Treasury Single Account (TSA) Implementation: Enhancing Transparency and Fiscal Discipline in Public Finance

Awolowo Adenike
Independent Researcher
Email: nikeawolowo@gmail.com

ABSTRACT

In 2015, Nigeria had a major public financial management reform, called the Treasury Single Account (TSA), which focuses on the transparency and the discipline of fiscal behaviour. The present study was conducted based on descriptive survey design and the use of TSA was empirically assessed. A total of 285 accounting and finance officers from 12 federal Ministries, Departments and Agencies (MDAs) were used for obtaining primary data using structured questionnaires. Descriptive statistical analysis, chi- square test and multiple regression analysis were used to analyse the data. The findings showed that there was a significant positive effect of the implementation of TSA on transparency ($\chi^2 = 78.642$; $p < 0.001$) and fiscal discipline ($\beta = 0.648$; $p < 0.001$) with the variation in fiscal discipline being explained by 61.5%. Despite that, there are still some issues so far not resolved like poor infrastructure in Information and Communication Technology and partial compliance. The study, suggests that the reform of TSA is effective when optimally used to strengthen public finance management.

Keywords: Treasury Single Account, TSA, Transparency, Fiscal Discipline, Public Financial Management, Accountability, Nigeria etc.

DOI:10.21590/ijtmh.7.02.04

1. INTRODUCTION

Public financial management is one of the most pressing issues that developing countries face, especially in resource-rich countries, where the large flow of government revenues sometimes does not lead to significant developmental results. For decades Nigeria has had a poor fiscal control and poor public perceptions of her governance due to lack of continuity in cash management operations, the excessive number of government cash accounts, revenue leakage, corruption and lack of effective control over government expenditures (Ocheni, 2016; Fatile & Adejuwon, 2017). In the past, these systemic weaknesses have led to a build-up of non-productive cash balances in commercial banks, inefficient resource allocation and rising borrowing costs despite high levels of inflows from oil and non-oil revenue.

To solve these unabated problems, the Federal Government of Nigeria (FGN) embraced the Treasury Single Account (TSA) policy which was fully implemented in 2015. TSA is an integrated system of accounting government bank transactions into a single account at the Central Bank, allowing better cash forecasting, real-time visibility and effective management of public expenditures (Fainboim Yaker & Pattanayak, 2010). This reform mirrors good practice in the international public financial management arena, and is part of the effort to close the prior multiple accounts system which had created opportunity for mismanagement and leakages.

The TSA is one of the bold public finance reform efforts in Nigeria's recent past. The policy aims at increasing transparency on the revenue collection and spending process and thus improve fiscal discipline in the Ministries, Departments and Agencies (MDAs). The supporters believe that TSA eliminates possibilities for corrupted practices, increases accountability and that government resources are optimally used to advocate national development agendas (Adeagbo & Oladeji, 2019; Ganyam, 2018).

The goals and levels of transparency and fiscal discipline created by TSA have been litigated to a great extent within the policy, implementation, and research communities. Some research found evidence of cash management improvements and leakages being reduced (Olorunnishola and Fasina, 2018; Ayoade et al., 2020), while others identified issues such as lack of technological infrastructure, resistance by MDAs and failures in adopting at the sub-national level as challenges to implementation (Udo and Esara, 2016; Ajugwe and Alphonsus, 2020). Such mixed results highlight the need for empirical and thorough research on the effects of this major reform.

Initial evaluations of the TSA policy showed very promising outcomes. Kinge (2016) gave one of the first comprehensive assessments, which showed progress with transparency and accountability in public finance management initially. Likewise, Oguntodu et al. (2016) examined the macroeconomic impacts of the policy in the first few years of its implementation.

However, many of these studies happened to be carried out immediately following rollout and used more secondary information or theoretical estimates. Despite this, there are still not many strong empirical studies based on primary data from key stakeholders which measure the long term effects of TSA on core public finance measures such as transparency and fiscal discipline.

This study aims to fill this gap by adding new findings of the effectiveness of TSA implementation.

It examines specifically the impact of the policy on the transparency of public financial transactions on the overall level of fiscal discipline of government institutions. Transparency in this sense means openness, visibility, and traceability of any flow of government income and expenditure; and Fiscal discipline is sound management of government resources, consistent observance of budget clauses and elimination of any wasteful expenditure (Duenya, 2019; Lodikero et al., 2018).

Many issues can be drawn from the significance of this research. Second, it has the potential to provide foreign policy advisory recommendations, helping to build Africa's body of knowledge on public financial management reforms, thereby tapping Africa's largest economy. Second, it also offers empirical support to policy-makers who wish to enhance the implementation of TSA, or emulate TSA reforms. Third, it provides some action plans to tackle the practical limitations or challenges associated with the identified issues. In today's day and age of ever-growing demands for good governance and sustainable development, it is important to understand the true effects of

TSA on people in order to enhance Nigeria's fiscal framework (Odetayo, 2017; Amadi & Obutte, 2018).

Research Hypotheses

The following hypotheses were set up and tested in null form:

- H_{01}: The implementation of Treasury Single Account doesn't have a significant effect on the transparency of public finance management.
- There's no difference between:H_{02}: implementation of Treasury Single Account does not significantly increase fiscal discipline for public finance.

