicit the opinions of public servants in the Federal Inland Revenue Service (FIRS). Interviews were also conducted. His findings revealed that the strategies adopted by IPPIS address ghost worker in the public sector in Nigeria; the introduction of IPPIS policy into the salary administration in Nigeria improved constant payment of employees and that there are still challenges facing IPPIS in uploading monthly salary of the employees.

This study in addition supported the study on: Integrated Personnel Payroll and Information System (IPPIS) Panacea For Ghost Workers Syndrome In Nigerian Public Service, examined the effects of ghost workers syndrome and how the instrumentality of the Integrated Personnel Payroll and Information System (IPPIS)] could address the menace in the public service³³. The researchers elicit data from both primary and secondary sources. The data were analyzed using the simple percentage, frequency tables, mean score and Spearman rank-order correlation technique. It was concluded that ghost workers syndrome is highly prominent in the public service and recommended that the (IPPIS) should be adopted in the public service to ensure a virile economy.

Our findings from Tables 4.3.3a show the Pearson correlation coefficient depicting the relationship that exists between GIFMIS and performance of federal research institute in Nigeria (PERF). This aligns with our *a priori* expectation which expects a positive relationship between GIFMIS and PERF. Empirically, our study is in line the study which examined the effects of the application and implementation of Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (IPPIS), and Integrated Financial Management Information System (IFMIS) in the Public Sector in Nigeria³⁴. The study revealed that TSA, IPPIS, and IFMIS have a positive and significant relationship with Fraud and fraud management as well as jointly impact the performances of Public Interest Entities. The study 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.

IPPIS in Nigeria: Challenges, Benefits and Prospects by looking critically at the challenges of implementation of IPPIS, benefits to be derived when IPPIS is fully implemented and what the future holds was explored³⁵. He outlined that accurate and reliable personnel information, reduction or elimination of corrupt and sharp practices, facilitation of modern scientific and accurate budgeting and forecasting are the major benefits of IPPIS. Also, that these benefits are, threatened by skills transfer problem, poor supporting infrastructure, technological barriers for inter MDAs transfer, resistance from stakeholders and lack of will for accelerated implementation. He was optimistic that IPPIS implementation will serve as a platform for budgeting projection and planning, acts as a database for national statistics and enable a reduction in governance cost.

In the worked on: Opinion and Perception of Treasury Single Account Implementation: Implications for Revenue Generation and Utilisation in Nigeria³⁶. Data were collected through the administration of a structured questionnaire. The study analyzed a total sample size of 200 purposively selected among Federal, State, Local Government and Private Sector Employees. Data were analyzed using frequency and percentages, as well as for analytic weighted mean. The

result showed variation in acceptability attitude towards TSA implementation in Nigeria; 23.4% of respondents reported negative perception (non-acceptability), and 76.6% of respondents reported positive perception (acceptability). The study, therefore, recommended that it is however important to take steps to address the short-term challenges that may arise from its implementation.

The work on: Prudence in Public Institutions Management: The Strategic Financial Efficiency Challenge in Nigeria³⁷. The study addressed the need for fiscal prudence in Nigerian public institutions, with a deeper emphasis on the imperatives of strategic financial efficiency. He concluded that strategic financial efficiency is possible in Nigerian public institutions, as it is desirable, practicable and sustainable. He recommended that the key actor in Nigerian Public institutions should brace up like their private sector counterparts, synergize and make things work. They should more innovatively in sensitizing institutional stakeholders to think strategy, embrace and accentuate total quality cash flow management under the prevailing consolidated public financial control mechanism.

The impact of Government Integrated Financial Management Information System (GIFMIS) on Economic Development of Nigeria was examined³⁸. Secondary data was collected and analyzed

with the use of statistical package for social science (SPSS) and t-test to test the significant difference in independent and dependent variables. The empirical findings revealed among other things, that GIFMIS has impacted positively on Nigeria's economic development through the budgeting and budgetary system, payroll management system, cash management reforms, expenditure ceiling for MDA's in Nigeria within the time under review. The study recommends, among others, that the government should strengthen GIFMIS module to achieve more in human capital development, investments and per capita income.

4.6 Implication of Findings

Federal research institutes in Oyo State and in Nigeria are generally concerned with achieving sustainable growth and development. This made Public financial management (PFM) an important phenomenon. Government is saddled with the responsibility of ensuring that quality resources are available to enhance the social welfare of the citizens and these must be provided in an effective way irrespective of divergences in the value system and ideologies of the regime or administration in power. The differences in ideology serve as a basis for ensuring optimal allocation and distribution of resources effectively and efficiently. Part of the framework put in place to aid transparency and accountability are the Integrated Personnel Payroll Information System (IPPIS), Government Integrated Financial Management Information System (GIFMIS), and Treasury Single Account policy. These systems are put in place to accelerate government operations in executing its function and also fosters transparency and accountability in government activities This study found out that TSA had a positive significant influence on the performance of selected federal research institutes in Oyo state. Nigeria;(B= 1.618, $t= 10.717$, $p<0.05$). The correlation coefficient shows that treasury single account had a positive but weak significant association with the performance of selected federal research institutes in Oyo state. Nigeria;(r = 0.403, $p< 0.05$).

This suggests that increased exposure to treasury single account will lead to improvement in the performance of federal research institutes in Nigeria. The model shows that treasury single account could account for only 16.2 percent variation ($R^2 = 0.162$) in the performance of federal research institutes in Nigeria. The implication of this is that treasury single account could be used to improve the performance of federal research institutes in Nigeria. Consequently, the null hypothesis which states that there is no significant influence of TSA policy implementation on the performance of selected federal research institutes in Oyo state, Nigeria; was rejected. A healthy and strong institutional framework can be judged based on how effective the public financial management system put in place are, in terms of its fiscal discipline, accountability, redistributive power, allocation, efficiency and equity.

Endnotes

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- ¹ Oyedokun Godwin (2016). Imperative of Treasury Single Account (TSA) in Nigeria. Article (PDF Available) in SSRN Electronic Journal · January 2016
- ² Ibrahim Apekhade Yusuf, (2015). <https://thenationonlineng.net/counting-cost-of-treasury-single-account/>
- ³ Eleng David Mbotor, (2019). Integrated Payroll and Personnel Information System (IPPIS): The Journey So Far. The International Journal Of Business & Management ISSN 2321–8916 www.theijbm.com 456 Vol 7 Issue 7 DOI No.: 10.24940/theijbm/2019/v7/i7/BM1907-034
- ⁴ Inienger, Chia Christopher, Orban Terkula Damian & Emem Udoh (2018). Treasury Single Account (TSA) and the Performance of the Federal Ministry of Education, Abuja. International Journal of Advanced Scientific Research | IJASR. International Journal of Scientific Research in Social Sciences & Management Studies | IJSRSSMS. ISSN Print: 2579–101X | ISSN Online: 2579–1928 Vol. 3, No. 1 April 2018.
- ⁵ O. C , Uzochukwu., I. Republic, & E. Stella Olohi, (2017). Treasury Single Account and University Administration in South East, Nigeria. *Asian Journal of Economics, Business and Accounting*, 4(4), 1-17. <https://doi.org/10.9734/AJEBA/2017/3645>
- ⁶ Owolabi Folashade, Achugamonu Uzoma and Ojeka Stephen (2017). Treasury Single Account Policy and Government Revenue in Nigeria. Journal of Internet Banking and Commerce. An open-access Internet journal (<http://www.icommercentral.com>) Journal of Internet Banking and Commerce, June 2017, vol. 22, no. S8 Special Issue: Mobile banking: A service provider perspective. Edited By: Mihail N. Dudin
- ⁷ K. Ocheni (2016). Treasury single account: A catalyst for public financial management in Nigeria. A paper presented at a workshop organised by Association of National Accountants of Nigeria (ANAN), International Federation of Accountants (IFAC), Office of the Accountant-General of the Federation (OAGF) and The World Bank in Abuja; 2016.
- ⁸ K. Awusa , M. Ahmad. Implementing the treasury single account. Punch Newspapers; 2015. Available: <http://www.punchng.com/opinion/ implementing-the-treasury-single-account/>
- ⁹ Effiong, Sunday & Oro, Benafa & Ogar, Godspower & Raphael, Imong & Etop, Jacob & Iroushu, rim. (2017). Treasury Single Account (TSA), Integrated Payroll and Personnel

Information System (Ippis), and Integrated Financial Management Information System (If): Application and Implementation Effects on Fraud Management in the Public Sector in Nigeria. IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 19, Issue 8. Ver. VII (August 2017), PP 22-30 www.iosrjournals.org DOI: 10.9790/487X-1908072230 www.iosrjournals.org 22 |

