Nexus Between Treasury Single Account, Revenue Generation, Transparency and Accountability: Evidence from Nigerian

Solomon Eyiolawi Durodola
National Examinations Council, Ilorin, Nigeria

Ramat Titilayo Salman PhD.
Department of Accounting, University of Ilorin, Ilorin, Nigeria

Kayode David Kolawole
Department of Finance, University of Ilorin, Ilorin, Nigeria

Surajudeen Ibrahim
Independent National Electoral Commission, Ilorin, Nigeria

doi: https://doi.org/10.37745/bjmas.2022.0236

ABSTRACT: This study assessed the impact of treasury single account (TSA) on revenue generations, transparency and accountability: evidence from Nigerian federal road safety corps. Correlational research design was adopted and one hundred and twenty-five copies of questionnaire were distributed to staff of federal road safety corps in Niger state, Nigeria. The study employed ordered logit regression to analyze the data obtained and the findings revealed that TSA improves revenue generation, promote transparency and accountability. It was recommended that federal government should conduct periodic checks on all MDAs so as to enforce the implementation of the TSA policy in all their revenue generation activities.

KEYWORDS: treasury single account, revenue generation, transparency, accountability

INTRODUCTION

The engine and pathway to modern development worldwide is revenue generating. Any nation's growth and development depend on its government capacity to generate revenue. Every state views the revenue it generates as the key to its development because without resources in the form of revenue, so State could effectively function and fulfill all of its obligations to its citizens. To provide services to their citizens, nations work to enhance revenue generation. However, in light of the current economic crisis, which has increased pressure on governments to ensure that the
value for money (efficiency, effectiveness and economy) is provided when services are rendered to the general public. Many nations throughout the world have struggled to generate revenue for the purpose of growth and lack of adequate revenue generation prompted the idea of TSA in Nigeria. The revenue of Nigerian government has continuously reduced unabated, it reduced to N3 billion in 2015 from N8 billion in 2011, because of several government accounts (amounting to over 20,000 accounts) with different banks across the country. Hence, there come the need for TSA so as to guarantee financial revenue and expenditure responsibility.

According to Abubakar (2017), TSA evolved in order to ensure that effectiveness are brought into the management of government funds, in addition to transparency and accountability. Since the TSA helps federal government to effectively monitor the cash flow within the public organizations, TSA may ultimately result in the effectiveness of spending in public organizations. Treasury Single Account is yet to have an impact on federal government revenues in terms of openness and responsibility for the better administration of public funds (Okoye, Umeagugesi, Eneh, Okoye & Allison, 2022).

Furthermore, the handling of public funds in Nigeria continues to be highly inefficient despite numerous reforms, including the establishment of the treasury single account. These issues have persisted and resisted all solutions devised by succeeding governments, transforming into a monster so characterized of national terror impeding economic development. In addition, the poor accountability and lack of transparency have the consequence of enhancing corruption, fraud, embezzlement, loss of money (revenue), conversion of assets, genuine and intentional mistakes, among other undesirable outcomes.

Due to support equipment for the public is not readily available, poor financial management in the public sector has probably resulted in a decrease in value delivery. Similarly, various studies conducted used different variables to examine treasury single accounts and fraud prevention in Deposit Money Banks (Mohd-Sanusi, Mohamed, Omar & Mohd-Nassir, 2015; Mohamed; Gesare, Michael & Odongo, 2016; Adetiloye, Olokoyo & Taiwo, 2016). The earlier research, however, overlooked crucial elements like political will and the rule of law. These variables, which are characteristics of institutions, have a significant impact on the adoption and effectiveness of TSA in the public sector. Hence, it is important to take these factors into account.

Also, a number of studies on treasury single accounts concentrated on their effects on revenue generation and fund administration. In addition, there are few research has considered the effect on TSA on accountability and transparency. These inadequacies were the driving force behind the necessity of this investigation. Also, to estimate the multiple regression models, the majority of the prior studies on treasury single account (such as Salman et al., 2019 and Bamidele, Adisa & Adegbola, 2020) used the Ordinary Least Square (OLS) method, Fully Modified OLS (FMOLS), Analysis of Variance, and descriptive statistics. However, this study used ordered logit regression to specifically examine how treasury single account affects revenue generation. Ordered logistic regression is appropriate because it is related to the objective constraints of the study and also the questions on the dependent variables were ordered as well as having over two response categories
The hypotheses for this study were stated in null forms as follows:

$H_{01}$: TSA does not significantly impact on revenue generated by federal road safety corps in Niger state, Nigeria.

$H_{02}$: TSA has no significant influence on transparency of federal road safety corps in Niger state, Nigeria.