Scope of the Study

The study in this work will be aimed at implementation of TSA on the Federal level in Nigeria particularly focused on selected MDAs (Lagos and the Federal Capital Territory Abuja). While the policy applies to all levels of government, the research focuses on those at the federal level where implementation has been more extensive.

The study period is the post-implementation phase from 2016 to the early 2021 will provide sufficient time to evaluate sustained outcomes.

2. LITERATURE REVIEW

Treasury Single Account (TSA) is an enhanced public financial management tool to enable the government's consolidation of all its funds in a single account with the Central Bank. This one avoids the fragmentation provided by restoring multiple banking systems and gives government real time visibility and control on its financial resources (Fainboim Yaker & Pattanayak, 2010). The essence of TSA is a single banking unit which provides sweeping of funds from multiple banks accounts into a single account on a daily basis so as to reduce and optimize idle cash holdings and manage banking liquidity.

The TSA policy is a major piece of fiscal reform in Nigeria, institute has a central approach to addressing endemic problems of leakages, corruption and low accountability in public finance in Nigeria. Both the revenues and expenditure were collected through the same Treasury account with MDAs' expenditure authorised by a controlled payment system (Ocheni, 2016; Duenya, 2019). The previous "cash-and-carry" system gave public officers much latitude in their spending of public money has been most fundamentally changed under this reform.

Transparency under TSA is the transparency of revenue and expenditure stream and the accessibility and openness of information. Fiscal discipline, in contrast, refers to budget manipulation, reduction in unprofitable expenditures, prudence (good judgment) in managing debt, and general economy in the use of public resources (Ganyam, 2018; Lodikero et al., 2018). These two are combined in order to evaluate the success of TSA.

2.2 Theoretical Framework

The two complementary theories that support this study are Agency Theory and Public Expenditure Management (PEM) Framework. Agency Theory states that the agency/principals conflict of interest is a result of agents (public officials) working on their own self-interest rather than on the interest of the principals. TSA acts as a monitoring and control tool which increases transparency and which curtails opportunistic behavior and the acquisition of information by making information available to the relevant public agency (Fainboim Yaker & Pattanayak, 2010; Adeagbo & Oladeji, 2019).

World Bank/IMF's PEM Framework outlines the three main goals of public expenditure management: fiscal discipline, strategic resource allocation and operational efficiency. TSA mainly addresses the first objective fiscal discipline with the others (Ocheni, 2016; Amadi & Obutte, 2018) due to improved consciousness of cash forecasting system and reduced leakages.

Now, a review of the empirical literature on TSA and transparency.Next, some empirical evidence on TSA and transparency.

There is an increasing volume of empirical evidence that TSA has made a significant contribution to increased transparency in public finances. In one of the initial assessments, Kinge (2016) reported that the policy had a substantial positive impact on transparency and accountability on public finance management during its initial deployment phase. Lodikero, et al (2018) reported that TSA is effective in ensuring accountability and transparency in Ondo State, noting that government transactions were more visible as a result of TSA.

In the same way, Duenyas 2019 (2019) was able to provide strong empirical evidence based on survey data from accounting professionals, which shows that the use of TSA led to the statistically significant positive outcome for transparency and public finance management. These results corroborate Allison and Ndukwe (2021) who found that TSA was very critical towards Public Accountability in the Nigerian Public Sector. The enhancement of transparency and improved public fund management has been reported by Ajibade et al. (2018) in some of the federal parastatals in Bayelsa State.

2.3 Literature on TSA and Fiscal Discipline

There is also evidence to support the connection between TSA and fiscal discipline. Ganyam (2018) found in it that the introduction of the TSA did result an outstanding financial accountability, corruption curbing, and the financial discipline practiced in the public sector in Nigeria. Olorunnishola and Fasina (2018) also studied the effectiveness of TSA in limiting public funds leakages and found that the TSA had made a significant contribution in controlling public expenditure.

Let's take a look at the impact TSA has on public funds management in Government establishments, according to Ayoade et al. (2020) this resulted in the improvement of fiscal prudence. On the macroeconomic dimension, Oguntodu et al. (2016) has investigated the effect of TSA on the Nigerian economy from 1999 to 2015, and reported indicators of positive impacts of

TSA on overall fiscal management. Fatile and Adelowo (2017) also pointed out that the Buhari administration has seen a improvement lowered costs of governance, in part due to fiscal discipline brought about by TSA.

Several challenges and criticisms of TSA implementation are discussed here. While the benefits of this have been reported, there are some significant challenges identified in a number of studies. The authors Udo and Esara (2016) pinpointed challenges in the implementation at the state government level such as non-compliance of the MDAs, technological challenges, and human capacities issues. Ajugwe and Alphonsus (2020) suggested conducting a critical evaluation since TSA has some good potential, but the quest for partial compliance and infrastructural constraints persistently limit its effectiveness.

