TREASURY SINGLE ACCOUNT (TSA) AND ECONOMIC GROWTH OF NIGERIA (2010-2019)

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Abstract

This study examined the impact of the introduction of Treasury Single Account (TSA) on Nigeria economic growth. The dependent economic variables considered in this study were real Gross Domestic Product (GDP), Recurrent Expenditure, and Total Expenditure. The study employed secondary source of data collection. The statistical tool employed was T-Test after developing models for the variables. Findings revealed that the real GDP showed significant increase as a result of the introduction of Treasury Single Account by the government. All the same, Recurrent Expenditure increased while Total Expenditure of the government showed no significant change. The study therefore recommends that the financial regulatory bodies should be proactive and initiate measures to correct any lapses on the implementation of this laudable policy. Again, the authorities should ensure strict compliance with rules and procedures of operation of Treasury Single Account by the relevant agencies and any deviation should attract sanctions.

Keywords: Gross Domestic Product, Recurrent Expenditure, Total Expenditure, Treasury Single Account
Introduction

Over the years, the Nigerian economy has deeply relied on revenue generated from the sale of crude oil for the running of government activities; and this has brought reckless spending and mismanagement of public funds in governance. Before now several government agencies in Nigeria were self-sufficient to collect money on behalf of the federal government and they had the freedom to expend part of it since they only needed to remit only a portion of the declared amount. Several challenges are posed due to high cost of cash management in Nigeria economy which is increasing every year.

Treasury Single Account (TSA) is one of the proven practices in improving the payment and revenue collection systems, and carrying out consistent control of public expenditures by centralizing the free balances of government bank accounts. The TSA infrastructure is usually implemented as a part of the Financial Management Information System (FMIS) solutions.

Government banking arrangements are important factor for efficient management and control of government’s cash resources. Such banking arrangements should be designed to minimize the cost of governmental operations, borrowings and maximize the opportunity cost of cash resources. This requires ensuring all cash received is available for carrying out government's expenditure programs and making payments in a timely fashion.

Adeolu (2015) defined Treasury Single Account as a public accounting system under which all government revenue, receipts and income are collected into one single account, usually maintained by the country's Central Bank and all payments done through this account as well. The purpose is primarily to ensure accountability of government revenue, enhance transparency and avoid misapplication of public funds. The maintenance of a Treasury Single Account helps to ensure proper cash management by eliminating idle funds usually left with commercial banks and in a way enhance reconciliation of revenue collection and payment. Treasury Single Account (TSA) is a financial policy used in several countries all over the world. It was introduced by the federal government of Nigeria in 2015 to consolidate all inflows from all agencies of government into a single account at the Central Bank of Nigeria. Since the emergence of the forth republic in Nigeria, the nation has been battling with how to cope with corruption and cases of money laundering by mostly government functionaries and high place private individuals. This lead to the establishment of ant graft agencies such as the independent corrupt practices and other related offences commission (ICPC) and the Economic and Financial Crimes Commission (EFCC) saddled with the task of checkmating corrupt government and private officials in Nigeria. Rather, there are claims that these agencies are being used by politicians in government to attack the opposition. In the effort to curb this menace, the President Goodluck Jonathan regime at the helm of affairs in Nigeria introduced the treasury single account though the implementation of the treasury single account policy was carried out by President Mohammed Buhari in 2005.

The term *remita* is the central payment platform supporting the payments of Federal Government and MDAs under the TSA, as it is widely accepted and connected online to all the Deposit Money Banks (DMBs) and sizeable number of Micro Finance Banks (MFBs) and Primary Mortgage Institutions (PMIs) (Utsu et al., 2016). TSA allows complete and timely information on government cash resources; enhances appropriation control; improves operational control during budget execution; enables efficient cash management; reduces bank fees and transaction costs; facilitates efficient payment mechanisms; improves bank
reconciliation and quality of fiscal data; lowers liquidity reserve needs. The custody of the TSA in Nigeria is with the central bank.

However, the balances in commercial banks should be cleared every day and all government cash balances should be consolidated in one central account of the treasury at the central bank (Utsu et al., 2016). The introduction of TSA no doubt is to control/curb financial mismanagement which will consequently improve government revenue and economic growth (Ofurum et al., 2018). Hence, one question stakeholders, researchers and the general public seek to know is whether the implementation of treasury single account (TSA) in 2015 by the president Buhari administration has yielded positive impact on the economic situation of the country. Hence, the aim of this study is to examine the impact of TSA on Nigeria’s economic growth.