- ¹⁰ O. Lamikanra. (2015). TSA and the implications for the Nigerian economy. Retrieved from <https://www.herald.ng/TSA-and-the-implications-for-the-nigerian-economy>
- ¹¹ C. Kanu. 2016. Impact of Treasury Single Account on the Liquidity ABC Journal of Advanced Research, 5, 43-52.
- ¹² Eme, Okechukwu Innocent, C. Chukwurah, Daniel and N. Emmanuel Iheanacho (2015). An analysis of pros and cons treasury single account policy in Nigeria
- ¹³ Akinyeke, Francis (2015). Prospects and challenges of treasury single account in a developing economy: case study of Nigeria
- ¹⁴ Russell Olukayode Somoye 2015. Treasury Single Account (TSA): Issues and Challenges. Presentation. <https://slideplayer.com/slide/12474402/>
- ¹⁵ Salman, Ramat Titilayo; Adeseye, Muideen Awodiran. Treasury Single Account and Fund Management in Nigeria: A Perception of Accounting Practitioners in Ado-Ekiti Metropolis. KIU Journal of Humanities, [S.l.], v. 2, n. 1, p. 19-32, oct. 2017. ISSN 2522-2821.
- ¹⁶ Y. Bashir., (2016) Effects of Treasury Single Account on Public Finance Management in Nigeria. Research Journal of Finance and Accounting. Vol.7, No.6
- ¹⁷ S. Pattanayak., & I. Fainboim, (2010). Treasury Single Account: Concept, Design and Implementation Issues. International Monetary Fund Working Paper #10/143
- ¹⁸ A. Ahmad. Abubakar.(2017). Treasury Single Account: A Viable Tool for Repositioning Government Ministries, Departments and Agencies (MDAs) for Sustainable Development in Nigeria. Journal of Economics and Sustainable Development www.iiste.org. ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) Vol.8, No.20, 2017
- ¹⁹ C. A. Akujuru, and N. C. Enyioko (2017). Effects of Treasury Single Account Policy on Corruption in Nigeria.

-
- ²⁰ Sailendra Pattanayak and Israel Fainboim (2011). Treasury Single Account: An Essential Tool for Government Cash Management. International Monetary Fund. Fiscal Affairs Department. Treasury Single Account.
- ²¹ Otemu, Eseoghene, Rita, Estemetan and Otemu, Oghenevwogaga (2018). Treasury Single Account (TSA) and Transparency in Public Sector Financial Management in Nigeria. Journal of Accounting and Financial Management ISSN 2504-8856 Vol. 4 No. 6 2018 www.iiardpub.org. IIARD – International Institute of Academic Research and Development Page
- ²² J. A. Oguntodu., Y.S.A. Alalade., Y.A. Adekunle and F.F. Adegbie, (2016).)Treasury Single Account and Nigeria’s Economy Between 1999 and 2015: An Assessment. Journal of Accounting and Financial Management ISSN 2504-8856 Vol. 2 No. 6 2016 www.iiardpub.org IIARD – International Institute of Academic Research and Development Page 61
- ²³ Nwaorgu, Innocent Augustine, Ezenwaka, Francis Abumchukwu and Onuorah Joshua (2017). Treasury Single Accounting (TSA) and Public Sector Accountability in Nigeria. Journal of Economics, Management and Trade 19(4): 1-8, 2017; Article no.JEMT.37780 ISSN: 2456-9216 (Past name: British Journal of Economics, Management & Trade, Past ISSN: 2278-098X)
- ²⁴ A. Onuorah, E. Chigbu .(2016). Federal Government Treasury Single Account, Deposit and Commercial Banks Performance. Journal of Social and Management Sciences. 2016; 3(11):1-13
- ²⁵ C. J. Igbokwe-Ibeto,. B. B. Nkomah, K. O. Osakede,. R. F. Kinge, (2015). Treasury Single Account – Transparency and Accountability in Public Finance Management in Nigeria: The Journey So Far. Africa’s Public Service Delivery & Performance Review
- ²⁶ N. Barine Michael (2018). Treasury Single Account and Bank Deposits Behaviours and Economic Growth pattern in Nigeria. Aefunai Journal of Accounting, Business and Finance (FJABAF). www.fujabf.org ISSN:2635-392X
- ²⁷ Olurankinse Felix, Ajidagba Felix, Olaniyi Rotimi (2018). Effects of Adoption of Treasury Single Account on Tertiary Institutions Finances in Nigeria. Proceedings of ISERD International Conference, Nairobi, Kenya, 10th-11th July 2018
- ²⁸ A. Ahmad Abubakar. Treasury Single Account: A Viable Tool for Repositioning Government Ministries, Departments and Agencies (MDAs) for Sustainable Development in Nigeria. Journal of Economics and Sustainable Development www.iiste.org. ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) Vol.8, No.20, 2017
- ²⁹ Dennis Amobi and Nneka Grace (2016). Dialectics of Treasury Single Account and Public Financial Management in Tertiary Institutions in Nigeria. NG-Journal of Social Development, VOL. 5, No. 5, October 2016. Journal homepage: www.arabianjbm.com/NGJSD_index.php Article · October 2016 DOI: 10.12816/0033197
- ³⁰ Amahalu, Nestor and Okoye, Pius Vincent and Okoye, Jane Frances, (2016). Effect of Integrated Personnel and Payroll Information System (IPPIS) on Federal Government Recurrent

DO NOT COPY. LEAD CITY UNIVERSITY, NIGERIA.

Expenditure in Nigeria (August 15, 2016). Proceedings of NAA National Conference, Federal University, Otuoke, Bayelsa State, 2016. Available at SSRN: <https://ssrn.com/abstract=3008572>

- ³¹ Leyira Christian Micah and Temple Moses, (2018). IPPIS and the Ghost Workers' Syndrome in Nigeria's Public Sector. *Scholars Journal of Economics, Business and Management (SJEBM)*. p-ISSN 2348-8875 © SAS Publishers (Scholars Academic and Scientific Publishers) A Unit of Scholars Academic and Scientific Society, India (www.saspjournals.com) e-ISSN 2348-5302 Abbreviated Key Title: Sch. J. Econ. Bus. Manag
- ³² Agboola Theophilus Olumuyiwa (2018). Effectiveness of the Integrated Personnel and Payroll Information System in Addressing Ghost Worker Syndrome in Nigerian Public Sector. *Global Journal of Human-Social Science: Interdisciplinary Type: Double Blind Peer Reviewed International Research Journal* Publisher: Global Journals Online ISSN: 2249-460x & Print ISSN: 0975-587X Volume 18 Issue 2 Version 1.0 the Year 2018
- ³³ Idris Haruna, Adaja Joseph and Audu Joel Samson, (2015). Integrated Personnel Payroll and Information System (IPPIS) panacea for ghost workers syndrome in Nigerian public service. *International Journal of Public Administration and Management Research (IJPAMR)*, Vol. 2, No. 5, March 2015. Website: www.rcmss.com. ISSN: 2350-2231 (Online) ISSN: 2346-7215 (Print) Idris Haruna, Adaja Joseph and Audu Joel Samson, 2015, 2(5): 55-64
- ³⁴ Effiong, Sunday & Oro, Benafa & Ogar, Godspower & Raphael, Imong & Etop, Jacob & Iroushu, rim. (2017). Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (Ippis), and Integrated Financial Management Information System (If): Application and Implementation Effects on Fraud Management in the Public Sector in Nigeria. *IOSR Journal of Business and Management (IOSR-JBM)* e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 19, Issue 8. Ver. VII (August 2017), PP 22-30 www.iosrjournals.org DOI: 10.9790/487X-1908072230 www.iosrjournals.org 22 |
- ³⁵ Lucky Izobo Enakirerhi and O. Sunny. Temile (2017). IPPIS in Nigeria: Challenges, Benefits and Prospects. *International Journal of Social Science and Economic Research* ISSN: 2455-8834 Volume:02, Issue:05 "May 2017" www.ijsser.org Copyright © IJSSER 2017, All right reserved Page 3490
- ³⁶ Abiola Abosede Solanke (2018). Opinion and Perception of Treasury Single Account Implementation: Implications for Revenue Generation and Utilization in Nigeria. *European Scientific Journal* January 2018 edition Vol.14, No.1 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 Doi: 10.19044/esj.2018.v14n1p164
- ³⁷ C. Agundu, Prince Umor. (2016). Prudence in Public Institutions Management: The Strategic Financial Efficiency Challenge in Nigeria. *An International Multi-disciplinary Journal, Ethiopia. AFRREV @ Ten*, Vol. 10(5), Serial No.44, September, 2016: 161-180 ISSN 1994-9057 (Print) ISSN 2070-0083 (Online) DOI: <http://dx.doi.org/10.4314/afrev.v10i5.12>

G. Ogbonna.Friday and Ojeaburu Friday (2015). The Impact of Government Integrated Financial Management Information System (GIFMIS) on Economic Development of Nigeria West African Journal of Business and Management Sciences Faculty of Business Administration Imo State University, Owerri Nigerian editionvol.4 no 1 April 2015

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Chapter Five

Conclusion

This chapter highlighted the summary of the study, descriptive and empirical findings as well as conclusion and recommendations, contribution to knowledge made and limitations of the study and suggested arrears for further study.

