Treasury Single Account: Tool for Resource Control and Fraud Mitigation

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Authors’ contributions
This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT
This study is carried out to investigate the influence of Treasury Single Account (TSA), on public sector resources management in Nigeria: a study of south-south Nigeria. The study empirically explores the extent to which TSA has influenced appropriation control and cash management in the Nigerian public sector. To achieve these objectives, the survey research design was adopted using primary data with the help of a questionnaire distributed to purposely selected 300 staff of federal government MDAs in South-South Nigeria. Two hypotheses were formulated and tested at 0.05 level of significance. Regression analysis was used for data analysis and testing of hypothesis. The outcome of the study revealed that TSA has a very strong and positive relationship with level of appropriation in public sector in Nigeria. More so, TSA has a strong and positive relationship with level of cash management in public sector in Nigeria. Fraud control positively and significantly moderates the relationship between TSA and public sector resources management in Nigeria. This research concludes that the introduction of TSA has significantly enhanced consolidation of cash resources of the government. The study however, recommended among others that TSA adoption is essential for actualization of public sector resources management, thus government should create more awareness of the benefits of TSA to employees of MDAs and the general public. Government should ensure that internal control processes are adequate to monitor and deter employees’ corrupt activities. Adequate policies and regulations that would ensure TSA is extended to all agencies of government at all levels should be enacted.
Keywords: Treasury single account; fraud control; public sector resource management.

1. INTRODUCTION

Section 80(1) of 1999 the Nigeria charter said that sales or different money raised or obtained via means of the federal authorities will be remitted into the unmarried consolidated sales fund of the federation. Section 80(2) in addition, says that no money will be withdrawn from the account except to satisfy expenditure is charged upon the fund via means of the charter. TSA is, consequently, now no longer a brand new coverage in Nigeria but a pretty new public accounting machine implementation; it's miles a unmarried account or a hard and fast of related bills through the authorities basically to govern authorities' sales and make sure that each one of the bills are made thru a consolidated revenue account (CRA). In 2012, for the duration of the management of former President Goodluck Jonathan, the authorities ran a pilot scheme for a treasury unmarried account the usage of 217 ministries, departments and organizations as a check case. The excise stored Nigeria approximately N500 billion in frivolous spending.

This achievement prompted authorities to absolutely put in force the treasury unmarried account, main to direct banks to undertake the era platform in an effort to assist and accommodate the treasury unmarried account scheme. In February 2015, the principal financial institution of Nigeria (CBN) issued a round asking all deposit cash banks to undertake the Remita e-series platform. The Remita e-series is an era platform advanced with the aid of using gadget specs, which become followed with the aid of using the Central Bank of Nigeria (CBN) for the gathering and the remittance of presidency price range to a consolidated account resident with the principal financial institution of Nigeria (CBN).

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Treasury single account

According to Abdullahi, Canice and Yahaya [1], TSA is defined as a financial institution account through which the authorities contains out all its receipts and bills and offers a centralized view of presidency coins sources. Stephenie [2], describes TSA as an included shape of presidency financial institution money owed that offers a view of coins sources of presidency primarily based totally at the precept of consolidation of coins and treasury upon which the authorities plays all its receipts and bills for manipulate and reporting purposes. The fundamental thrust of TSA implementation is to maximize the usage of public fund through awareness and discount in glide costs [3]. Adeolu, [4] defined treasury unmarried account as public accounting device below which each authorities sales, receipt and profits are amassed into one account, commonly maintained with the aid of using the country’s Central Bank and all bills completed through this account as well. The cause is often to make certain duty of presidency sales, beautify transparency and to keep away from misapplication of public finances. The implementation of a treasury unmarried account will assist to make certain right coins control with the aid of using and eradicating idle finances commonly left in one of a kind industrial banks and in a manner to beautify reconciliation of sales series and payment. According to Ekubiat and Ime [5] Onyekperene [6], and Oyedele [7], TSA is an included shape of presidency financial institution money owed, helping the submerging and best usage of presidency finances. Pallanayak and Fainboim [8], describe TSA as a unified shape of Government financial institution account that permits consolidation and foremost usage of presidency coins sources. It is a way wherein all Government revenues (receipts, profits) amassed with the aid of using deposit cash banks (DMBs) are remitted right into an unmarried account with the Central Bank of Nigeria (CBN). Treasury Single Account is a public finance control device below which all authorities sales, receipts and profits are remitted into one account, commonly maintained with the aid of using the country’s Central Bank and all bills completed thru the account as well [9].