Nigeria is a country endowed with natural and human resources, but still fall short of the developmental progress required to positively impact on the well being of the average citizen. Mismanagement of public funds, corruption and other financial irregularities has been described as the greatest challenges of the present time and the prevalence in governance has been identified as one major obstacle militating against rapid growth and development. Therefore, the problems stated above are mostly owing to the fact that why Nigerians average are not enjoying the impact of our resources and as a result of mismanagement of public finance.

The Economic situation in the country made the government of President Muhammadu Buhari to look inward on how government could improve the revenue generation and bridge the gap of corruption, misapplication and mismanagement of public funds. This led to the implementation of Treasury single account. Challenges against the adoption of TSA policy in Nigeria is enormous, initially, some MDAs are against the implementation of TSA because of their usual and sharp dealings with the public funds. However, the implementation of this policy is a critical step towards curbing mismanagement of funds in public sector and to ensure accountability and transparency in the management of public funds, and also enables efficient control and monitoring fund flow to critical sectors of the economy to sustain growth and development.

Therefore, the main objective of the study is to determine the effect of Treasury single account on the economic growth of Nigeria. Specifically the study seeks to;

1. Examine how the introduction of Treasury single account has influenced real Gross domestic product (GDP) of Nigeria.
2. Evaluate the extent of change in recurrent expenditure as a result of the implementation of Treasury single account.
3. Determine the extent of impact the Treasury single account has on the total expenditure of the country.

In view of the objectives of this study as stated above, the following hypotheses have been formulated:

\( H_{01} \): There is no significant difference between Real Gross Domestic Product during the pre-TSA period and Real Gross Domestic Product during the post-TSA period.

\( H_{02} \): There is no significant difference between Government Recurrent Expenditure during the pre-TSA period and Government Recurrent Expenditure during the post-TSA period.
H$_{03}$: There is no significant difference between Government Total Expenditure during the pre-TSA period and Government Total Expenditure during the post-TSA period.

**Review of Related Literature**

**Conceptual Review**

**Concept of Treasury Single Account**

Oyedele (2015) also defined a Treasury Single Account as a unified structure of government bank accounts that gives a consolidated view of government cash resources. Based on the principle of unity of cash and the unity of treasury, a Treasury Single Account is a bank account or a set of linked accounts through which the government transacts all its receipts and payments. The principle of unity follows from the fusion of all cash irrespective of its end use. While it is necessary to distinguish individual cash transactions for control and reporting purposes, this purpose is achieved through the accounting system and not by holding or depositing cash in transaction specific bank accounts. This enables the treasury to delink management of cash from control at a transaction level. A government like Nigeria lacking effective control over its cash resources has over the years paid for institutional deficiencies in multiple ways.

a) First, idle cash balances in bank accounts often fail to earn market-related remuneration.

b) Second, the government, being unaware of its resources incurs unnecessary borrowing cost on raising funds to cover a perceived cash shortage.

c) Third, idle government cash balances in the commercial banking sector are not idle for the banks themselves, and can be used to extend credit. Draining this extra liquidity through open market operations also imposes costs on the central bank. This research work is hereby carried out to determine whether the establishment of a unified structure of government bank accounts via a Treasury Single Account (TSA) will solve the problem of frivolous and unscrupulous spending of Government fund and hence eradicate loss and enhance cash management and control.

The principle of unity follows from the fundability of all cash irrespective of its end use. While it is necessary to distinguish individual cash transactions for control and reporting purposes, this purpose is achieved through the accounting system and not by holding/depositing cash in transaction specific bank accounts. TSA is a system of Aggregative Financial inclusion, being a nationally organized and particular way of connecting all and divergent federating units on 3-by-3 matrix, Federal–State–Local governments and their respective Ministries, Departments and Agencies (MDAs), to account for all their incomes and revenues via TSA Designated bank accounts with Deposit Money Banks (DMBs), channeling and consolidating same to Consolidating Single Account with Central Bank of Nigeria.