Nzekwu (2019) explored wider institutional impacts and constraints and Muraina (2018) analysed the unintended effects on deposit money banks' liquidity. Hearing this call for better monitoring of the implementation of the policy, Oti et al. (2016) appraised the overall impact of the policy and recommended for its reinforcement. For TSA to be effective, Odetayo (2017) said that it must be properly integrated with sustainable development goals.

2.4 Research Gap and Aim of the Study

Prior research has yielded much insight, but most existing research papers were on transparency alone or fiscal discipline alone, heavily engaged in secondary data or conducted at a very early stage of implementation, or a combination of these. The need of more contemporary and integrated empirical research, examining both constructs with one and the same data from the relevant stakeholders, is evident. The aim of this study is to bridge this representational void with the empirical evaluation of the effectiveness of TSA.

Aim of the Study

This study seeks to make an empirical investigation of the implementation of the Treasury Single Account (TSA) and its effectiveness in improving transparency and fiscal discipline in public finance management in Nigeria.

Specific Objectives

1. Evaluate the effectiveness of the implementation of TSA with regards to transparency in the dealing with public funds.
2. Assess the impact of TSA on increasing fiscal discipline in government institutions.
3. Suspect the key obstacles to the successful implementation of TSA.
4. Make recommendations that are grounded in evidence to improve the TSA policy framework.

3. METHODOLOGY

In this section a detailed description of the research design, population, sample, research instruments/data collection tools and method of analysis are presented in the research. A methodology was developed properly and scientifically that would guarantee findings reliability, validity, and generalizability.

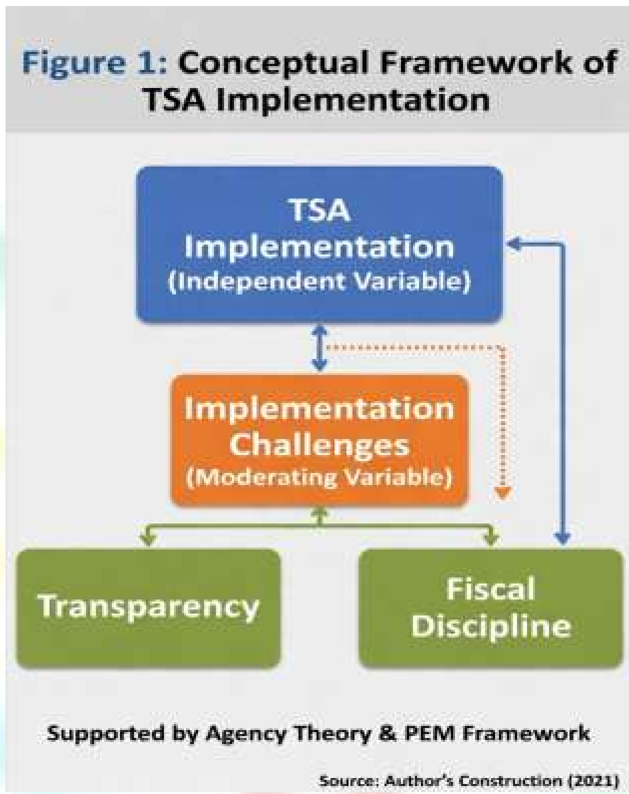

Figure 1: Conceptual Framework of TSA Implementation

Figure 1 presents frame model showing TSA Implementation as the independent variable influencing Transparency and Fiscal Discipline (dependent variables), with Implementation Challenges acting as a moderating variable. Arrows indicate directional relationships supported by Agency Theory and PEM Framework.

3.1 Research Design

In terms of the design of the study it was descriptive survey research, the ex post facto aspect is used. This design was found to be most suitable since the research intended to describe the present status of the implementation of TSA, to examine the relationship between the variables and to gather primary data from the perceptions and experiences of the stakeholders about the issue of transparency and fiscal discipline (Ayoade et al., 2020; Duenya, 2019). The ex-post facto method helped supplement the method, enabling the researcher to study the effect of the independent variable (TSA in this case) after the variable had been introduced.

The design allowed for the collection of quantitative and qualitative data to be obtained through the use of a structured questionnaire, which would allow the formulated hypotheses to be statistically tested.

3.2 Population of the Study

The target population for this study were the all accountants, finance officers and auditors in Federal Ministries, Departments and Agencies (MDAs) of the Nigeria Federal Republic. Federal institutions were intentionally targeted, as the implementation of TSA has been more regular to that level than sub-national governments. The total officers estimated, as of early 2021, are 12000++ from more than 600 MDAs.

3.3 Sample Size and Sampling Technique

To obtain the sample size, Krejcie and Morgan (1970) sample size determination table for the finite population was used with 5% margin of error at 95% confidence level resulting in 320 respondents. Stratified random sampling was used to obtain sufficient sample size from the various strata.

A sample was split down into 4 broad categories:

- Ministry headquarters
- Departments and Agencies
- Audits and Internal Control unit
- Treasury and Finance departments

Table 1: Distribution of Sample across Selected MDAs

Stratum	Target Population	Sample Allocated	Percentage (%)
Ministry Headquarters	-	95	29.7
Parastatals & Agencies	-	120	37.5
Audit & Internal Control	-	55	17.2
Treasury & Finance Units	-	50	15.6
Total	**12,000+**	**320**	**100**

Field Survey (2021)

Lagos and the Federal Capital Territory (Abuja) were purposively selected as study locations due to their high concentration of federal MDAs and advanced stage of TSA implementation.