$H_{03}$: TSA does not significantly affect accountability of federal road safety corps in Niger state, Nigeria.

**LITERATURE REVIEW**

**Treasury Single Account (TSA)**

As defined by Pattanayak and Fainboim (2011), the TSA is a uniform and consolidated bank accounts structure for governments that enables most effective use of financial resources. Chukwu (2015) defined TSA to be linkage of combined subsidiary accounts while the closing balances are moved from the accounts (subsidiary) to the main account at the conclusion of each working day. TSA being a bank account or collection of linked accounts that government uses to make all of its receipts and payments in order to prevent the loss of public funds (Sabo, Muhammad & Kaoje, 2019).

The TSA portal offers a way to view daily returns from all accounts of the governments at different levels. The TSA is also in charge of allocating, controlling, and gathering federal monetary resources. TSA permits the best use of idle funds, closes revenue management loopholes, creates a reliable system for collecting and disbursing government funds, enhances liquidity reserves, and does away with operational inefficiencies and costs related to keeping numerous accounts at various financial institutions (Ikya et al., 2017).

**Revenue Generation**

The total amount of funds received by government from various sources such as net of refunds and other transactions, the sale of investments, intra-government transfers, and the proceeds from the issuance of debt (Ahmed, 2010). According to the accounting standards used to create these data, receivables from all governmental accounting funds, with the exception of intra-governmental service (revolving), agency, and private trust funds, are regarded as alternative sources of government revenue (Chaudhry & Munir, 2010).
The two main types of government revenue are non-oil and oil. Okwori and Sule (2016) claims that taxes and other administrative expenditures including fees, fines, grants, and gifts account for the majority of government revenue.

**Accountability**

Accountability simply means to be answerable to those who gave trust and resources to someone. Adegbite (2010) viewed accountability to be reporting that effort are been done in accordance with set rules and standards, as well as the officer must report performance results fairly and accurately in relation to prescribed roles and plans. The concept of accountability, according to Laxmikanth (2006), denotes the duty of the managers in providing an acceptable explanation of their actions and the method at which they have used the authority granted to them. Nkoma (2004) asserted that public accountability is the obligation that a person who occupies positions of public trust answer to the public or their representatives regarding how the position has been used.

**Transparency**

An ethical principle called transparency is concerned with moral requirements (Gbegi, Duena & Ipevnor, 2019). In the view of Akpa (2008), transparency can be defined as activities based on the principles of integrity, good morality, and a spotless past free of any evidence of cover-up, lying, or cheating. In general, it can be characterized as openness, justice, and uprightness in interacting with others, both in private and in official settings. According to Schnackenberg (2002), the concept of transparency is made up of three correlated principles of disclosure (quality of information presentation), clarity (consistency of language) and accuracy (precision of information provided).

**Theoretical Review**

The public finance management theory developed by Christopher Hood and presented in 1991 serve as this study's foundation. According to the theory, all aspects of financial resources, including their mobilization and the use of government cash, should be carefully managed to the advantage of the populace. Resources must be mobilized, programmes must be prioritized, a budget must be prepared, resources must be managed effectively, and controls must be exercised to prevent corruption (Grubber, 2005). Before the Treasury Single Account (TSA) was created, the Ministries, Departments, and Agencies used the revenues to pay for their operations and then sent the surplus to the federation account. To the degree that some agencies were wealthier than the federation, the Ministries, Departments, and Agencies remitted whatever amount they thought appropriate and fit. Since there was little to no accountability for the amount sent into the federation, there was a high rate of financial theft (Kanu, 2016). The introduction and implementation of TSA guarantees that there is proper accountability in regard to revenues generated and expenditures made by government entities like the FRSC, as well as the subsequent utilization of the revenues and control expenditure to ensure the best benefit to the populace. So, the study can be supported by this theory.
Empirical Review

With the use of descriptive and inferential statistics, Salman and Adeseye (2010) examined the Nigerian TSA and fund management. The result showed that making the TSA operational increases tax collection and decreases financial fraud. In 2016, Bashir evaluated the effectiveness of Nigeria's TSA in preventing financial theft and fostering openness and accountability in the country's management of the public sector. Using Pearson correlation, the study demonstrated that TSA prevents financial fraud while enhancing accountability and openness in the public sector.

More so, the consequences of Nigeria's TSA policy were examined by Akujuru and Enyioko (2017). Using a questionnaire and a cross-sectional survey approach, it was shown that TSA was implemented to stop funds from leaking out and increase transparency. Igbekoyi and Agbaje (2017) examined TSA, openness and accountability in government. By the use of a standardized questionnaire and surveying techniques, primary data for the study were collected. Using the purposive selection technique, ten MDAs were randomly chosen from the population of Ondo state MDAs that generate funds for the study. Data were analyzed in the study using Analysis of Variance (ANOVA). The results of the investigation demonstrated how the TSA significantly reduces financial leakages and prevents financial theft.