5.1 Summary

This study evaluated the influence of public financial management and performance of federal research institutes in Oyo State, Nigeria. Several studies related to this study have focused majorly on the effect of various public financial management programmes and policies on the economy. This study employed proxies that represent public financial management while examining its effect on the performance of federal research institutes. The study was categorized into five chapters. Chapter one looked into the background of the study, discussed the problems of the study, stated the main and specific objectives of the study, in which research questions and hypotheses was in line with the objectives specified. The chapter also identified the justification and significance, scope as well as identified and operationalized of the study variables. In addition, relevant terms to the study were defined based on their contextual use in the work.

Chapter two entailed the conceptual review, the theoretical review and lastly the empirical review which expanded the knowledge of the researcher. The conceptual review deals with the concept of public financial management, the concept of Treasury Single Account (TSA), and the benefits of TSA, the concept of Integrated Personnel Payroll Information System (IPPIS), and lastly the concept of working of Government Information Management Information System (GIFMIS) The second

aspect of chapter two which is the theoretical review identified rational choice theory as the theoretical framework for this study. This chapter also reviewed theories like rational choice theory and incrementalism theory, while the empirical review comprises of scholarly kinds of literature on public financial management and performance of federal research institute.

Chapter three showed the methodology employed for this study. More importantly, chapter three emphasized on the design and population of the study. Stratified and purposive sampling method was the appropriate sample size for this study. Questionnaire was employed to collect data from respondent in which validity, reliability and administration of the research instrument were discussed. Furthermore, the functional relationships, associated models, techniques for the evaluation of the model's coefficient, *a priori* expectation and ethical consideration were described.

Chapter four consisted two sections, which are the descriptive part of the analysis which identified the mean, the standard deviation, maximum and minimum value. The results of the summary statistics of all the variables obtained from the selected countries for the period under study was shown on Table 4.1. The second section aligned with the objectives of the study dealt with empirical analysis in this study. Regression analysis was employed to evaluate the degree of the relationship and to test the formulated hypotheses in the fourth part we presented the discussion of findings and implications.

Chapter five presents the summary of the study as well as the findings and their implications, conclusions were drawn and recommendations were made. Finally, the chapter highlighted the limitations of the study, the study's contribution to knowledge and suggestion for further studies.

Tables 4.3.1a and 4.3.1b indicate that treasury single account policy implementation had a

positive significant influence on the performance of federal research institutes in Nigeria ($B= 0.374, t= 1.981, p<0.05$). The correlation co-efficient shows that treasury single account had a positive but weak significant association with the performance of federal research institutes in Nigeria ($r = 0.114, p< 0.05$). This suggests that increased exposure to treasury single account will lead to improvement in the performance of federal research institutes in Nigeria. The model shows that treasury single account could account for only 1.3 percent variation ($R^2= 0.013$) in the performance of federal research institutes in Nigeria. The implication of this is that treasury single account could be used to improve the performance of federal research institutes in Nigeria. Consequently, the null hypothesis which states that there is no significant influence of TSA policy implementation on the performance of selected federal research institutes in Oyo state, Nigeria; was rejected.

Treasury single account policy implementation had a positive significant influence on the performance of selected federal research institute in Oyo State, Nigeria. ($B= 0.374, t= 1.981, p<0.05$).

Compliance with treasury single account tenets ensure proper cash management for collection of government revenue. Also, TSA fosters efficient allocation of public funds through the adoption of treasury single account. Treasury Single Account greatly enhance financial discipline and help to curb misappropriation of funds in the MDAs.

Treasury Single Account ensure the spending of funds in line with approved budget and financial plan of MDAs thereby increasing the MDA's level of revenue. TSA has also resulted in improved overall financial and administrative process of the MDA.

Tables 4.3.2a and 4.3.2b indicate that IPPIS had a positive significant influence on the Performance of federal research institutes in Nigeria ($B= 0.376, t= 6.091, p<0.05$). The correlation coefficient shows that IPPIS had a positive weak significant relationship with the

Performance of federal research institutes in Nigeria ($r = 0.334$, $p < 0.05$). This suggests that increased exposure to IPPIS will lead to better performance of federal research institutes in Nigeria. The model shows that IPPIS could account for 11.1 percent variation ($R^2 = 0.111$) in Performance of federal research institutes in Nigeria. The implication of this is IPPIS has the tendency to result in better and positive Performance of federal research institutes in Nigeria. Consequently, the null hypothesis which states that IPPIS has no significant influence on the performance of selected federal research institutes in Oyo State, Nigeria; was rejected.

IPPIS had a positive significant influence on the performance of selected federal research institutes in Oyo State, Nigeria; ($B = 0.376$, $t = 6.091$, $p < 0.05$)

Integrated Personnel Payroll Information System (IPPIS) tracks all financial transaction that are related and linked to personnel emoluments.

IPPIS also implied accountability and transparency of Government transaction increased with its implementation.

IPPIS reduces personnel cost by eliminating ghost works and facilities easy storage, updating and retrieval of personnel records to reduce administrative cost.

IPPIS has facilitated convenient and timely payment of over-heads and salaries and also reduces wastage and financial leakages in MDA recurrent expenditure in terms of personnel cost management.

IPPIS enabled accurate preparation of reliable information about the size of personnel in the payroll and also aided in the reduction of corruption and sharp practices in the ministry.

Tables 4.3.3a show the Pearson correlation coefficient depicting the relationship that exists between GIFMIS and performance of federal research institute in Nigeria (PERF). From the table the correlation coefficient is 0.961 which signals that there is a strong positive relationship

between GIFMIS and performance of federal research institute in Nigeria (PERF) ($r = 0.961$, $p < 0.05$). This implies that increased GIFMIS will lead to improvement in the performance of federal research institute in Nigeria (PERF). The implication of this is that GIFMIS could be used to improve the performance of federal research institute in Nigeria (PERF). Consequently, the null hypothesis which states that there is no relationship between GIFMIS and performance of selected federal research institutes in Oyo state, Nigeria; was rejected.

GIFMIS system has helped the MDA to achieve a target in revenue collection.

GIFMIS has reduced administrative task by reducing operating cost of hiring employees by revenue agencies.

GIFMIS aids in payment of tax to Nigeria Revenue Authority.

GIFMIS has re-enforced internal control for safeguarding of public money.

GIFMIS has reduced cost of reporting budgetary and financial statement to MDAs and has helped to fast track personnel information generation or retrieval, updates and dissemination in the MDA.

GIFMIS has reduced administrative bureaucratic processes and bottlenecks peculiar with MDA.

5.2 Conclusion

This study therefore concludes that the implementation of TSA has positive effects of the performance of federal research institutes in Oyo State. Also, that IPPIS has positive influence on the performance of federal research institutes in Nigeria.. And that, GIFMIS has strong and positive relationship with the performance of federal research institutes in Nigeria.

The study evaluated the influence of public financial management on performance of selected federal research institutes in Oyo State. The proxies for public financial management were TSA, IPPIS and GIFMIS on performance of selected federal research institutes. Findings of this study therefore provide insight into the effect of public financial management on performance of selected federal research

institutes in Nigeria. It further provides an insight as to the extent to which each of the independent variables of public financial management affects the dependent variable of performance of selected federal research institutes in Oyo State. It also provides an affirmation of the extent to which the variations in the dependent variable are caused by the independent variables covered in the models as depicted by the adjusted R-squared.

The performance of the federal research institute is strongly influenced by the quality of PFM variables; TSA, IPPIS and GIFMIS.

5.3 Recommendations

A healthy and strong institutional framework can be judged based on how effective the public financial management system put in place are, in terms of its fiscal discipline, accountability, redistributive power, allocation, efficiency and equity. Part of the framework put in place to aid transparency and accountability are the Integrated Personnel Payroll Information System (IPPIS), Government Integrated Financial Management Information System (GIFMIS), and Treasury Single Account policy. Government Integrated Financial Management Information System (GIFMIS) was put in place to achieve an effective budgeting system. Based on the results derived from empirically studying the effect of public financial management system on performance of federal research institute in Oyo State, Nigeria, this study recommends the following:

The Government

Political will must foster the systems put in place to accelerate government operations in executing its function and also fosters transparency and accountability in government activities. Based

on the result of the research study on TSA, IPPIS and GIFMIS, it is strongly recommended that the federal government should empower and strengthen the judiciary, police, anti-graft agencies and the media in the country to promote efficient fund management and curb revenue leakage. Also the government must improve the public sector accounting and auditing standards and restructure the public account committees to enhance accountability of public resources.