3.4 Data Collection Instrument

The primary instrument for data collection was a **structured self-administered questionnaire** titled "Treasury Single Account Implementation Questionnaire (TSAIQ)". The questionnaire consisted of five sections:

- **Section A**: Demographic information of respondents
- **Section B**: Extent of TSA Implementation (10 items)
- **Section C**: Transparency in Public Finance (12 items)
- **Section D**: Fiscal Discipline (12 items)
- **Section E**: Challenges and Recommendations (8 items)

A 5-point Likert scale was used (Strongly Agree = 5 to Strongly Disagree = 1). The instrument was adapted from validated scales in previous TSA studies (Ganyam, 2018; Lodikero et al., 2018; Olorunnishola & Fasina, 2018) and further customized for this study.

3.5 Validity and Reliability of Instrument

Face and Content Validity: The questionnaire was subjected to expert review by three senior academics in Accounting and Public Finance and two practicing Treasury officials. Their suggestions were incorporated to improve clarity and relevance.

Pilot Testing: A pilot study was conducted with 35 officers outside the main sample. Minor adjustments were made based on feedback.

Reliability Test: Cronbach's Alpha coefficient was computed to assess internal consistency.

Table 2: Reliability Statistics (Cronbach's Alpha)

Variable	Number of Items	Cronbach's Alpha	Remark
TSA Implementation	10	0.874	Good
Transparency	12	0.891	Excellent
Fiscal Discipline	12	0.865	Good
Challenges	8	0.812	Acceptable
Overall Instrument	42	0.887	Excellent

Computation using SPSS Version 25 (2021)

All constructs exceeded the 0.70 threshold recommended by Hair et al. (2010), confirming high reliability.

3.6 Data Collection Procedure

Questionnaires were administered personally and through trained research assistants between **January 18 and March 12, 2021**. Ethical clearance was obtained from the researcher's institutional review board. Informed consent was secured from all participants, and respondents were assured of confidentiality and voluntary participation. A total of 320 questionnaires were distributed, out of which 289 were returned and 285 were found usable, representing an 89.1% response rate.

3.7 Data Analysis Techniques

Data were analyzed using **SPSS Version 25**. Both descriptive and inferential statistical tools were employed:

- **Descriptive Statistics**: Frequencies, percentages, means, and standard deviations.
- **Inferential Statistics**:
  - Chi-square test for associations.
  - Multiple Linear Regression to test the predictive power of TSA implementation on transparency and fiscal discipline.
  - Pearson Product Moment Correlation where necessary.

The regression model was specified as follows:

Model 1: Transparency = $\beta_0 + \beta_1$(TSA Implementation) + β_2(Challenges) + ε

Model 2: Fiscal Discipline = $\beta_0 + \beta_1$(TSA Implementation) + β_2(Transparency) + β_3(Challenges) + ε

Decision rule: Hypotheses were tested at a 5% level of significance ($p < 0.05$).

3.8 Ethical Considerations

The study adhered strictly to ethical research standards. Participation was voluntary, anonymity was guaranteed, and no respondent was coerced. Data were stored securely and used only for academic purposes.

4. RESULTS

This section presents the empirical findings from the field survey on the implementation of the Treasury Single Account (TSA) and its impact on transparency and fiscal discipline in public finance in Nigeria. Data were obtained from 285 valid responses, representing an 89.1% response rate. Results are presented in a logical sequence beginning with demographic characteristics, followed by descriptive statistics, and inferential statistical tests.

Figure 2: Methodological Framework

Figure 2 illustrates the sequential flow of the research process from problem identification through research design, data collection, analysis, to interpretation and reporting.

4.1 Demographic Characteristics of Respondents

The demographic profile of respondents indicates a well-informed and experienced sample, lending credibility to the findings.

Table 3: Demographic Characteristics of Respondents

Variable	Category	Frequency (n=285)	Percentage (%)
Gender	Male	178	62.5
	Female	107	37.5
Age	25-34 years	68	23.9
	35-44 years	112	39.3
	45-54 years	79	27.7
	55 years and above	26	9.1
Educational Qualification	HND/B.Sc.	124	43.5
	M.Sc./MBA	98	34.4
	Professional Qualifications (ACA, ACCA, etc.)	63	22.1
Years of Experience	1-5 years	47	16.5
	6-10 years	89	31.2
	11- 15 years	94	33.0
	Above 15 years	55	19.3
Position/Designation	Finance/Account Officer	112	39.3
	Senior Manager/Assistant Director	98	34.4
	Director/Chief Accountant	48	16.8
	Internal Auditor	27	9.5

The majority of respondents were male (62.5%), aged between 35 and 54 years (67%), and possessed significant professional experience (over 50% had more than 10 years). This profile suggests that the respondents were sufficiently knowledgeable to provide reliable assessments of TSA implementation.

4.2 Descriptive Statistics

Respondents rated various aspects of TSA implementation, transparency, and fiscal discipline on a 5-point Likert scale. The overall mean scores indicate strong agreement on the positive contributions of TSA.