It is globally recommended that no other government agency should operate bank accounts outside the oversight of the treasury. Institutional structures and transaction processing arrangements determine how a TSA is accessed and operated. The treasurer, as the chief financial agent of the government, should manage the government’s cash (and debt) positions to ensure that sufficient funds are available to meet financial obligations. Idle cash is efficiently invested, and debt is optimally issued according to the appropriate statutes. In some cases, debt management including issuance of debt is done by a Debt Management Office (DMO). Judging by the provisions of the Financial Regulations (FR) and the 1999 Constitution of the Federal Republic of Nigeria, some Ministries/Extra-Ministerial Offices,
Agencies and other arms of Government collect revenue such as Value Added Tax (VAT), Withholding Tax (WHT), fees, fines and interest and are expected to remit same into the Consolidated Revenue Fund (CRF). In line with Section 16 of the Finance (Control and Management) Act, LFN, 1990 and the Financial Regulation number 413 (i), all unexpended recurrent votes for a financial year shall lapse at the expiration of the year. Consequently, all unspent balances in the Recurrent Expenditure Cash Books at the end of every financial year must be paid back to the Consolidated Revenue Fund Account with CBN by issuing mandate in favour of “Sub-Treasury of the Federation (Yusuf & Chiejina, 2015).

**TSA main account.** This is the treasury’s account with the central bank which consolidates the government’s cash position. It is the main TSA account when the TSA arrangement in a particular country consists of a set of linked accounts. Cash balances in all other linked accounts are swept into this account. In other words, all government receipts finally flow into, and all disbursements are met from, the central TSA account.

**TSA subsidiary accounts or sub-accounts.** These are not separate bank accounts per se (in the sense of holding individual cash balances), but are special sub-accounts within the main TSA account. This is basically an accounting arrangement to group together a set of transactions and allows the government to maintain the distinct accounting identity or ledger of its budget organizations (line ministries/agencies) effectively. A cash disbursement ceiling for each entity can be enforced against these ledgers. Balances in these accounts are netted off with the TSA main account for cash management purposes.

**Transaction accounts.** Sometimes government bank accounts that are justified for retail transaction banking operations are opened separately and are structured as transaction accounts. These separate transaction accounts could be opened for government entities that need transaction banking services, but do not have a direct access to the TSA main account or a subsidiary account, and/or specific category of operations (e.g., special funds). A transaction account could take the form of a zero-balance account or an imprest account. It is possible to impose a cash disbursement limit (for the concerned agency) on a particular transaction account, which could be monitored by the concerned bank.

**Zero-balance accounts (ZBAs).** Where transactional accounts are necessary, these are generally opened on a zero-balance basis, i.e., end-of-the-day cash balances in these accounts are swept back into the TSA main account periodically (preferably daily). Such accounts opened in commercial banks are used for disbursements or for collection of government revenues (particularly non-tax revenues). At the end of the day, all revenues collected would be deposited in the TSA. The commercial bank would honor payments of the respective agency, and would be reimbursed by the TSA overnight. ZBAs have many similarities with special credit line arrangements, where budget agencies are provided spending credits towards the amount of payments they can make within a specified period, to be reimbursed by the TSA in the central bank. A ZBA also has the benefit that it bypasses the normal interbank settlement process for each individual transaction, which is often time consuming in developing countries, and ensures same-day settlement on a net basis for all receipts and payments passing through the accounts.

**Imprest accounts.** These transaction accounts can hold cash up to a maximum authorized amount and are recouped from time to time. Such accounts might be necessary in some cases, particularly when there is only limited availability of interbank settlement facilities.
However, the number of imprest accounts should be kept to a minimum and the strategy should be to progressively transform these accounts into zero-balance accounts.

Transit accounts. These accounts are not meant for day-to-day transaction banking operations of government units. A transit account simply serves as a transit for eventual flow of cash into the TSA main account. Transit accounts might be necessary: (i) for major revenue streams to monitor their collection and remittance by the banking system; and (ii) to facilitate revenue sharing (formula-based sharing from a common pool of resources) between tiers of government in a federal system in line with constitutional and/or legal requirements.

Correspondent accounts. A separate ledger account is opened for each correspondent. The correspondent entity has real time information on the balances it maintains in the TSA. There should be safeguards to ensure that each correspondent government is provided with the funds needed to implement its own budget in a timely manner. The central bank (which maintains the accounts in the TSA) has the obligation to make payments to the extent of the balances available in a correspondent’s account.