The Federal Research Institutes

The research institutes should review the existing policies and systems with respects to TSA, IPPIS and GIFMIS from time to time in order to provide easy access to financial data efficiently. Also, they should report on the adequacies and inadequacies of government policies imposed on them in order to guide the government towards making well informed decisions. The research institutes must fully comply with public sector accounting and auditing standards and legislation.

The accounting bodies:

It is recommended that the various accounting bodies like ICAN, ANAN among others should from time to time join hands with the government to review the yield from these policies and provide suggestions on ways to improve them; encourage their implementation and enforcement.

5.4 Contribution to Knowledge

Our study empirically filled the specific gap in literature in respect to how public financial management affects the dependent variable of performance of selected federal research institutes in Oyo State. Studies relating to public financial management which has been carried out in both developed and developing countries gave more attention to analyzing public financial management and its economic benefits towards national growth and development. This study has also contributed to

accounting practice since its findings bring to bear that the application of public financial management plays a major role of transparency and accountability of public resources and how it relates to the performance of selected federal research institutes in Oyo State. The study contributed to concept by defining public financial management and performance of federal institution.

The author depict the relationship between PFM and performance of selected FRI in his conceptual model as shown in the diagram below.

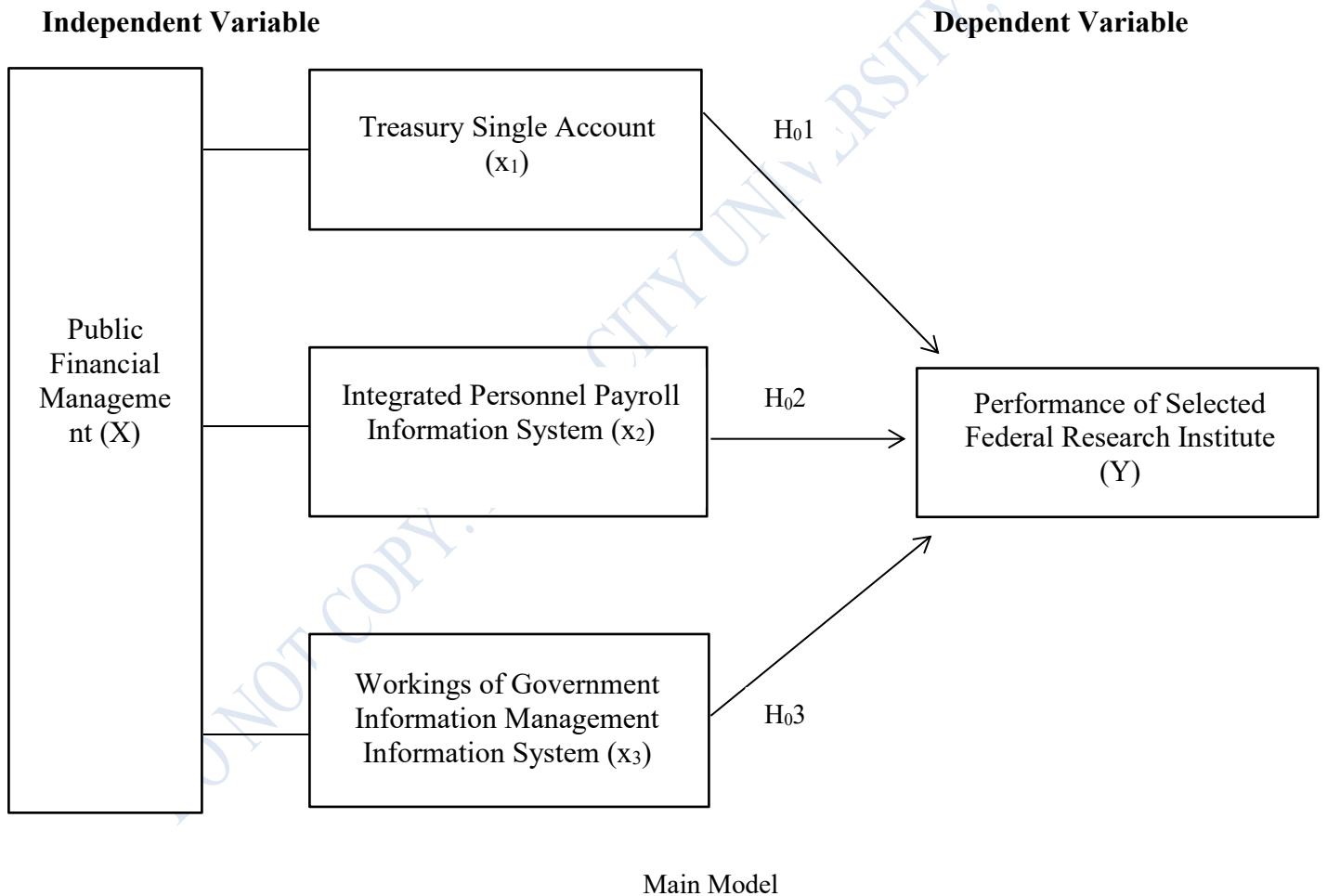


Figure Researcher's Conceptual Model

Source: Researcher's Study (2020)

The author found out that treasury single account (TSA) policy implementation had a positive significant influence on the performance of federal research institutes in Oyo State and a that integrated personnel payroll information system (IPPIS) had a positive significant influence on the performance of federal research institutes in Oyo State and also that a strong positive relationship that exists between government information management information system (GIFMIS) and performance of federal research institute in Oyo State (PERF).

The study contributes to knowledge in terms of theory by emphasizing on incrementalism theory and rational choice theory as a public financial management theory. However, this government activities and policies can also lead to environmental security, resolutions of conflicts between groups, and consequently economic performance. This study has contributed to the existing literature by attempting to form a nexus between the independent variables and dependent variables; and through the models developed and supported with the underlining theories of the study.

5.5 Suggestions for further Studies

Further studies can empirically investigate the impact of IPPIS, TSA and GIFMIS on the performance of other federal institutions in various sectors like the academic, security agencies, the judiciary, health, financial institutions among others. Also, this study suggests that scholarly works should be tailored towards a comparative study of public financial management and performance of selected federal research institutes in Oyo state, Nigeria; and other countries of the world.

Bibliography

Journals

Abdulkadir Abdulrashid Rafindadi & Olashinde Joseph Ogidan, 2018. "Empirical Analysis of Poor Public Financial Management in Nigeria: Causes, Implications and Remedies," Asian Development Policy Review, Asian Economic and Social Society, vol. 6(4), pages 178-197, December.

Abell, 1990. Supporting industrial cooperatives in developing countries: some Tanzanian experiences. *Econ. Indust. Democracy* 11:483–504

Abiola Abosede Solanke (2018). Opinion and Perception of Treasury Single Account Implementation: Implications for Revenue Generation and Utilization in Nigeria. *European Scientific Journal* January 2018 edition Vol.14, No.1 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 Doi: 10.19044/esj.2018.v14n1p164 URL:<http://dx.doi.org/10.19044/esj.2018.v14n1p164>

Abodunrin, Oyinlola R & Omole, Funmilayo, (2017). Treasury single account (TSA) policy and its effort in combating corruption in Nigeria *International Journal of Social Sciences and Humanities Reviews* Vol.7 No.2, August 2017; p.90 – 96, (ISSN: 2276-8645)

Adebisi J. & Okike, M. (2016). The Adoption of the Treasury Single Account (TSA) and its Effect on Revenue Leakages of Nigerian States. *American Research Journal of Business and Management*, 2(2)12-13

Adesoji, B. S. (2020). Nigeria ranks 146 on the global corruption index in 2019. Retrieved from <https://nairametrics.com/2020/01/23/breaking-nigeria-ranks-146-on-global-corruption-index-in-2019/>

African Development Bank (ADB). (2013). The Infrastructure Action Plan for Nigeria: Closing the Infrastructure Gap and Accelerating Economic Transformation Report. Retrieved Electronic copy available at: <https://ssrn.com/abstract=3363159> from African Development website: [http://www.afdb.org/en/countries/Western - Africa/Nigeria/infrastructure-and-growth-in-Nigeria-an-action-plan-for-strengthened recovery/](http://www.afdb.org/en/countries/Western-Africa/Nigeria/infrastructure-and-growth-in-Nigeria-an-action-plan-for-strengthened-recovery/). <https://www.oxfordbibliographies.com/view/document/obo-9780195396607/obo-9780195396607-0007.xml#:~:text=Rational%20choice%20theory%20originated%20during,prevention%2C%20and%20routine%20activity%20theory>

Agboola Theophilus Olumuyiwa (2018). Effectiveness of the Integrated Personnel and Payroll Information System in Addressing Ghost Worker Syndrome in Nigerian Public Sector. *Global Journal of Human-Social Science: Interdisciplinary Type: Double Blind Peer Reviewed International Research Journal* Publisher: Global Journals Online ISSN: 2249-460x & Print ISSN: 0975-587X Volume 18 Issue 2 Version 1.0 the Year 2018

Agundu Prince Umo C. (2016). Prudence in Public Institutions Management: The Strategic Financial Efficiency Challenge in Nigeria. An International Multi-disciplinary Journal, Ethiopia. AFRREV @ Ten, Vol. 10(5), Serial No.44, September, 2016: 161-180 ISSN 1994-9057 (Print) ISSN 2070-0083 (Online) DOI: <http://dx.doi.org/10.4314/afrrrev.v10i5.12>

Ahmad Abubakar A..(2017). Treasury Single Account: A Viable Tool for Repositioning Government Ministries, Departments and Agencies (MDAs) for Sustainable Development in Nigeria. Journal of Economics and Sustainable Development www.iiste.org. ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) Vol.8, No.20, 2017

Ahmed Adamu Isa (2016). The Treasury Single Account (TSA) as an Instrument of Financial Prudence and Management: Prospects and Problems Bursary Department, Federal College of Education, P.M.B 2042, Yola. Adamawa State. Nigeria.