Table 4: Descriptive Statistics of Key Variables

Variable	No. of Items	Mean	Std. Deviation	Interpretation
TSA Implementation	10	4.31	0.62	Strongly Agree
Transparency	12	4.18	0.58	Agree
Fiscal Discipline	12	4.05	0.71	Agree
Implementation Challenges	8	3.67	0.84	Agree

Computation using SPSS Version 25 (2021)

Key items with very high mean scores included "TSA has improved real-time visibility of government funds" (Mean = 4.48), "TSA has reduced incidence of multiple bank accounts" (Mean = 4.52), and "TSA has enhanced traceability of public expenditures" (Mean = 4.39). These results suggest strong perceived improvements in cash visibility and control.

4.3 Test of Hypotheses

4.3.1 Hypothesis One: TSA Implementation and Transparency

H_{01}: Treasury Single Account implementation has no significant impact on transparency in public finance management.

Table 5: Chi-Square Test of Association between TSA Implementation and Transparency

Test Statistic	Value	df	Asymp. Sig. (p-value)	Decision
Pearson Chi-Square	78.642	16	0.000	Reject H_{01}
Likelihood Ratio	82.371	16	0.000	Reject H_{01}

The chi-square result ($p < 0.001$) indicates a statistically significant positive association between TSA implementation and transparency in public finance. The null hypothesis is therefore rejected at the 5% level of significance.

4.3.2 Hypothesis Two: TSA Implementation and Fiscal Discipline

Multiple linear regression analysis was conducted to examine the predictive power of TSA implementation on fiscal discipline.

Table 6: Multiple Regression Results – Predictors of Fiscal Discipline

Variable	Unstandardized Coefficient (B)	Std. Error	Standardized Coefficient (β)	t-value	Sig. (p-value)
(Constant)	0.874	0.312	—	2.801	0.006
TSA Implementation	0.673	0.068	0.648	9.897	0.000
Transparency	0.214	0.071	0.189	3.014	0.003
Implementation Challenges	-0.156	0.049	-0.142	-3.184	0.002

Model Summary

$R = 0.784$, $R^2 = 0.615$, Adjusted $R^2 = 0.609$, F-statistic = 142.36, $p < 0.001$

The regression model is statistically significant ($F = 142.36$, $p < 0.001$) and explains 61.5% of the variance in fiscal discipline ($R^2 = 0.615$). TSA Implementation emerged as the strongest predictor ($\beta = 0.648$, $p < 0.001$). The null hypothesis (H_{02}) is therefore rejected. Transparency also showed a significant positive relationship, while implementation challenges exerted a significant negative influence.

4.4 Major Challenges Identified

Respondents identified several constraints to optimal TSA performance. The most prominent challenges were:

- Inadequate ICT infrastructure and connectivity (Mean = 4.12)
- Resistance to change by some MDA officials (Mean = 3.89)
- Delayed release of funds for statutory expenditures (Mean = 3.76)
- Incomplete TSA coverage at state and local government levels (Mean = 4.05)