Treasury Single Account and the economy
Government sees Treasury Single Account as a useful tool to establish centralized control over its revenue through effective cash management. It enhances accountability and enables government to know how much is accruing to its accounts on a daily basis. In Nigeria, it is expected that the implementation of TSA will help tame the tide of corruption of financial leakages and embezzlement. The implementation of Single Treasury Account (TSA) is expected to block revenue leakages within the government parastatals as the Ministry of Finance will be able to monitor the inflows and outflows, hence, augment the reduction in oil revenue due to falling oil prices. CBN, (2015) reasoned in the same direction and said that the implementation of TSA will enable the Ministry of Finance to monitor fund flow as no agency of government is allowed to maintain any operational bank account outside the oversight of the ministry of finance.

The implementation of the TSA will have a positive effect on the national economic planning, swift & full budgetary implementation; reduce leakages and other irregularities in the MDAs, aid appropriate planning, data collection, analysis and timely aggregation of Federal Government Revenue. Realization of the government revenue on time causes its effective allocation. The primary benefit of a Treasury Single Account is to provide for proper monitoring of government receipts and expenditure. In the Nigerian case, it will help to block most, if not all, the leakages that have been the bane of the economy. We have a situation where some Ministries, Departments, and Agencies manage their finances like independent empires and remit limited revenue to government treasury. Under a properly run Treasury Single Account, it cannot be possible, an agencies of government are meant to spend in line with duly approved budget provisions. TSA ensures that all money received is available for carrying out government's expenditure program and making payments on time. Many low-income countries have fragmented systems for handling government receipts and payments. In these countries, the ministry of finance/treasury lacks a unified view and centralized control over government's cash resources. As a result, this fund lies idle for extended periods in numerous bank accounts held by spending agencies while the government continues to borrow to execute its budget.
Hence, Udoma (2016) opines that maintenance of TSA will enhance funding government budget rather than depend on Federal allocation. In any economy where the budget is fully funded, the aim certainly will be accomplished. The consequence should be; improved economic system, political and social development.

IMF (2010), made it clear in her working paper that a government that lacks effective control over its cash resources can pay for its institutional deficiencies in multiple ways. First, idle cash balances in bank accounts often fail to earn market-related remuneration. Second, the government, being unaware of these resources, incurs unnecessary borrowing costs on raising funds to cover a perceived cash shortage.

Third, idle government cash balances in the commercial banks are not idle for the banks themselves, and can be used to extend credit. These have been the case in Nigerian economy. Nigeria still owes a huge amount in both external and internal debts. Therefore, the implementation of TSA will promote a healthy economic system.

Although the falling oil price is making the fiscal space more complicated, I believe that there is still room for improvement. One area that can be easily improved upon is the reduction of wastages in government finances, which is as a result of poor financial management. By far the greatest single example of this is the absence of the Treasury Single Account (TSA)

The IMF in a 2010 paper titled Treasury Single Account: Concept, Design, and Implementation Issues, outlined the benefits of operating a Treasury Single Account. It started by explaining that the primary objective of a TSA is to ensure effective aggregate control over government cash balances. Here are the benefits:

(i) Allows complete and timely information on government revenue in countries with advanced payment and settlement systems and an Integrated Financial Management Information System (IFMIS) with adequate interfaces with the banking system, this information will be available in real time. As a minimum, required and updated balances should be available daily.

(ii) Improves appropriation control. The TSA ensures that the MoF has full control over budget allocations, and strengthens the authority of the budget appropriation. The result of maintaining separate bank accounts is often system, where funds provided for budgetary appropriations are augmented by additional cash resources that become available through various creative, often extra-budgetary, measures.

(iii) Improves operational control during budget execution. When the Treasury has full information about cash resources, it can plan and implement budget in an efficient, transparent, and reliable manner. The existence of uncertainty regarding whether the Treasury will have sufficient funds to finance program expenditures may lead to sub-optimal behavior by budget entities, such as exaggerating their estimates for cash needs or channeling costs through off-budget arrangements.