2.2 Empirical Review

Ofor, Omaliko and Okoli [10] investigated the impact of Treasury Single Accounts and overall performance of ministries, departments and companies (Mda) in Nigeria. The studies relied essentially on number one information which changed into received via questionnaire designed and administered to seventy five respondents drawn from the federal authorities ministries, departments, companies and parastatals in Anambra city of Nigeria. Analysis finished via Wilcoxon Sign test, the end result exhibits that the implementation of TSA has
appreciably affected and progressed the overall performance of federal authorities MDAs at 5% stage of importance which is going similarly to verify that treasury unregistered account is able to block off economic loopholes in sales technology and growing transparency and accountability. They advocated that because the adoption of TSA has appreciably progressed the performances MDAs in Nigeria, authorities need to implement the adoption of TSA and government should enforce the adoption of TSA and ensure that it is mandatory for all MDAs and parastatals in the country.

Bashir [11] studied the Effects of Treasury Single Account on Public Finance Management in Nigeria. The studies investigate the extent to which Treasury Single Account can block monetary leakages, promotes transparency and duty within the public monetary management. Both number one and secondary statistics changed into used. The populations of their study includes Ministries, Department and Agencies (MDAs) inside Bauchi city, the use of a pattern of seventy two respondents through judgment sampling. The statistics method used to analyzed the data is the Pearson Correlation techniques. The final results of this studies indicates that adoption of a Treasury Single Account (TSA) is able to plugging monetary loopholes, selling transparency and duty within the public monetary system. The researchers therefore, advocate that for the fulfillment of this coverage, authorities ought to promulgate greater law to make it obligatory for all of the 3 stages of presidency in Nigeria.

Tari1, Myatafadi and Kibikiwa [12] on their work titled “Treasury Single Account (TSA) Policy in Nigeria: Reviving Jonathan’s ‘Dead’ Policy Directives” attempts to look at the contributions of resuscitating the Treasury Single Account. The paper employed secondary methodology to effectively examine the fiscal impact of resuscitating the TSA policy and anchored on incremental model as a framework of analysis. The paper suggests better ways of making the policy effective amidst the dwindling oil price and the superiority of Dollar against the Naira. The paper concluded that except proper monitoring of government account is adopted in all government institutions and strong punitive measure applied against defaulters and corrupt officers, that TSA will be a failure in Nigeria.

Bello [13] examines the benefit of TSA as a method for dealing with Public Finances in Nigeria and concludes that protection of a unmarried account for authorities will create road for ministry of finance to display fund waft as no organization of presidency is authorized to hold any useful financial institution account outdoor the oversight of the ministry of finance.

Effiong, Oro and Ogar, [14] executed a look at on 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 withinside the Public Sector in Nigeria. The descriptive studies layout changed was employed, and questionnaire was administered on respondents randomly. The linear regression version was utilized in setting up the connection among variables. Outcome of the statistic take a look and noted that TSA, IPPIS, and IFMIS have high-quality and substantial courting with Fraud and fraud control in addition to together effect the performances of Public Interest Entities. Considering the findings of the look, it changed amongst others that IPPIS be completely followed to deal with the ghost employees syndrome in Public Interest Entities and that public officials need to be technologically skilled to effectively utilize TSA, IPPIS and IFMIS platforms.