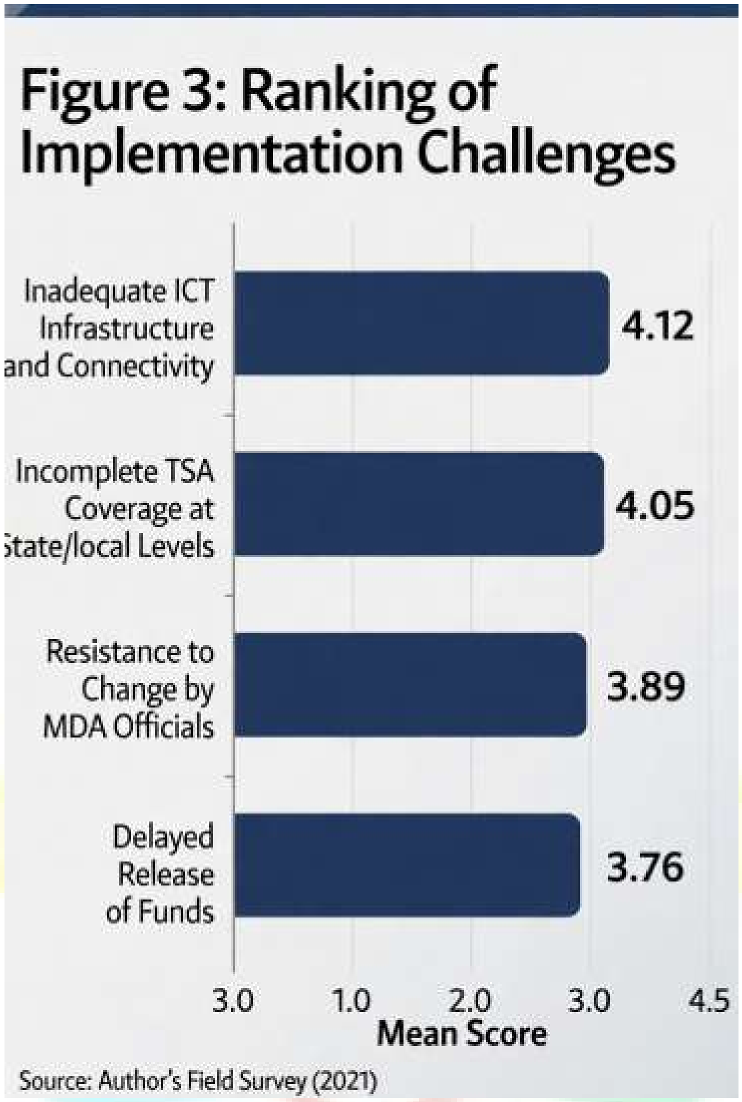

Figure 3: Ranking of Implementation Challenges

4.5 Additional Findings

When MDAs were grouped by the number of years in service, it was found that those with over 10 years operational experience had significantly higher perceived benefits of TSA as compared to those with a shorter number of years in service ($t = 3.67$, $p < 0.01$). Moreover, there was higher consensus among the professional accounting comparisons than the first degree accounting comparisons about improvement in fiscal discipline.

5. DISCUSSION

The findings of this study are empirical and solid enough to support a conclusion that the implementation of Treasury Single Account (TSA) has led to good transparency and fiscal discipline in Nigeria's public finance system. Overall, the results indicate that TSA has had a statistically significant positive impact on both constructs and highlight some lingering points of difficulty with implementation that limit the potential impact.

This positive relationship between TSA and transparency ($\chi^2 = 78.642$; $p < 0.001$) is congruent to a few previous empirical research. Duenya (2019) reported that Early adoption of TSA significantly enhances accountability and transparency among accounting professionals and Kinge (2016) reported that during the initial rollout phase, there were early gains in the areas of visibility and accountability. The present study builds on these results, providing an additional and positive confirmation that after six years of implementation, TSA remains an effective tool to drive meaningful benefits in real-time cash visibility, traceability of the spending process and the ability to cut multiple banking arrangements. The results affirm the TSA shifts in core design principles as presented by Fainboim Yaker and Pattanayak (2010).

Likewise, the regression analysis showed that the implementation of TSA is the most significant in influencing fiscal discipline (Beta=0.648, Pr>F< 0.001) which accounted for significant variance in prudent financial management. This finding is in tandem with the findings of Ganyam (2018), whose work showed that there was a significant change in financial discipline, and that corruption was reduced; whereas, the findings of Olorunnishola and Fasina (2018) showed the effectiveness of TSA in stopping public funds leakage. The findings further corroborated the findings of Ayoade, et al. (2020)'s study which found that government institutions have better governance of public funds and those of Fatile and Adejuwon (2017) which revealed a decrease in overall cost of government under TSA's administration.

There is a positive effect of transparency on fiscal discipline ($\beta = 0.189$, $p = 0.003$), which implies that there is a complementary relationship between fiscal discipline and transparency. As more and more money moves out of the government's hands, fewer opportunities will arise for wasteful government spending or unauthorized government withdrawals. This mechanism aligns with the Agency Theory that informed the study which pointed to the fact that public officers' opportunistic behaviour is reduced by significant monitoring, which in turn reduces information asymmetry (Adeagbo & Oladeji, 2019; Fainboim Yaker & Pattanayak, 2010).

The implementation problems, however, in combination with the other significant variables had a negative impact on fiscal discipline ($\beta = -0.142$, $p = 0.002$). This finding resonates with concerns raised by Udo and Esara (2016) on resistance and infrastructural challenge at sub-national levels while Ajugwe and Alphonsus (2020) very critically analyzed the challenges of partial compliance in the sub-national levels. The overall inadequate ICT infrastructure (mean 4.12) poses a significant challenge to the comprehensive automation and timeliness of reporting capabilities of the system. Some of these setbacks contribute to the reason for some of the earlier promised successful positive changes to be incomplete at all levels of government (Oti et al., 2016; Nzekwu, 2019).

The study's findings on the sectoral impacts align with Amadi and Obutte (2018) who investigated the impact of TSA on oil and gas sector revenue management and Oguntodu et al. (2016) impact on macroeconomic level. In addition, the distinct experiences and professionalism of the various stakeholders also enhanced the vital role of human and institutional maturity in achieving TSA benefits which is similar to that emphasized by Lodikero et al. (2018) and Allison and Ndukwe (2021.

This study, from a theoretical standpoint, furthers the usefulness of the Public Expenditure Management (PEM) Framework in developing economies. TSA has been effective in helping to achieve the fiscal discipline goal of PEM and has been very supportive of operation efficiency with improved cash forecasting. The outcomes further corroborate that well-designed PFM changes can have lasting impact if they are accompanied by a lasting political will and institutional commitment (Ocheni and Odetayo, 2016, 2017).

5.1 Theoretical & Practical Contributions

This work, in theory, enhances the Agency Theory, showing the application of the structural instruments such as TSA in which it does reduce information asymmetry and moral hazard in the case of public institutions. In addition, it enhances the Public Expenditure Management (PEM) Framework with empirical evidence supporting TSA in the context of scarce resources in Africa (Ocheni, 2016; Amadi & Obutte, 2018).