Ahrari M.E. 1987. "A Paradigm of 'Crisis' Decision Making: The Case of Synfuels Policy." British Journal of Political Science 17: 71-91.

Aina O. (2002). Alternative Mode of Financing Higher Education in Nigeria and Implication for University Governance Research Source from Sub-Saharan Africa. Bolabay Publications.

Aji B.G. (2013). "Only 235 MDAs on IPPIS-HOS".www.nigerianbestforum.com/index.php?topic=300432.0

Ajibade A. T. PhD, Oyedokun G. E. PhD, Doumu O. S. (2018). Treasury Single Account and Public Fund Management: A Study of Selected Federal Government Parastatals in Bayelsa State. International Journal of Scientific & Engineering Research Volume 9, Issue 12, December-2018 890 ISSN 2229-5518 IJSER © 2018 <http://www.ijser.org>

Akinyeke, Francis (2015). PROSPECTS AND CHALLENGES OF TREASURY SINGLE ACCOUNT INA DEVELOPING ECONOMY: CASE STUDY OF NIGERIA.

Akujuru C. A. and Enyioko N. C. (2017). Effects of Treasury Single Account Policy on Corruption in Nigeria.

Amahalu, Nestor and Okoye, Pius Vincent and Okoye, Jane Frances, (2016). Effect of Integrated Personnel and Payroll Information System (IPPIS) on Federal Government Recurrent Expenditure in Nigeria (August 15, 2016). Proceedings of NAA National Conference, Federal University, Otuoke, Bayelsa State, 2016. Available at SSRN: <https://ssrn.com/abstract=3008572>

Appah, C. & Appiah K. (2010). "Fraud and Development of Sound Financial Institutions in Nigeria", Nigerian Journal for Development Research, 1(1): 49 – 56.

Arrow, K. J. 1951. "Alternative Approaches to the Theory of Choice in Risk-Taking Situations." *Econometrica* 19:404-437.

Awusa, V. Ahmad M, Implementing the treasury single account. Punch Newspapers; 2015.

Available: <http://www.punchng.com/opinion/ implementing-the treasury-single-account/>

Ayodele A. (2009). Electronic Payment in Nigeria.

Barine Michael A. (2018). Treasury Single Account and Bank Deposits Behaviours and Economic Growth pattern in Nigeria. *Aefunai Journal of Accounting, Business and Finance (FJABAF)*. www.fjabaf.org ISSN:2635-392X

Bashir Y. (2016) Effects of Treasury Single Account on Public Finance Management in Nigeria. *Research Journal of Finance and Accounting*. Vol.7, No.6

Bassey (2016). Premium Times. "15 things to know about Treasury Single Account (TSA)"

Bello S. (2001). „Fraud Prevention and Control in Nigerian Public Service: The Need for A Dimensional Approach”, *Journal of Business Administration*, 1(2): 118-133.

Bossone, Biagio; Casino, Massimo.2001.The oversight of the payments systems: a framework for the development and governance of payment systems in emerging economies (English). *Western Hemisphere Payments and Securities Clearance and Settlement Systems Research Series*; no. 1 Washington, D.C.

:WorldBankGroup.<http://documents.worldbank.org/curated/en/646651468156578578/The-oversight-of-the-payments-systems-a-framework-for-the-development-and-governance-of-payment-systems-in-emerging-economies>

Braybrooke C. and Lindblom. C.E. 1963. *A Strategy of Decision*. New York: The Free Press
Bourgeois, L.J., III and K.M. Eisenhardt. 1988. "Strategic Decision Processes in High-Velocity Environments: Four Cases in the Microcomputer Industry." *Management Science* 34: 816-835
Problem Solving. New Haven: Yale University Press.

CATHERINE HERFELD, (2012). The potentials and limitations of rational choice theory: an interview with Gary Becker CATHERINE HERFELD. *Erasmus Journal for Philosophy and Economics*, Volume 5, Issue 1, Spring 2012, pp. 73-86. <http://ejpe.org/pdf/5-1-int.pdf> NOTE: Catherine

Chêne M (2009).The Implementation of Integrated Financial Information Management Systems (IFMS). Retrieved from <http://www.u4.no/helpdesk/helpdesk/query.cf m?id=196>.

Chi-Chi, O. A. (2012). Accountability and public sector financial management in Nigeria. *Arabian Journal of Business and Management Review*, 1(6), 1

Chinedu Okerekeoti U. and Emma Okoye I. (2017). Treasury Single Account (TSA) In Nigeria: A Theoretical Perspective. The 2017 International Conference on African Entrepreneurship and Innovation for Sustainable Development (AEISD)

Cobb A.(2004), cashless banking. Retrieved from: <http://www.ameinfo.com/50050.html>

David Collingridge and Edward Woodhouse (1993). Incrementalism, Intelligent Trial-and-Error, and the Future of Political Decision Theory 24.49rensselaer Polytechnic Institute

Delali J. (2010). The Challenges of Implementing Electronic Payment System: The case of Ghana"s E-which payment system MBA Thesis.

Dennis Amobi and Nneka Grace (2016). Dialectics of Treasury Single Account and Public Financial Management in Tertiary Institutions in Nigeria. NG-Journal of Social Development, VOL. 5, No. 5, October 2016. Journal homepage: www.arabianjbm.com/NGJSD_index.php Article · October 2016 DOI: 10.12816/0033197

Diamond J. & Khemani P. (2005). Introducing Financial Management Information Systems in Developing Countries. International Monetary Fund.

Document of the World Bank. (2014). Implementation Completion and Results Report (Ida-40110), on a Credit in the amount of Sdr 93.4 Million (Us\$140 Million Equivalent) to the Federal Republic of Nigeria for an Economic Reform and Governance Project.

Donald Green P. and Ian Shapiro (1994). Pathologies of Rational Choice Theory: A Critique of Applications in Political Science. Yale University Press

Dror Y. 1964. "Muddling Through - Science or Inertia?" Public Administration Review 24: 153-157.

Effiong, Sunday & Oro, Benafa & Ogar, Godspower & Raphael, Imong & Etop, Jacob & Iroushu, rim. (2017). Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (Ippis), and Integrated Financial Management Information System (If): Application and Implementation Effects on Fraud Management in the Public Sector in Nigeria. IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 19, Issue 8. Ver. VII (August 2017), PP 22-30 www.iosrjournals.org DOI: 10.9790/487X-1908072230 www.iosrjournals.org 22 |

Elong David Mbotor, (2019). Integrated Payroll and Personnel Information System (IPPIS): The Journey So Far. The International Journal Of Business & Management ISSN 2321-8916 www.theijbm.com 456 Vol 7 Issue 7 DOI No.: 10.24940/theijbm/2019/v7/i7/BM1907-034

Elster J. (1989); Social Norms and Economic Theory, Journal of Economic Perspectives, American Economic Association, vol. 3(4), pages 99-117.

Eme O. I, Chukwarah D. C, and Iheanacho E. N. (2015) „Analysis of Pros and Cons of Treasury Single Account Policy in Nigeria“. Arabian Journal of Business and Management Review (OMAN) vol. 5 (4): 20-39

Etzioni, Amitai. 1967. "Mixed Scanning: A Third Approach to Decision Making." *Public Administration Review* 27: 387-392.

Forester J. 1984. "Bounded Rationality and the Politics of Muddling Through." *Public Administration Review* 44: 23-31.

Gary Browning, Abigail Halcli, Frank Webster, (2000), *Understanding Contemporary Society: Theories of the Present*, London, SAGE Publications

Geoffrey Hodgson M. (2012). *On the Limits of Rational Choice Theory* University of Hertfordshire Business School, UK g.m.hodgson@herts.ac.uk *Economic Thought* 1:94-108

Gereek A, & . Titregim F.B. (2020). Tax system and tax reforms in Turkey. Springer ISSN 25097873. Retrieved from <https://doi.org/10.1007/9789811519147>.