Fasuwa and Osagie, [15] examine the relationship between financial control and fraud prevention in the Nigeria public sector. The study specifically seeks to establish financial control; prevention in government sector. Questionnaires were administered to collect data from thirty-three (33) respondents selected from Edo State and Ondo State. A regression analysis was used to examine the relationship between financial control and fraud prevention in the public sector. The results reveal that the existing control measures by federal government are sufficient in content and scope to prevent fraud in the public sectors, additionally, the success of these effective controls depend on honest personnel and tone at the top. The study therefore, recommended among others that, personnel of integrity and honesty as well forensic experts should be employed to scrutinize the relevant controls put in place.

Liman, Erunke and Yakubu (2019) argues that there is a general misconception of TSA as a cure all syndromes for public sector fraud. Their study interrogates previous empirical literature with a view to ascertaining the existence of fraud.
elimination and control mechanisms inherent in the TSA. The result reveals that, while a better part of the literature assent to abilities of the TSA to prevent and control fraud, beyond pooling revenue, it has no control over appropriation of such revenue. In conclusion, it claims the overburdening emphasis on TSA as a cure all syndrome for fraud remains a popular misconception that is shared by a handful of studies.

Adebisi, and Gbegi, [16] studied fraud and the Nigerian public sector performance: The need for forensic accounting. Their study population was 190 senior staff of the three Anti-Corruption Agencies in Nigeria (EFCC, ICPC, and CCB) with the sample size of 129. Primary and secondary data sources was employed for the study. Questionnaire was used in collecting primary data while secondary data were obtained from EFCC, CCB and ICPC. The data generated for the study were analyzed using simple percentages and presented in tabular form while the hypotheses were tested using Analysis of variance (ANOVA) and regression analysis with the use of SPSS version 20.0. Their findings show that, Public sector fraud has significant effect on economic growth in Nigeria, and secondly, there is positive and significant influence between the use of forensic accounting and the performance of public sector in Nigeria. The research recommends that appropriate sanctions should be applied when fraud is discovered or detected. Secondly, Government should establish a Public Recovery Fund (PRF) where money recovered through forensic accounting should be kept for proper utilization to ensure efficient and effective performance in the public sector. This conclusion is not in tandem with the observation of scholars such as Leff, (1994); Ney, (1967) and Huntington, (1968) who assert that some levels of corruption, fraud in the public sector might lead to growth and development in government establishment and aid nations to conquer bureaucracy and unite elites who concluded that fraud grows with the economy.

Yusuf and Mohammed [17] studied the effect of TSA policy on the public financial management in Nigeria and its benefits if properly implemented. Primary and secondary data were adopted. The population of their study comprised of Ministries, Department and Agencies (MDAs) within Damaturu in Yobe State. Data were analyzed using ANOVA techniques. The result of the study revealed that, proper implementation of TSA by every stakeholders will help tremendously in reducing corruption, mismanagement of public fund, block leakages and other financial irregularities in states and the country at large.

Ofurum, Oyibo, and Ahuche, [18] carried out empirically study and examined the level to which TSA has improved Federally Collected Revenue (FCR) and Gross Domestic Product (GDP) of the economy. The study adopted secondary data sources from Central Bank of Nigeria statistical bulletin and economic reports. The observations were recorded on quarterly basis from Q3-2013 to Q2-2017. The data were split into two periods: Pre TSA period (Q3-2013 to Q2-2015) and Post TSA period (Q3-2015 to Q2-2017). A pre post analysis (difference in means test) was carried out using SPSS version 2.0. Result shows that the implementation of TSA has a negative and significant effect on FCR. However, further findings revealed that GDP of the country significantly increased after the implantation of TSA. They recommended periodic appraisal of each revenue generating unit so that sectors that are not performing as they ought to will not feel covered by those that are doing better.