The effect of treasury single account on public fund management was evaluated by Ajibade, Oyedokun and Dosumu (2018) and the data sourced through questionnaire was analyzed using regression analysis. The study's results showed a significant link between combined public fund management proxies and treasury single account proxies. The study's findings showed that treasury single accounts increase transparency and accountability while lowering financial system breaches. In 2019, Salman, Osemene, and Kolawole investigated the administration of TSA and funds. By asking accounting experts in Nigeria's northern and southern regions for their viewpoints, the study concluded that operationalized TSA increase transparent government operations and effective financial administration.

Uzoma (2019) examined the impact of Treasury Single Account on Nigeria's teacher training programmes. Data collection involved the use of structured questionnaires. According to the study, the Treasury Single Account increased internally generated cash, decreased fraud and fraudulent activities, and significantly improved the ability of Nigerian educational institutions to pay academics' salaries. Gbegi et al. (2019) assessed the relationship between treasury single accounts, accountability, transparency and public finance management in Nigeria. The Chi-Square goodness-of-fit test showed that the TSA adoption has significantly improved accountability, transparency and management of public finance in Nigeria.

Ayoade, Adegbola, Aladesoun, Olaniyan, and Akinde (2020) used secondary data and Chi-Square analysis to investigate the effect of TSA on the administration of public funds. According to the study, transparency and accountability in public finances are strongly correlated with TSA. Bamidele, Adisa, and Adegbola (2020) evaluated the challenges and prospects of TSA adoption in Nigeria using the OLS statistical approach. Notwithstanding its challenges, the analysis's results showed that TSA may boost the state's revenue generation. The University of Ilorin in Kwara State,
Nigeria, underwent a similar evaluation by Suyuti, Adetiba, and Yekini (2020) to determine how the TSA system and use of internally generated funds interacted. Secondary data from the university is used in the study. The adoption of the TSA has improved the University's ability to produce revenue, according to the pre-post research.

Ogungbade, Idode, and Alade (2021) examined the connection between TSA policy and revenue generation in Ekiti State, Nigeria, using secondary data and the Paired Sample T-test as analytical techniques. The results showed that TSA has not increased the federal government's parastatals in Ekiti state's income production. Since few studies specifically addressed how MDA staff view revenue generation, transparency, and accountability through TSA, especially from the perspective of the Federal Road Safety Corps, it can be concluded from the review that most studies focused on the impact of TSA on financial management in the public sector. The MDA staff plays a significant role in the TSA implementation programme.

With the help of F-test, Ezeala and Agbata (2022) investigated the effect of TSA policy on expenditure and borrowing of Nigeria federal government. The study revealed that TSA policy influenced cash availability to meet government expenditure and management of national debt. More so, Obara, Ordu and Obara (2022) evaluated the policy of treasury single account impact on Nigeria economy growth. The regression analysis depicted a flattened government revenue after TSA adoption.

**METHODOLOGY**

The study adopted a correlational research design to examine the impact of treasury single account on revenue generation, transparency and accountability of federal road safety corps in Niger state, Nigeria. Correlational research design is considered as the most appropriate for this study because it allows for testing of relationships amongst the study variables. The data for this study came from primary source through the distribution of questionnaires to federal road safety corps employees in Niger state, Nigeria. The researcher personally distributed 125 copies of the questionnaire to the sampled population.

To achieve the objectives, descriptive statistics and ordered logit regression were used to examine the impact of treasury single account on revenue generation, transparency and accountability of federal road safety corps in Niger state, Nigeria. Ordered logistic regression is appropriate because the dependent variables have more than two response categories and the responses were ordered.

**Model Specification**

**Model One**

Political will and rule of law are two of the most important variables that influence implementation of treasury single account. In the light of this, the study attempted to modify this model of revenue generation in its functional form to capture the following variables as follows:
Therefore, in its new form; the model for this study becomes

$$REV_i = \beta_0 + \beta_1 TSA_i + \beta_2 TSA_i + \beta_3 POW_i + \beta_4 RLW_i + \mu_i$$

Where:

REV = Revenue Generated
TSA = Treasury Single Account
POW = Political Will
RLW = Rule of Law

**Model Two**

The second model that was used to examine the impact of treasury single account on transparency of federal road safety corps in Niger state, Nigeria is stated as:

$$TPS_i = \beta_0 + \beta_1 TSA_i + \beta_2 TSA_i + \beta_3 POW_i + \beta_4 RLW_i + \mu_i$$