GIFMIS. (2014). *Government Integrated Financial Management Information System (GIFMIS) of Federal Government of Nigeria*. Retrieved from <http://gifmis.gov.ng/gifmis/>
World Bank Study. (2011). *Financial Management Information System, 25 years of World Bank experience on what works and what doesn't*.

Haruna I, Joseph A, Samson A.J. *Integrated Personnel Payroll and Information System (IPPIS): Panacea for Ghost Workers Syndrome in Nigerian Public Service*. *International Journal of Public Administration and Management Research (IJPAMR)*. 2015;2(5):55-64.

Helen Walter Mbotto, Amenawo Offiong I and Bassey Ibor I. (2017). *Public Perception of the Treasury Single Account in Nigeria*. *Journal of Economics and Development Studies*. June 2017, Vol. 5, No. 2, pp. 68-77 ISSN: 2334-2382 (Print), 2334-2390 (Online) Copyright © The Author(s). All Rights Reserved. Published by the American Research Institute for Policy Development DOI: 10.15640/jeds.v5n1a7 URL: <https://doi.org/10.15640/jeds.v5n1a7>

Heys (2009) in Eme, Okechukwu Innocent, Chukwurah, Daniel C and Emmanuel N Iheanacho (2015). *AN ANALYSIS OF PROS AND CONS TREASURY SINGLE ACCOUNT POLICY IN NIGERIA*. *Arabian Journal of Business and Management Review (OMAN Chapter)* Vol. 5, No.4; November. 2015 20

Hendriks C. J. (2012). 'Integrated Financial Management Information Systems: Guidelines for effective implementation by the public sector of South Africa'. *SA Journal of Information Management* 14(1), Art. #529, 9 pages <http://dx.doi.org/10.4102/sajim.v14i1.529>

Homans George A (1974) *Social Behaviour: Its Elementary Forms*. Rev. ed. New York: Harcourt Brace Jovanovich, Inc. (Book)

Ian A, *Public financial management; a whole system approach for Ghana*, 21st May 2015-the chartered institute for public finance and accountancy

Idris Haruna, Adaja Joseph and Audu Joel Samson, (2015). *Integrated Personnel Payroll and Information System (IPPIS) panacea for ghost workers syndrome in Nigerian public service*.

International Journal of Public Administration and Management Research (IJPAMR), Vol. 2, No. 5, March 2015. Website: www.rcmss.com. ISSN: 2350-2231 (Online) ISSN: 2346-7215 (Print) Idris Haruna, Adaja Joseph and Audu Joel Samson, 2015, 2(5): 55-64

Igbokwe-Ibeto C. J. Nkomah B. B. Osakede K. O. and Kinge R. F. (2015). Treasury Single Account – Transparency and Accountability in Public Finance Management in Nigeria: The Journey So Far. Africa's Public Service Delivery & Performance Review.

IITA (2019). Oyo governor commissions IITA projects. Retrieved from <http://www.iita.org/news-item/oyo-governor-commissions-iita-projects/>

IMF, 2010. Preserving debt sustainability in low-Income countries in the wake of the global crisis, IMF Policy Paper (Washington)

IMF (2013). Public financial management and emerging architecture. Washington, D. CISBN 9781475531091

Inienger, Chia Christopher, Orban Terkula Damian & Emem Udoh (2018). Treasury Single Account (TSA) and the Performance of the Federal Ministry of Education, Abuja. International Journal of Advanced Scientific Research | IJASR. International Journal of Scientific Research in Social Sciences & Management Studies | IJSRSSMS. ISSN Print: 2579–101X | ISSN Online: 2579–1928 Vol. 3, No. 1 April 2018.

Jessica H. & Heidi T.(2012). An analysis of fiscal space for social protection in Nigeria. Overseas Development Institute, London SE1 7JD, UK, www.odi.org.uk

John McCumber, “The Failure of Rational Choice Philosophy,” The New York Times Opinion Pages Opinionator (blog), June 19, 2011, <http://opinionator.blogs.nytimes.com/2011/06/19/the-failure-of-rational-choice/>.

Kanu C. 2016. Impact of Treasury Single Account on the Liquidity ABC Journal of Advanced Research, 5, 43-52.

Keneth Mela, (2019). The Implementation of IPPIS Policy in the Nigerian Universities: benefits and challenges. Global Journal of Applied, Management and Social Sciences (GOJAMSS); Vol.17, August 2019; P.201 – 212 (ISSN: 2276 – 9013) 201

Kioko S, Matkin D. S. T. Marlowe D. S. T., & Zhan Z. J. (2011). Why public financial management matters. Journal of Public Administration Research and Theory, 21, 13-124.

Lamikanra M (2015). TSA and the implications for the Nigerian economy. Retrieved from <https://www.herald.ng/TSA-and-the-implications-for-the-nigerian-economy>

Leyira Christian Micah and Temple Moses, (2018).IPPIS and the Ghost Workers' Syndrome in Nigeria's Public Sector. Scholars Journal of Economics, Business and Management (SJEEM). p- ISSN 2348-8875 © SAS Publishers (Scholars Academic and Scientific Publishers) A Unit of

Lienert, Ian, (2009). Modernizing Cash Management, Technical Notes and Manuals, Fiscal Affairs Department (Washington: International Monetary Fund).
Michael I. Ogu (2013). Rational choice theory: assumptions, strengths, and greatest weaknesses in application outside the western milieu context. *Arabian Journal of Business and Management Review (Nigerian Chapter)* Vol. 1, No. 3, 2013 90.

Lindblom Charles E. (1959). "The Science of 'Muddling Through'."

Lindblom Charles E. (1979). "Still Muddling, Not Yet Through." *Public Administration Review* 39: 517-526.

Lindblom Charles E. and David Cohen. K. (1979). *Usable Knowledge: Social Science and Social*

Lindblom C. E., & Woodhouse E. J, (1993). *The policy-making process* (3rd ed.). Englewood Cliffs: Prentice-Hall.

Lindblom C. E. (1990). *Inquiry and Change: The Troubled Attempt to Understand and Shape Society*. New Haven: Yale University Press.

Logsdon J.M. 1986. "The Decision to Develop the Space Shuttle." *Space Policy* 2:103-119

Lucky Izobo Enakirerhi and O. Sunny Temile (2017). IPPIS in Nigeria: Challenges, Benefits and Prospects. *International Journal of Social Science and Economic Research* ISSN: 2455-8834 Volume:02, Issue:05 "May 2017" www.ijsser.org Copyright © IJSSER 2017, All right reserved Page 3490

Lustick H.1980. "Explaining the Variable Utility of Disjointed Incrementalism: Four Propositions." *American Political Science Review* 74: 342-353.

Nick York, (2008) Preface to Pretorius, C.and Pretorius, N. (2008) *A Review of PFM Reform Literature*. London: DFID

Nkechi Ofor S., Leonard Emeka Omaliko, Francis Chukwudi Okoli (2017). Effect of Treasury Single Accounts (TSA) on the Performance of Ministries, Departments and Agencies (MDA) in Nigeria. *Trendy ekonomiky a management trends economics and management*. ISSN 1802-8527 (Print) / ISSN 2336-6508 (Online) 2017 29(2): 59-67 DOI: <http://dx.doi.org/10.13164/trends.2017.29.59>

Nwadiani M. & Ofoegbu F. (2005) Level of Perceived Stress Lecturers in Nigerian Universities. *Journal of Instructional Psychology* 33(1), 66-74

Nwaobia A. N., Ogundajo G. O., & Theogene N. (2016). Internal audit practices and public financial management in Rwanda and Nigeria: Bridging the transparency gap in public sector financial reporting. *International Journal of Advanced Academic Research*, 2(10), 39-77.

Nwaorgu, Innocent Augustine, Ezenwaka, Francis Abumchukwu and Onuorah Joshua (2017). Treasury Single Accounting (TSA) and Public Sector Accountability in Nigeria. *Journal of Economics, Management and Trade* 19(4): 1-8, 2017; Article no.JEMT.37780 ISSN: 2456-9216 (Past name: *British Journal of Economics, Management & Trade*, Past ISSN: 2278-098X)

Nweze A (2016). Treasury Single Account: Pains, gains. Retrieved from *The Nation*: <http://www.thenationonline.net/treasury-single-account-pains-gains/>

Nwobi V. (2016). The Law and Treasury Single Account: Do the gains outweigh the cost?. Retrieved from <https://.linkedin.com/pulse/law-treasury-single-account-do-the-gain-outweigh-the-cost.March> 7th

Obinna C. (2015), Banks Face Liquidity Strain as FG Fully Enforces Treasury Single Account, *Thisday Monday*, 11 August, P52

Ocheni S. T. (2016). Treasury single account: A catalyst for public financial management in Nigeria. *International Academy of Business Review*, 2(1), 11-32. controversies-crippling-fgs-single-account-policy/

Ocheni K. (2016). Treasury single account: A catalyst for public financial management in Nigeria. A paper presented at a workshop organised by Association of National Accountants of Nigeria (ANAN), International Federation of Accountants (IFAC), Office of the Accountant-General of the Federation (OAGF) and The World Bank in Abuja; 2016.