Sam-Quarm [19] examined the ramifications of the Treasury Single Account, the Imis Platform, and Government Cash Management in Developing Economies in the Wake of the Covid-19 Pandemic: Ghana’s Empirical Example. It was cross-sectional research through non-probability and purposive sampling with 200 respondents. They recommended the need to constantly and regularly engage the users and managers of the TSA in their capacity training and development in this era of electronic information as well as high levels of well-organized and coordinated computerized crime and corruption. This is because any government lacking an efficient and effective control over its cash resources will pay for its institutional deficiencies in multiple ways. Therefore, the establishment of the TSA in Ghana must be jealously protected and enhanced through the digitisation programme and paperless systems, in order to constantly and consistently improve the government’s cash management system, budgetary and liquidity controls in this era of the novel, dreaded, and disruptive Covid-19 Pandemic.

2.3 Purpose of Study

The purpose of this study is to assess the degree of the effect of treasury single account on
financial efficacy in public sector administration in South-South and South-East Nigeria. Specifically, the study determined;

1. The effect of treasury single account on appropriation control in Nigerian public sectors.

2.4 Research Questions

Based on the specific objectives, the following research questions were raised:

i) What is the effectiveness of TSA on the level of appropriation control in the Nigerian public sector?
ii) What is the relationship between TSA and the level of cash management in the Nigerian public sector?

2.5 Research Hypotheses

\( H_0: \) The implementation of TSA does not exert significant effect on appropriation control in the Nigerian public sector.

\( H_0: \) There is no significant effect of TSA and cash management in the Nigerian public sector.

3. METHODOLOGY

In analyzing the elicited responses, the statistical tools employed ranged from tables, frequency counts, percentages, means, standard deviations, goodness of fit, F-Statistics and their associated p-values from either of regression analysis. The mean and standard deviation were used to analyse and find answers to the research questions while the test of hypotheses and the decision on whether to accept or reject each hypothesis was based on the result of the regression analysis.

3.1 Model Specification

**Model 1**

\[ \text{APPRPC} = f(\text{TSA}, \text{FRAUD}) \]  \[ eq.1 \]

\[ \text{APPRPC} = \alpha_0 + \beta_1 \text{TSA} + \beta_2 \text{FRAUD} + \mu \]  \[ eq.2 \]

**Model 2**

\[ \text{CASHM} = f(\text{TSA}, \text{FRAUD}) \]  \[ eq.3 \]

\[ \text{CASHM} = \alpha_0 + \beta_1 \text{TSA} + \beta_2 \text{FRAUD} + \mu \]  \[ eq.4 \]

Research question I

What is the effectiveness of TSA on the level of appropriation control in the Nigerian public sector?

<table>
<thead>
<tr>
<th>S/N</th>
<th>Questionnaire Items</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Treasury single account ensures appropriation control of government funds</td>
<td>300</td>
<td>3.60</td>
<td>0.560</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>2</td>
<td>Treasury single account ensures proper disbursement of government funds</td>
<td>300</td>
<td>3.67</td>
<td>0.472</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>3</td>
<td>Treasury single account ensures Timely appropriation of government funds</td>
<td>300</td>
<td>3.70</td>
<td>0.458</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>4</td>
<td>Treasury single account ensures adequate appropriation of government funds</td>
<td>300</td>
<td>3.64</td>
<td>0.480</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>5</td>
<td>Treasury single account ensures correctness in the appropriation of government funds</td>
<td>300</td>
<td>3.63</td>
<td>0.485</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>6</td>
<td>Treasury single account control fraudulent appropriation of government funds</td>
<td>300</td>
<td>3.74</td>
<td>0.438</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>7</td>
<td>Treasury single account discourages misappropriation of government funds</td>
<td>300</td>
<td>3.61</td>
<td>0.489</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>8</td>
<td>Treasury single account encourages proper and equitable appropriation of government funds</td>
<td>300</td>
<td>3.58</td>
<td>0.495</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>9</td>
<td>Treasury single account ensures appropriation are in accordance with the budgets</td>
<td>300</td>
<td>3.69</td>
<td>0.463</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>10</td>
<td>Treasury single account ensures complete appropriation control of government funds</td>
<td>300</td>
<td>3.65</td>
<td>0.479</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

Source: Researcher’s Computation, 2021
On a general note, the value of standard deviation obtained for all items ranged from 0.438 to 0.560 (see questionnaire items 6 and 1 respectively). The low standard deviation shows that the responses of the respondents were normally distributed and followed a normal curve.