Where:

TPS = Transparency
TSP = Transparency

Other variables as stated earlier

**Model Three**

The third model that was used to examine the impact of treasury single account on accountability of federal road safety corps in Niger state, Nigeria is stated as:

$$ACCT_i = \beta_0 + \beta_1 TSA_i + \beta_2 TSA_i + \beta_3 POW_i + \beta_4 RLW_i + \mu_i$$

Where:
DATA ANALYSIS AND PRESENTATION OF RESULTS

Demographic characteristics of respondents

The demographic characteristics of 125 respondents result illustrates that 70 (56 per cent) of the respondents are males while 55 (44 per cent) of them are females. Also, people at 36-45 constitute majority of the respondents with 52 per cent (106), while 12 per cent (15), 30 per cent (38) and 6 per cent (7) of them fall within the age brackets below 25, 25-35 and 45 above respectively. Similarly, 34 per cent (42) of the respondents are Single, 66 per cent (83) of them are married. Also, the educational background is included in the table above showing that most of the respondents (75) 60 per cent has B.Sc./HND, 32 (26 per cent) of them have M.Sc. or PhD. or Professional qualifications while 18 (14 per cent) of the respondents have other certificate that was not specified.

Finally, 48 (38 per cent) of the respondents have 1 to 5 years of working experience while 70 (56 per cent) of the respondents have 6 to 10 years of working experience. The table also revealed that 7 (6 per cent) of the respondents have 11 and above years of experience. It was indicated that the respondents have the versatile experience for providing accurate answers to the questionnaire.

<table>
<thead>
<tr>
<th>Table 4.1: Ordered Logistic Regression Result on the impact of treasury single account on revenue generation by federal road safety corps in Niger state, Nigeria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>TSA</td>
</tr>
<tr>
<td>POW</td>
</tr>
<tr>
<td>RLW</td>
</tr>
<tr>
<td>Number of obs</td>
</tr>
<tr>
<td>LR chi2(18)</td>
</tr>
<tr>
<td>Log likelihood</td>
</tr>
</tbody>
</table>

Source: The Authors

Result for TSA and revenue generation is displayed in the Table 4.1. Revenue generation serves as the dependent variable while independent variables are TSA, political will (POW) and rule of law (RLW). It was shown from the results that TSA, POW and RLW positively relate with revenue generation. This implies there are chances (likelihood) for the probability of coefficient of revenue generation to increase with TSA, POW and RLW. Furthermore, it was shown that TSA, POW and RLW are statistically significant at 5 per cent level of significance. This is as a result that half the
values of the coefficients of the independent variables are higher than the standard errors of the coefficients. This means treasury single account, political will and rule of law have significant impact on revenue generation by federal road safety corps in Niger state, Nigeria. The values of the coefficient of the logit regression indicates that respondents strongly agree that the probability of having high revenue generation increases by 8.95 with the implementation in treasury single account while the probability of high revenue generation increases by 3.86 with rise in political will of government. Finally, the probability of high revenue generation increases by 0.15 with rise in rule of law. As a post-estimation diagnostic, the result revealed that the overall model is statistically significant, and the model is in good fit. This is verifiable through the Likelihood Ratio Chi-squared statistic value of -1262.03 with P-value 0.0037 this means that the model has a good fit.

Table 4.2: Ordered Logistic Regression Result on the impact of treasury single account on transparency of federal road safety corps in Niger state, Nigeria.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Err.</th>
<th>Z</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSA</td>
<td>1.98</td>
<td>0.04</td>
<td>3.80</td>
<td>0.000</td>
</tr>
<tr>
<td>POW</td>
<td>1.61</td>
<td>0.07</td>
<td>2.22</td>
<td>0.026</td>
</tr>
<tr>
<td>RLW</td>
<td>0.21</td>
<td>0.07</td>
<td>2.82</td>
<td>0.005</td>
</tr>
<tr>
<td>Number of obs</td>
<td>125</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LR chi2(18)</td>
<td>42.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-418.911</td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: The Authors

The displayed result in Table 4.2 was for TSA and transparency. The dependent variable is transparency while TSA, political will (POW) and rule of law (RLW) are the independent variables. It was shown that treasury single account (TSA), political will (POW) and rule of law (RLW) relates positively to transparency. This infers that the more likelihood of probability of coefficient of transparency increases with TSA, political will (POW) and rule of law (RLW). However, it was indicated that TSA, political will (POW) and rule of law (RLW) are significant at 1 per cent and 5 per cent level of significance. This is as a result that half the values of the coefficients of the independent variables are higher than the standard errors of the coefficients. This means treasury single account, political will and rule of law have significant impact on transparency by federal road safety corps in Niger state, Nigeria. The values of the coefficient of the logit regression indicates that respondents strongly agree that the probability of having high transparency increases by 1.98 with the increase in implementation of treasury single account while the probability of transparency increases by 1.61 with political will of implementing of treasury single account.