Odia H.O & Odia A. A. (2016). E-government and corruption in Nigeria: The case of the Treasury Single Account (TSA). *Afro Asian Journal of Social Sciences*. VII(1V):1-25

Office of the Accountant-General of the Federation (OAGF). (2014). *Federal Ministry of Finance. Annual Report. Nigeria.*

Ogbonna Friday G. and Ojeaburu Friday (2015). The Impact of Government Integrated Financial Management Information System (GIFMIS) on Economic Development of Nigeria West African *Journal of Business and Management Sciences Faculty of Business Administration Imo State University, Owerri Nigerian edition vol.4 no 1 April 2015*

Oguntodu J. A., Alalade Y. S. A., Adekunle Y. A., and Adegbe F. F. (2016). Treasury Single Account and Nigeria's Economy Between 1999 and 2015: An Assessment. *Journal of Accounting and Financial Management* ISSN 2504-8856 Vol. 2 No. 6 2016 www.iiardpub.org IIARD – International Institute of Academic Research and Development Page 61

Okwoli A. (2004). "Towards Probity, Accountability, and Transparency in Revenue Generation in the Nigerian Public Sector", Nigerian Journal of Accounting Research, Vol. 1(1): 1-9.

Olofu P. (2017). Treasury Single Account policy, Public funding and liquidity of deposit money Banks

Onyeizugbe Chinedu Uzochukwu, Igbodo Republic and Enaini Stella Olohi (2017). Treasury Single Account and University Administration in South East, Nigeria. Asian Journal of Economics, Business and Accounting 4(4): 1-17, 2017; Article no.AJEBA.36451 ISSN: 2456-639X

Onyekpere (2015). <https://guardian.ng/sunday-magazine/treasury-single-account-giving-life-to-jonathans-dead-policy-directives>

Oru, Anthony, Odu, Odumusor and Charles Joseph (2019). Effect of Treasury Single Account (TSA) on Liquidity of Deposit Money Banks and Effective Control of Governments Cash Resources in Nigeria. IOSR Journal of Economics and Finance (IOSR-JEF) e-ISSN: 2321-5933, p-ISSN: 2321-5925. Volume 10, Issue 1 Ser. III (Jan. – Feb.2019), PP 49-59 www.iosrjournals.org DOI: 10.9790/5933-1001034959 www.iosrjournals.org

A. Oteh, 2010. The role of entrepreneurship in transforming the Nigerian economy. Being A Paper delivered at the 4th Convocation in Igbinedion University, Okada, 2(1): 3 – 4

Otemu, Eseoghene, Rita, Estemetan and Otemu, Oghenevwogaga (2018). Treasury Single Account (TSA) and Transparency in Public Sector Financial Management in Nigeria. Journal of Accounting and Financial Management ISSN 2504-8856 Vol. 4 No. 6 2018 www.iiardpub.org. IIARD – International Institute of Academic Research and Development Page

Owolabi Folashade, Achugamonu Uzoma and Ojeka Stephen (2017). Treasury Single Account Policy and Government Revenue in Nigeria. Journal of Internet Banking and Commerce. An open-access Internet journal (<http://www.icommercecetral.com>) Journal of Internet Banking and Commerce, June 2017, vol. 22, no. S8 Special Issue: Mobile banking: A service provider perspective. Edited By: Mihail N. Dudin

Oyedele T. (2016). Treasury Single Account and Taxation. Retrieved from PWC. <http://pwc.com/nigeriaatxblog>

Oyedokun Godwin (2016). Imperative of Treasury Single Account (TSA) in Nigeria. Article (PDF Available) in SSRN Electronic Journal · January 2016

Pattanaya S. & Fainboim I. (2010). Treasury Single Account: Concept, Design and Implementation Issues. International Monetary Fund Working Paper #10/143

Phalama S. H. M. (2012). Factors Affecting Implementation of Enterprise Applications Integration (EAI) with Special Reference to Corruption and Fraud in DOD. A Thesis Submitted

in Partial Fulfilment of the Requirement for the Degree of Master of Philosophy (Information and Knowledge Management) at the University of Stellenbosch.

Pierre Bourdieu (2005) *The Social Structures of the Economy*, Polity 2005

Quinn H. B. (1978). Strategic change: Logical incrementalism. *Sloan Management Review* 20 (1), 7–21.

Rafindadi A. A. & Ogidan O. J (2018). An empirical analysis of poor public financial management in Nigeria: causes, implications and remedies. *Asian Development Policy Review*, 6(4), 1-7

Rogrs A. (2018). Controversies crippling FG's treasury single account policy. Retrieved from <https://www.vanguardngr.com/2018/12/controversies-crippling-fgs-single-account-policy/>

Russell Olukayode Somoye 2015. Treasury Single Account (TSA): Issues and Challenges. Presentation. <https://slideplayer.com/slide/12474402/>

Sailendra Pattanayak and Israel Fainboim (2011). Treasury Single Account: An Essential Tool for Government Cash Management. International Monetary Fund. Fiscal Affairs Department. Treasury Single Account.

Salman, Ramat Titilayo; Adeseye, Muideen Awodiran. Treasury Single Account and Fund Management in Nigeria: A Perception of Accounting Practitioners in Ado-Ekiti Metropolis. *KIU Journal of Humanities*, [S.l.], v. 2, n. 1, p. 19-32, oct. 2017. ISSN 2522-2821.

Samson Kukogho (2015). <https://www.pulse.ng/communities/student/treasury-single-account-asuu-questions-buharis-tsa-policy-warns-of-implications/2byyyhw>

Schulman Paul R. 1975. "Nonincremental Policy Making: Notes Toward an Alternative Paradigm." *American Political Science Review* 69: 1354-1370

Schulman, Paul. 1980. *Large-scale Policy Making*. New York: Elsevier.

Simon Herbert A. 1955. "A Behavioral Model of Rational Choice." *Quarterly Journal of Economics* 69: 99-118

Simon Herbert A. 1958. "[no title]," *American Political Science Review*, Cambridge University Press, vol. 52(2), pages 502-502, June

Simon, Herbert A. (1997). "On the possibility of accurate public prediction," *Journal of Behavioral and Experimental Economics* (formerly *The Journal of Socio-Economics*), Elsevier, vol. 26(2), pages 127-132.

Stephen K. (2009). Where New Technology Meets Socio-Economic Impasses: A Study of the Integrated Financial Management System as a Management Control in Local Government In Uganda. *Accountancy Business & the Public Interest*, Vol.8, No.2, 2009,1-43.

Summers, A. J. (2012). "Payment Systems- Design, Governance and Oversight," London: Central Banking Publications.

Tari V. A., Yatafadi P., & Kibikiwa M. G. (2016). Treasury Single Account (TSA) Policy in Nigeria: Reviving Jonathan,s _Dead,, Policy Directives. *Online Journal of Social Sciences Research*,5(2016),6- 12

The Association of Chartered Certified Accountants (ACCA), 2010. Improving public sector financial management in developing countries and emerging economies

Tilley A., (2014). Public sector cuts require strong management, *Financial Management*, pp. 6 65.

Torough Terenge, (2014). <https://sueddie.wordpress.com/2014/09/05/current-government-financial-reforms-in-nigeria-a-paper-presented-by-toroughternenge/>

Tullock G (1976); in Michael I. Ogu (2013). RATIONAL CHOICE THEORY: ASSUMPTIONS, STRENGTHS, AND GREATEST WEAKNESSES IN APPLICATION OUTSIDE THE WESTERN MILIEU CONTEXT. *Arabian Journal of Business and Management Review (Nigerian Chapter)* Vol. 1, No. 3, 2013 90.