Research question II

What is the relationship between TSA and the level of cash management in the Nigerian public sector?

Table 1. B. TSA Implementation (TSA) and Cash Management (CASHM)

<table>
<thead>
<tr>
<th>S/N</th>
<th>Questionnaire Items</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Treasury single account has significant influence on cash flow forecasting and reporting</td>
<td>300</td>
<td>3.68</td>
<td>0.473</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>12</td>
<td>Treasury single account provides greater level of transparency in the management of public funds</td>
<td>300</td>
<td>3.63</td>
<td>0.483</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>13</td>
<td>Treasury single account facilitates effective cash management through optimal investment of idle cash</td>
<td>300</td>
<td>3.61</td>
<td>0.488</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>14</td>
<td>TSA eliminates ambiguity regarding the volume or the location of government funds, thereby facilitating precise monitoring of established payment mechanisms.</td>
<td>300</td>
<td>3.74</td>
<td>0.439</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>15</td>
<td>Treasury single account has influence on the monitoring and control of government expenditure</td>
<td>300</td>
<td>3.59</td>
<td>0.492</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>16</td>
<td>Treasury single account facilitates regular monitoring of government cash balances</td>
<td>300</td>
<td>3.59</td>
<td>0.493</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>17</td>
<td>Treasury single account significantly improves transaction processing and recording</td>
<td>300</td>
<td>3.71</td>
<td>0.455</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>18</td>
<td>Treasury single account improves the quality of cash outturn analysis undertaken by government and their respective agencies</td>
<td>300</td>
<td>3.65</td>
<td>0.478</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

Source: Researcher's Computation, 2021

Overall, the value of standard deviation obtained for all items for research question 4 ranged from 0.439 to 0.493 (see questionnaire items 14 and 16 respectively). The low standard deviation shows that the responses of the respondents were normally distributed and followed a normal curve.

Test of Hypotheses I

H_{01}: The implementation of TSA does not exert significant influence on appropriation control in the Nigerian public sector.

Table 2A. Model Summary for TSA Implementation (TSA) & Appropriation Control (APPRPC)

| APPRPC  | Coeff.  | Std. Err.  | T     | P>|t| | Reject |
|---------|---------|------------|-------|------|--------|
| TSA     | -0.1506328 | 0.0498278  | -3.02 | 0.003 |        |
| FRAUD   | -0.1508773 | 0.0380040  | -3.97 | 0.000 |        |
| _cons   | 4.750945   | 0.1846820  | 25.73 | 0.000 |        |
| Obs.    | 300       |            |       |      |        |
| F(2, 297)| 19.38    |            |       |      |        |
| Prob > F| 0.0000    |            |       |      |        |

R - squared = 0.1154 ; Adj R - Squared = 0.1095

Source: Researcher's Computation, 2021

Hypothesis I was tested to ascertain whether the implementation of TSA exerted significant influence on appropriation control within Nigeria’s public sector. The results relating to the test of this hypothesis was presented in Table 2.A. Accordingly, the coefficients recorded for TSA and FRAUD are negative (-0.1506328 and -0.1508773 respectively) which means that TSA implementation and fraud control may have an inverse relationship with appropriation control. Additionally, the results of the respective t-values obtained for TSA and FRAUD (-3.02 and -3.97) with their respective p-values of 0.003 and
0.000 are indications that individually, TSA implementation and fraud controls exert significant influence on appropriation control in the Nigerian public sector. The result of the $R^2$ further suggests that TSA and FRAUD accounts for about 10.95% - 11.45% of the variations in the level of appropriation controls in Nigeria. Notwithstanding, going by the overall result of the model, one would observe that the $F_{cal}$ for the overall model is 19.38 with a corresponding $p$-value of 0.0000 ($F_{cal} = 19.38; p= 0.0000 < 0.05$). With this result, we therefore reject the hypothesis that the implementation of TSA does not exert significant influence on appropriation control in the Nigerian public sector. Impliedly, our conclusion is that the implementation of TSA when moderated by the level of fraud control has significant influence on appropriation control in Nigeria.