(iv) Enables efficient fund management. A TSA facilitates regular monitoring of government cash balances. It also enables higher quality inflow and out flow analysis to be undertaken (e.g., identifying causal factors of variances and distinguishing causal factors from random variations in cash balances).
Elimination of bank fees and transaction costs. Reducing the number of bank accounts results in a lower administrative cost for the government for maintaining these accounts, including the cost associated with bank reconciliation, and reduced banking fees.

Facilitates efficient payment mechanisms. A TSA ensures that there is no ambiguity regarding the volume or the location of the government funds, and makes it possible to monitor payment mechanisms precisely. It can result in substantially lower transaction costs because of economies of scale in processing settlements. In establishment of a TSA, it is combined with the elimination of the "float" in the banking and the payment systems, and the introduction of transparent fee and penalty structures for payment services. Many governments have achieved substantial reductions in their real cost of banking services by introducing a TSA.

Improves bank reconciliation and quality of fiscal accounting system. A TSA allows for effective reconciliation between the government accounting systems and cash flow statements from the banking system. TSA also eliminates the risk of errors in reconciliation of financial statements and improves the timeliness and quality of the fiscal accounts.

Lowers liquidity reserve needs. A TSA reduces the speed of cash flows through the treasury, thus allowing it to maintain a lower cash reserve/buffer to meet unexpected fiscal volatility.

Theoretical Review

For the purpose of this research, three theories, stakeholder theory, public finance management theory and modern money theory were adopted to form a solid foundation for the concept of TSA.

Stakeholder theory

This theory was popularized by Richard Edward Freeman in 1984 in his book “Strategic Management: A Stakeholder Approach”. He indicated that his view of the stakeholder concept was drawn from the perspective of the company. The word stakeholder was however pioneered by the work done by Stanford Research Institute in the 1960s. Stakeholder theory looks beyond the relationship between shareholders and managers to include other categories of stakeholders such as customers, suppliers etc. According to Mikailu and Garbu (2015), this theory considers the firm as a chain of contracts between management and shareholders on the one hand and employees, creditors, government, citizens, international bodies etc. Thus, from the point of view of the stakeholder theory, concern should go beyond the traditional management shareholder (government citizen) relationship to include all other stakeholders. Freeman (2004) posits that the idea of stakeholders, or stakeholder management, or a stakeholder approach to strategic management, suggests that managers must formulate and implement processes which satisfy all and only those groups who have a stake in the business. Relating this to the public sector, policies and processes formulated should satisfy public servants, taxpayers, other government, international bodies etc. The stakeholder theory, in essence, suggests that every organization strives to create value for all stakeholders as a reason for its existence.

Public Finance Management theory

This theory assumed that all areas of financial resources, i.e. mobilization and expenditure should be well utilized in government for the benefits of the citizens. It involves resource mobilization, prioritization of programs, the budgetary process, efficient management of
resources and exercising control to guide against threats. According to Udo (2016), TSA basically is to prevent misuse of public funds.

**Modern Money Theory (MMT)**
This theory examines how monetarily sovereign governments operate and their impacts on the economy. It shows that it is relevant to aggregate the central bank and the treasury into a government sector that finances itself through monetary creation such that financial position of the treasury and the central bank are so intertwined that both of them are constantly in contact in order to make fiscal and monetary policy run smoothly.

**Empirical Review**
Using time series data, Oguntodu et al., (2016) studied the relationship between government revenue, TSA and GDP in Nigeria over the period of 1999 - 2015, applying F-statistics test and the coefficient of determination. The results revealed a positive relationship between TSA, Government Revenue and Gross Domestic Product (GDP). It also shows that deposit into TSA influences the position of GDP in Nigeria. It implies that commercial banks through its creation of money influence the position of GDP in the country.

Ogbonna and Amuji (2018) developed multivariate model for the study of the impact of treasury single account (TSA) on the performance of banks in Nigeria. The findings of their study revealed that there exists insignificant statistical difference between the period before and after the introduction of the TSA policy on the performance of banks in Nigeria. Their study considered two commercial banks, Diamond Bank Nigeria Plc (now Access Bank) and First bank Plc). Result showed that in Diamond Bank Nigeria Plc, there exists an inverse association between liquidity ratio and capital adequacy; liquidity ratio and credit to customers; capital adequacy and credit to customers. Similarly, on first bank, it was found that there were both positive and fairly strong relationships between the liquidity ratio and capital adequacy; inverse association between liquidity ratio and credit to customers and inverse association between capital adequacy and credit to customers.