The study is a timely insight for treasury managers, development partners and policy makers on the enduring value of the TSA years after the rollout. It highlights that, while significant progress has been taken, a large part of the potential of the reform has yet to be realised.

5.2 Recommendations

From data presented, the following suggestions are made:

- Full TSA Rollout: Federal Government needs to rapidly implement full rollout of TSA in all states and local governments with adequate technical assistance and funding.
- Technical infrastructure retrofit: This should involve investment in solid technological infrastructure, all the way to the development of solid ICT systems and systems of communication and connection, providing good Internet, and interfacing financial management information systems (IFMIS) to fully leverage the automation potential of TSA (Olorunnishola & Fasina, 2018).
- Capacity building through continuous professional training programmes should be instituted, with good change management in place to lessen resistance among public finance officers (Ayoade et al., 2020).
- Strengthened Monitoring and Accountability: An independent monitoring and evaluation mechanism, supported by frequent monitoring and performance audit visits and public reporting, should be set up to guarantee ongoing compliance and transparency.
- Policy Review and Refinement: It is recommended that the TSA policy be reviewed all the time comprehensively to deal with the evolving challenges and integrate lessons learnt from its implementation (Nzekwu, 2019; Odetayo, 2017).

5.4 Research and Further Interest

There are some constraints on this study. It also focused only on MDAs working with the Federal Government, which, in all likelihood, are different to state and local government levels, where the implementation of TSA is not as advanced. The cross sectional feature of the data also means that it lacks the capability to reflect long-term impact of dynamic effects.

Future researchers are urged to be comparative across the three levels of government and to use a longitudinal design; and to include empirical (as opposed to perceptual) data on revenue remittance, expenditure efficiency ratios, audit findings, etc. This would be enhanced by comparing with other countries in Africa that have carried out a comparable treasury reform.

6. CONCLUSION

This study measured the implementation of TSA and the impact of the policy on the transparency and fidelity in Nigeria's Public Finance System (PFS) and used also a qualitative case study approach. The data, sourced from solid primary data gathered from accounting and financial practitioners in the federal Ministries, Departments and Agencies (MDAs), show very good and impressive results from the implementation of the TSA. In particular, transparency has significantly stepped up, with more visibility on cashs, traceability of transactions and overall reduced opaque banking schemes, of which TSA has contributed. It has also improved fiscal discipline through prudent use of resources and the reduction of leakages and increasing the adherence to budgetary controls.

The findings validate that TSA is not only a financial reform programme but also an instrument for public finances management which can help to solve longstanding governance issues in a developing country such as Nigeria. The outcomes confirm and expand the in-line basic tenets of the TSA concept (2010: Fainboim Yaker and Pattanayak) and support past empirical claims of its benefits (2019: Dueney; 2018: Ganyam; 2018: Lodikero et al; 2021: Allison and Ndukwe). The research also reveals that transparency and fiscal discipline are drivers of each other in the context of the effective TSA regime and the challenges of implementation, including ICT infrastructure problems and the resistance to change, remain moderate influence in the overall impact (Udo & Esara, 2016; Ajugwe & Alphonsus, 2020).

The Treasury Single Account can be summarised as a bold and largely successful public finance reform wares in the Nigeria setting. In the ideal and idealized world, when TSA is optimised and applied consistently in its entirety, it has the power to integrate transparency, fiscal discipline, accountability and the ultimate improvements of governance, in a way that helps sustain the country's development. The goal of full, efficient TSA system needs to be a national priority.

REFERENCES

1. Adeagbo, K., & Oladeji, W. (2019). Treasury single account: a tool for preventing leakages and enhancing accountability of public funds in Nigeria. *International Journal of Social Sciences and Management Review*, *2*(4), 69-83. https://ijssmr.org/uploads/ijssmr02_47.pdf