Test of Hypotheses II

$H_{o2}$: There is no significant relationship between the implementation of TSA and cash management in the Nigerian public sector.

Table 2B. Model Summary for TSA Implementation (TSA) & Cash Management (CASHM)

|       | Coeff.  | Std. Err. | t    | P>|t| | Reject |
|-------|---------|-----------|------|------|--------|
| CASHM |         |           |      |      |        |
| TSA   | 0.4188201 | 0.0438969 | 9.54 | 0.000 |        |
| FRAUD | 0.1500180 | 0.0334805 | 4.48 | 0.000 |        |
| _cons | 1.5744120 | 0.1626999 | 9.68 | 0.000 |        |
| Obs.  | 300     |           |      |      |        |
| F( 2, 297) | 81.95 |        |      |      |        |
| Prob > F | 0.0000 |        |      |      |        |

**R - squared = 0.3556 ; Adj R - Squared = 0.3513**

Source: Researcher's Computation, 2021

Hypothesis II was tested to examine the relationship between the implementation of TSA and the management of cash within Nigeria's public sector. The results relating to the test of hypothesis II is as presented in Table 2.B. Accordingly, the coefficients recorded for TSA and FRAUD are positive in both cases. This is an indication that TSA implementation and fraud control recorded positive relationship with cash management; thus suggesting that a unit improvement in the level of efficiency on the implementation of TSA would result to approximately 0.42 unit increase in the level of cash management in the country's public sector. Additionally, the results of the respective t-values obtained for TSA and FRAUD (9.54 and 4.48) with their respective p-values of 0.000 and 0.000 are indications that individually, TSA implementation has significant positive relationship with cash management in the Nigerian public sector. The result of the $R^2$ further suggests that TSA and FRAUD accounts for about 35% of the variations in the level of cash management in Nigeria. Notwithstanding, going by the overall result of the model, one would observe that the $F_{cal}$ for the overall model is 81.95 with a corresponding $p$-value of 0.0000 ($F_{cal} = 81.95; p= 0.0000 < 0.05$). With this result, we therefore reject the hypothesis that there is no significant relationship between the implementation of TSA and cash management in the Nigerian public sector. Going by the decision to reject the hypothesis, our conclusion is that the implementation of TSA when moderated by the level of fraud control has significant relationship with cash management in the Nigerian public sector.

3.2 Summary of Findings on Test of Hypotheses

Based on the results of the test of hypotheses, the summary of this study’s findings are highlighted below:

1. The implementation of TSA exerts significant influence on appropriation control in the Nigerian public sector.
2. There is a significant relationship between the implementation of TSA and cash management in the Nigerian public sector.

3.3 TSA Implementation and Appropriation Control

In testing hypothesis I of this study, our concern was directed at ascertaining the relationship between the implementation of TSA and appropriation control in Nigeria's public sector.
Specifically, information was sought from respondents on whether the implementation of TSA exerted significant influence on appropriation control within Nigeria’s public sector. The responses were thereafter analysed and presented in Table 2A. With respect to the direction of relationship, we observe from the correlation coefficients of -0.1506328 and -0.1508773 for TSA and FRAUD respectively that an inverse relationship exists between appropriation control and the explanatory variables.

Furthermore, an analysis of the individual relationship which the implementation of TSA may possibly have on appropriation control was done using the results of the respective t-values obtained for TSA and FRAUD (-3.02 and -3.97) accompanied by their respective p-values of 0.003 and 0.000. The implication of the result of the stated t-values is that the implementation of TSA and fraud controls individually exerts significant influence on appropriation control in the Nigerian public sector. Also, the result of the \( R^2 \) further suggests that TSA and FRAUD jointly accounts for about 10.95% - 11.45% of the recorded changes in the level of appropriation controls within Nigeria’s public sector.