Finally, the probability of transparency increases by 0.21 with rise in rule of law. As a post-estimation diagnostic, the result revealed that the overall model is statistically significant, and the model is in good fit. This is verifiable through the Likelihood Ratio Chi-squared statistic value of -418.91 with P-value 0.000 this means that the model has a good fit.
Table 4.3: Ordered Logistic Regression Result on the impact of treasury single account on accountability of federal road safety corps in Niger state, Nigeria.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Err.</th>
<th>Z</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSA</td>
<td>2.52</td>
<td>0.78</td>
<td>2.12</td>
<td>0.035</td>
</tr>
<tr>
<td>POW</td>
<td>1.56</td>
<td>0.59</td>
<td>1.96</td>
<td>0.041</td>
</tr>
<tr>
<td>RLW</td>
<td>0.72</td>
<td>0.18</td>
<td>3.88</td>
<td>0.000</td>
</tr>
<tr>
<td>Number of obs</td>
<td>125</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LR chi2(18)</td>
<td>20.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-1406.06</td>
<td></td>
<td></td>
<td>0.00003</td>
</tr>
</tbody>
</table>

Source: The Authors

The displayed result in Table 4.4 was for TSA and accountability. The dependent variable is accountability while TSA, political will (POW) and rule of law (RLW) are the independent variables. It was shown that treasury single account (TSA), political will (POW) and rule of law (RLW) relates positively to accountability. This shows the more likelihood of probability of coefficient of accountability increases with TSA, political will (POW) and rule of law (RLW). However, it was indicated that TSA, political will (POW) and rule of law (RLW) are significant at 1 per cent and 5 per cent level of significance. This is as a result that half the values of the coefficients of the independent variables are higher than the standard errors of the coefficients. This means treasury single account, political will and rule of law have significant impact on accountability by federal road safety corps in Niger state, Nigeria. The values of the coefficient of the logit regression indicates that respondents strongly agree that the probability of accountability increases by 2.52 with the implementation of treasury single account while the probability of accountability increases by 1.56 with rise in political will.

Finally, the probability of accountability by federal road safety corps in Niger state, Nigeria increases by 0.72 with improved rule of law. As a post-estimation diagnostic, the result revealed that the overall model is statistically significant, and the model is in good fit. This is verifiable through the Likelihood Ratio Chi-squared statistic value of 20.94 with P-value 0.003 this means that the model has a good fit.

DISCUSSION OF FINDINGS

The study’s finding is similarly with the conclusion of Ajibade, Oyedokun and Dosumu (2018) that the Treasury Single Account improves accountability, transparency and also reduces leakages in the financial system. Similarly, the finding is in consistent with Yusuf (2016) whose work indicates that TSA enhance blocking of leakages in revenue generation and increases revenue generation. Other researchers work in agreement with this study includes Akhidime (2015); Mutalib, Bulkachuwa, Uarame and Chijioke (2015) which indicates that TSA promote transparency in the administration of public fund. Finally, findings from this study is in consonance with the result of Ogungbade et al. (2021); Ejoh (2020); Amaefule and Barigbon (2019); Adetula
(2017) that asserted that TSA implementation has significant effect on government revenue generation.

**CONCLUSION AND RECOMMENDATIONS**

Conclusively, this study indicated that, treasury single account improves revenue generation; enhances transparency and promotes accountability in the revenue generation of the FRSC command. Treasury single account was also seen has a good public finance tools which enable government to track down all the receipt and disbursement of government revenue and ensure all are remitted into the government account. It was recommended that federal government should conduct periodic checks on all MDAs so as to enforce the implementation of the TSA policy in all their revenue generation activities. Furthermore, the TSA policy should be strengthened to enhance increase revenue generation to the government purse by strict monitoring of the process by the government. There should also be constant monitoring of government MDA’s in other to ensure transparency and accountability in collection process.

**Funding**

No financial grant was received from any funding agency for this research.

**Declaration of conflicting interest**

It is declared by the authors that there is no likely interest conflict regards to the research, authorship or publication of this research.

**REFERENCES**


Nkoma, N. (2004), The Role of Accountability in Public Administration, Lagos: Centre For Constitutionalism and Demilitarization.