Udo E, and Esara E. (2016). Adoption of Treasury Single Account (TSA) by State Governments of Nigeria: Benefits, Challenges and Prospects. *Journal of Finance and Accounting*

UNESCO. (2010). Education for all global monitoring report. UNESCO. Available on: <https://files.eric.ed.gov/fulltext/EJ1092383.pdf>

Uzochukwu O. C., Republic I., & Stella Olohi E. (2017). Treasury Single Account and University Administration in South East, Nigeria. *Asian Journal of Economics, Business and Accounting*, 4(4), 1-17. <https://doi.org/10.9734/AJEBA/2017/3645>

Vanguard Editorial,(2015). Buhari on Treasury Single Account, Vanguard, August 28, P6

Yusuf A.B. & Mairafi S. (2015). Treasury Single Account Implementation in Nigeria: Potential implications for Deposit Money Banks. Paper presentation in a conference in Nassarawa State University, Keffi

Online

<https://www.cbn.gov.ng/out/2015/bpsd/circular%20on%20oagf%20revenue%20collection.pdf>

<https://businessday.ng/technology/article/quality-delivery-of-e-payment-infrastructure-fasttracked-tsa-implementation-systemspecs/>

<https://www.cbn.gov.ng/Out/2019/RSD/2018%20AR%20KAMA1.pdf>

<https://businessday.ng/technology/article/quality-delivery-of-e-payment-infrastructure-fasttracked-tsa-implementation-systemspecs/>

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<http://documents1.worldbank.org/curated/en/898601468298477897/pdf/479400PJPR0P08101Oficial0Use0Only1.pdf>

<https://norad.no/en/front/thematic-areas/macro-economics-and-public-administration/public-financial-management/>

<https://allafrica.com/stories/201604150687.html>

<http://www.businessdictionary.com/definition/accountability.html>

<https://gifmis.gov.ng/gifmis/index.php/about-gifmis>

<https://www.ippis.gov.ng/>

<https://www.ippis.gov.ng/history/>

<https://www.ippis.gov.ng/what-is-3/>

<https://www.thenigerianvoice.com/news/122891/fg-saves-n120bn-through-ippis-reduces-ghost-workers-person.html>

<https://www.thenigerianvoice.com/news/122891/fg-saves-n120b>

<https://www.britannica.com/topic/government-economic-policy>

<https://www.ifac.org/knowledge-gateway/contributing-global-economy/discussion/how-strong-public-financial-management-nigeria-will-support-sustainable-growth>

<https://norad.no/en/front/thematic-areas/macro-economics-and-public-administration/public-financial-management/>

<https://www.cbn.gov.ng/out/2016/bpsd/guidelines%20for%20the%20operations%20of%20tsa%20by%20state%20governments%20in%20nigeria.pdf>

<https://www.imf.org/external/pubs/ft/wp/2010/wp10143.pdf>

http://www.sparc-igeria.com/RC/files/5.2.11_Local_Application_of_TSA_in_Kaduna_State.pdf

<https://www.investopedia.com/terms/r/rational-choice-theory.asp>

<https://oll.libertyfund.org/titles/buchanan-the-calculus-of-consent-logical-foundations-of-constitutional-democracy>

https://www.rafaelwittek.eu/images/pdf/lemmas/Wittek_2013_-_Rational_Choice_Theory.pdf

<https://www.investopedia.com/terms/r/rational-choice-theory.asp>

[https://en.wikipedia.org/wiki/Incrementalism#:~:text=Incrementalism%20is%20a%20method%20of,\(extensively%20planned\)%20large%20jumps.&text=In%20public%20policy%2C%20incrementalism%20is,larger%20broad%20based%20policy%20change.](https://en.wikipedia.org/wiki/Incrementalism#:~:text=Incrementalism%20is%20a%20method%20of,(extensively%20planned)%20large%20jumps.&text=In%20public%20policy%2C%20incrementalism%20is,larger%20broad%20based%20policy%20change.)

<https://www.kibin.com/essay-examples/the-process-of-incrementalism-a-theory-of-public-policy-making-uytpe4dm>

<https://thenationonlineng.net/counting-cost-of-treasury-single-account/>

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APPENDIX I

QUESTIONNAIRE

Department of Management and
Accounting,
Faculty of Environment, Management
and Social Sciences,
School of Postgraduate Studies,
Lead City University,
Ibadan,
Oyo State.

Dear Respondent,

I am an M.Sc. student of the department of Management and Accounting, Faculty of Environment, Management and Social Sciences School of Postgraduate Studies Lead City University, Ibadan, Oyo State, carrying out a research on Treasury Single Account policy and Public Financial Management in Nigeria.

This study is purely an academic exercise and responses shall be treated as confidential and will not be used for other purpose.

Please place a tick in a box that most accurately describes your opinion.

Thank you for your anticipated and sincere cooperation.

Yours faithfully,

Fadare Oludare O.

Questionnaire on Public Financial Management and Performance of Federal Research Institutes in Nigeria. A case of Federal Research Institutes in Ibadan, Oyo State, Nigeria.

Instruction: Please tick the appropriate response as it applies to you.

QUESTIONNAIRE

Section A: PERSONAL INFORMATION

Please tick the appropriate box where applicable

1 Gender: Male Female

2 Age: Below 30 year Between 30-50 years Above 50 year

3 Educational background: HND B.Sc. M Sc. Professional Others

Section B

Please, tick the appropriate box as appropriate taking SA = Strongly Agree, A = Agree, D = Disagree and SD = Strongly Disagree

Section 1

The extent to which TSA policy implementation affects the performance of federal research institutes in Nigeria

TSA

SA A D SD

Treasury Single Account ensures proper cash management for collection of government revenue

Efficient allocation of public funds is enhanced through the adoption of Treasury Single Account

Treasury Single Account greatly enhances financial discipline

Treasury Single Account ensures the spending of funds in line with approved budgets and financial plans of MDAs

Introduction of TSA has led to readily availability of funds to

execute projects when needed.

There is no improvement in financial discipline after the introduction of TSA

TSA policy helps to curb misappropriation of funds in my MDA.

MDA's level of Revenue Generation has increased since the adoption of TSA

Execution of projects in MDA has been greatly enhanced due to the use of TSA

The use of TSA has improved the overall financial and administrative processes of the MDA

Section 2

The influence of IPPIS on performance of federal research institutes in Nigeria

SA A D SD

IPPIS tracks all financial transaction that are related and linked to personnel emolument

Accountability and transparency of Government transaction increased with IPPIS

IPPIS reduces personnel cost by eliminating ghost works

IPPIS reduces multiple payments of emolument to a single employee in your ministry

IPPIS facilities easy storage, updating and retrieval of personnel records to reduce administrative cost

With the introduction of IPPIS, has your MDA made any saving from its recurrent expenditure in terms of personnel cost and overhead

IPPIS has made payments in terms of over-head and salary to be made on-time and more conveniently

IPPIS reduces wastage and financial leakages in MDA recurrent expenditure in terms of personnel cost management

IPPIS aid in having and preparing accurate and reliable

information about the size of personnel in the payroll

IPPIS aid in the reduction of corruption and sharp practices in the ministry

Section 3

The relationship between GIFMIS and performance of federal research institutes in Nigeria

SA A D SD

The GIFMIS system has helped the MDA to achieve a target in revenue collection

GIFMIS has reduced administrative task by reducing operating cost of hiring employees by revenue agencies

GIFMIS aids in payment of tax to Nigeria Revenue Authority

GIFMIS has re-enforced internal controls for safeguarding of public money

GIFMIS has reduced cost of reporting budgetary and financial statements to MDAs

GIFMIS has helped to fast track personnel information generation or retrieval, updates and dissemination in the MDA

GIFMIS has reduced administrative bureaucratic processes and bottlenecks peculiar with MDA

GIFMIS operates a Single Treasury Accounts that reduces borrowing cost

Section 5

The effect of Public Financial Management on Performance of selected federal tertiary institutions in Nigeria

SA A D SD

Public Financial Management through the use of TSA, IPPIS and GIFMIS, has increased the Revenue of MDA

Public Financial Management through the use of TSA, IPPIS and GIFMIS, has reduced the Revenue of MDA administrative

task

Public Financial Management through the use of TSA, IPPIS and GIFMIS, has increased Cash management of MDA

Public Financial Management through the use of TSA, IPPIS and GIFMIS, has re-enforced internal controls for safeguarding of MDA money

Public Financial Management through the use of TSA, IPPIS and GIFMIS, has increased the financial discipline of MDA

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08032377880
House address: Alh. Boladale house, opposite Trendy Guest house, old Ife
road, Ibadan.
Date of birth: 21st February, 1982. Place of
birth: Ibadan
Nationality: Nigerian
Marital status: Single
Name and address: Fadare Taiwo Olaolu. No.12, Unity estate, of next of
kin Akobo Ojurin, Ibadan, Oyo State.
Date of assumption of duty
in current establishment: 15th January, 2015
Status of first appointment
establishment: Self Employment in current
Present position: Owner
Date of commencement: 16th January, 2015

EDUCATIONAL BACKGROUND

EDUCATIONAL INSTITUTION ATTENDED WITH DATES

Lead City University, Ibadan	2018-2020
Lead City University, Ibadan	2011-2013
The Polytechnic, Ibadan	2005-2008
The Federal Polytechnic, Ede, Osun State	2000-2003
Loyola College, Ibadan	1992-1998

Name

Date & Signature