Notwithstanding the aforementioned, the result of the model summary produced an \( F_{cal} \) of about 19.38 with a corresponding p-value of 0.0000; thereby suggesting that TSA implementation and fraud control jointly influence the level of appropriation control in Nigeria’s public sector. Going by this finding, Hypothesis I of this study was rejected, thus leading to the conclusion that the implementation of TSA exerts significant negative influence on appropriation control in the Nigerian public sector. This result corroborates the position of earlier studies in this domain [11], Emme and Chukwurh (2015; Isa, 2016; Liman, Erunke and Yakubu, 2019). Thus, while supporting the view that TSA may possibly help to generate and pool government revenue and reduce fraudulent practices, its lack of control over appropriation cannot be over emphasized (Liman, Erunke and Yakubu, 2019).

3.4 TSA Implementation and Cash Management

In order to ascertain the relationship between the implementation of TSA and cash management in the Nigerian public sector, information was elicited from respondents and analysed. Relevant data were thereafter subjected to further analysis and employed in testing Hypothesis testing of this study. One would observe that in relation to the direction of relationship, the coefficients recorded for TSA and FRAUD are both positive (0.4188201 and 0.150018 respectively). This means that an increase in the level of efficiency in the implementation of TSA will lead to improvement in the level of cash management in the country's public sector.

Furthermore, we observed that the results of the respective t-values obtained for TSA and FRAUD were 9.54 and 4.48 with 0.000 as the p-values in each case. This means that individually, the implementation of TSA and fraud control has the capacity of influencing the level of cash management in the Nigerian public sector. Additionally, one would notice that the value of \( R^2 \) stood at approximately 0.3556 which connotes that TSA and FRAUD jointly accounts for about 35% - 36% of the improvement recorded in the level of cash management in Nigeria’s public sector.

Notwithstanding the above position, the result of the overall model produced 81.95 and the value of \( F_{cal} \) with a corresponding p-value of 0.0000 which means that there is a significant relationship between the implementation of TSA and cash management in the Nigerian public sector. This result corroborates the position of earlier findings (Emme and Chkwurah, 2017; Adetula, 2017; Liman, Erunke and Yakubu, 2019).

4. CONCLUSION

Considering the first objective all the questionnaire items relating to research question 1 of this study obtained mean scores that were above 2.50 cut off point. Specifically, we will observe that the mean response obtained for questionnaire item 1 was 3.60 with a corresponding standard deviation of 0.560. This result is an indication that a larger proportion of the respondents strongly agreed with the idea that treasury single account ensures appropriation control of government funds. In a similar vein, the mean score of 3.67 with a corresponding value of 0.472 as standard deviation for questionnaire item 2 is an indication that on a general note, the respondents strongly agreed with the idea that treasury single account ensures the proper disbursement of government funds in Nigeria.
Highlights of the overall result of the second objective indicate that TSA has an influence on cash management in the public sector. The value of standard deviation obtained for all items for research question 2 ranged from 0.439 to 0.493. The low standard deviation shows that the responses of the respondents were normally distributed and followed a normal curve.

RECOMMENDATIONS

In accordance with the findings of the study researcher recommends as follows:

i) Government accountants and all revenue generation officials of all MDAs should be trained and retrained both in ICT to achieve the essence of TSA. This can be done through conferences, workshops and seminars. This will enable them to have good knowledge of TSA and its intended benefits.

ii) The central Bank of Nigeria should improve on sending bank statements to Real-time Gross settlement (RTGS) and Automated Clearing House (ACH) this will reduce the level of fraud in the public sector.

iii) Government should improve on oversight functions for payment and settlements system through automated processes carried out by the Central Bank. This will ensure efficient and effective cash management in the public sector.

iv) Periodically, appraisal of revenue generating sector should be made to ensure they are not covered by other MDAs that are doing better.

v) TSA should be jealously protected and enhanced, through the digitization programme and paperless systems, in order to constantly and consistently improve its resources management, appropriation and liquidity controls in this era of the novel, dreaded, and disruptive Covid-19 Pandemic.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES


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