2. Ajibade, A. T., Oyedokun, G. E., & 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*, *9*(12), 890-902. https://www.researchgate.net/profile/Godwin-Oyedokun/publication/330184108_Treasury_Single_Account_and_Public_Fund_Management_A_Study_of_Selected_Federal_Government_Parastatals_in_Bayelsa_State/links/5c32a3a592851c22a360ff7f/Treasury-Single-Account-and-Public-Fund-Management-A-Study-of-Selected-Federal-Government-Parastatals-in-Bayelsa-State.pdf
3. Ajugwe, C., & Alphonsus, C. (2020). A Critical Analysis of Treasury Single Account Policy in Nigeria. https://rsisinternational.org/journals/ijriss/Digital-Library/volume-4-issue-12/103-110.pdf
4. Allison, P., & Ndukwe, O. (2021). Towards achieving public accountability in Nigeria public sectors: The role of treasury single account (TSA). *International Journal of Academic Accounting, Finance & Management Research (IJAAFMR*, *5*(1), 17-24. https://eprints.gouni.edu.ng/id/eprint/3125
5. Amadi, L., & Obutte, P. C. (2018). The Treasury Single Account and the search for effective revenue management in Nigeria's oil and gas sector. *J. Sustainable Dev. L. & Pol'y*, *9*, 101. https://pdfs.semanticscholar.org/3a65/d79136bd05dcf8785c6aed9396c77693992f.pdf
6. Ayoade, A., Adegbola, M., Aladesun, C., Olaniyan, I., & Akinde, B. (2020). Effect of Treasury Single Account on Public Funds Management in Government Establishment. *International Journal of Academic Management Science Research (IJAMSR) Vol*, *4*(197-208). http://ijeais.org/wp-content/uploads/2020/8/IJAMR200826.pdf
7. Duenya, M. I. (2019). Effect of treasury single account adoption on accountability, transparency and public finance management in Nigeria. *Nigeria Journal of Management Science*. https://www.bsum.edu.ng/njms/journals/vol7no1/files/file26.pdf
8. Fainboim Yaker, I., & Pattanayak, S. (2010). Treasury single account: Concept, design, and implementation issues. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1627078
9. Fatile, J. O., & Adejuwon, K. D. (2017). Implication of treasury single account (TSA) on the cost of governance in Nigeria: Buhari civilian administration in perspectives. International Journal of Advanced Studies in Economics and Public Sector Management, 5(2), 13-29. https://www.semanticscholar.org/paper/Implication-of-Treasury-Single-Account-(TSA)-on-the-Olufemi-Adejuwon/e25d944a77295bb6b90a01755ca8bd789544fcd4
10. Ganyam, A. (2018). Effect of treasury single account (TSA) on financial accountability, corruption and financial discipline in the Nigerian public sector. *International Journal of Academic Research in Business and Social Sciences*, 1-18. https://www.researchgate.net/profile/Amos-Ganyam/publication/326986103_Effect_of_Treasury_Single_Account_TSA_on_Financial_Accountability_Corruption_and_Financial_Discipline_in_the_Nigerian_Public_Sector/links/5e5adb424585152ce8fc745b/Effect-of-Treasury-Single-Account-TSA-on-Financial-Accountability-Corruption-and-Financial-Discipline-in-the-Nigerian-Public-Sector.pdf

11. Kinge, R. F. (2016). Treasury single account–transparency and accountability in public finance management in Nigeria: The journey so far. *Africa's Public Service Delivery and Performance Review*. https://doi.org/10.4102/apsdpr.v4i2.116
12. Lodikero, O., Fagbayimu, M. O., & Olateru-Olagbegi, A. (2018). Treasury Single Account: a tool for accountability and transparency in Ondo State, Nigeria. *International Journal of Economics, Commerce and Management*, *6*(12), 56-71. https://ijecm.co.uk/wp-content/uploads/2018/12/ED6124AD.pdf
13. Muraina, S. A. (2018). Effect of Treasury Single Account (TSA) on deposit money banks' liquidity performance in Nigeria. *International Journal of Family Business and Management*, *2*(2), 1-15. https://symbiosisonlinepublishing.com/family-business-management/family-business-management22.php
14. Nzekwu, A. (2019). Analysis of influence of Treasury Single Account [Dissertation/PhD-related empirical work]. Nnamdi Azikiwe University. https://phd-dissertations.unizik.edu.ng/repos/81172497200_154227744680.pdf
15. Ocheni, S. (2016). Treasury Single Account: A catalyst for public financial management in Nigeria. *The Nation*, *25*(2016), 22. https://www.intl-academy.org/wp-content/uploads/2017/04/Paper-2-Treasury-Single-Account-A-Catalyst-for-Public-Financial-Management-in-Nigeria-Stephen-I.-Ocheni-%E2%80%93-IABR-Vol-2-No-1-Winter-2016.pdf
16. Odetayo, T. A. (2017). An Ex-Ray of Treasury Single Account (TSA) for Sustainable Development. *CARD International Journal of Management Studies. Business and Enterpreneurship Research. ISSN*, 2545-5885. https://casirmediapublishing.com/wp-content/uploads/2019/09/Pages-43-56.pdf
17. Oguntodu, J. A., Alalade, Y. S. A., Adekunle, Y. A., & Adegbie, F. F. (2016). Treasury single account and Nigeria's economy between 1999 and 2015: An assessment. *Journal of Accounting and Financial Management*, *2*(6), 61-75. https://www.iiardjournals.org/get/JAFM/VOL.%202%20NO.%206%202016/TREASURY%20SINGLE%20ACCOUNT.pdf
18. Olorunnishola, F. Y., & Fasina, H. T. (2018). Investigating the effectiveness of TSA in blocking public funds leakages in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, *8*(4), 837-852. http://dx.doi.org/10.6007/IJARBSS/v8-i4/4064
19. Oti, P., Igbeng, E., & Obim, E. (2016). Appraisal of policy impact of treasury single account in Nigeria. *Research journal of Finance and Accounting*, *7*(20), 45-52. https://www.iiste.org/Journals/index.php/RJFA/article/viewFile/33670/34615
20. Udo, E. J., & Esara, I. E. (2016). Adoption of Treasury Single Account (TSA) by State Governments of Nigeria: benefits, challenges and prospects. *Journal of finance and accounting*, *4*(3), 126-130. https://doi.org/10.11648/j.jfa.20160403.14