Bashir (2016) also examined the effect of treasury single account on public finance management in Nigeria using both primary and secondary data which were analysed using Pearson correlation techniques. Based on the study, TSA policy will go along within blocking the identified financial leakages in revenue generation and promote transparency and accountability in the public financial system.

**Methods and Materials**
This section deals with procedure for carrying out the research. The study made use of secondary sources and in order to meet the information requirement, as well as for accuracy and precision of data hence, the use of secondary data, sourced for a period of ten(10) years (2010-2019) divided into two parts i.e. five(5) years pre-TSA and five(5) years post-TSA. The data were absolute aggregates for each variable sourced from the Central Bank of Nigeria 2019 Statistical Bulletin. The period chosen for the study is period prior to the introduction of TSA and period after the introduction of TSA in Nigeria.

**Development of the Model**
In this work, Real Gross Domestic Product (RGDP), Recurrent Expenditure (GRE) and Total Expenditure (GTE) shall be used as proxies to Economic Growth. The model for the study is:

\[ M_1 = M_2 \]

Where: 

\[ M1 = \text{Economic Growth during the pre-TSA period} \]
M2 = Economic Growth during the post-TSA period

The performance figures for the pre-TSA period is represented by mean $M_1$ while the performance figures for the post-TSA period is represented by mean $M_2$.

**Method of Data analysis**

Since the researcher’s sample size is small and equal the appropriate t-test statistic formula to be used is given as:

$$ t = \frac{M_1 - M_2}{\sqrt{\frac{(S_1)^2 + (S_{ii})^2}{N}}} $$

Where:

<table>
<thead>
<tr>
<th>Sample 1: Pre-TSA</th>
<th>Sample 2: Post-TSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Size</td>
<td>$N_1 = 5$years</td>
</tr>
<tr>
<td>Test Mean</td>
<td>$M_1$</td>
</tr>
<tr>
<td>Test Variance</td>
<td>$(S_1)$</td>
</tr>
<tr>
<td></td>
<td>$N_2 = 5$years</td>
</tr>
<tr>
<td></td>
<td>$M_2$</td>
</tr>
<tr>
<td></td>
<td>$(S_{ii})$</td>
</tr>
</tbody>
</table>

Note: $N_1 = N_2 = N$; The numerator of the equation above is the difference in mean while the denominator is the standard error of the difference between the means. The degree of freedom (d.f.) for small sample is $N$. The hypothesis that is being tested is:

$H_{01}$: $M_{11} = M_{21}$: (There is no significant difference between Real Gross Domestic Product during the pre-TSA period and Real Gross Domestic Product during the post-TSA period)

$H_{02}$: $M_{12} = M_{22}$: (There is no significant difference between Government Recurrent Expenditure during the pre-TSA period and Government Recurrent Expenditure during the post-TSA period)

$H_{03}$: $M_{13} = M_{23}$: (There is no significant difference between Government Total Expenditure during the pre-TSA period and Government Total Expenditure during the post-TSA period)

T-Test statistical tool is adopted in analyzing the data. This was after developing a model for the variables namely economic growth, Gross Domestic Product, Recurrent Expenditure and Capital Expenditure.

The t-test statistical tool is adopted at 5% (0.05) level of significance or 95% confidence level while the Statistical Package for Social Sciences (SPSS) was used for the estimation. Reject $H_0$ if the probability value of $t$ – calculated is less than 0.05, otherwise do not reject $H_0$. 
Data Presentation, Analysis and Interpretation

Data Presentation

Table 4.1 Pre-TSA Performance indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>RGDP</th>
<th>GRE</th>
<th>GTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>54,612.26</td>
<td>3,109.44</td>
<td>883.87</td>
</tr>
<tr>
<td>2011</td>
<td>57,511.04</td>
<td>3,314.51</td>
<td>918.55</td>
</tr>
<tr>
<td>2012</td>
<td>59,929.89</td>
<td>3,325.16</td>
<td>874.70</td>
</tr>
<tr>
<td>2013</td>
<td>63,218.72</td>
<td>3,214.95</td>
<td>1,108.39</td>
</tr>
<tr>
<td>2014</td>
<td>67,152.79</td>
<td>3,426.94</td>
<td>783.12</td>
</tr>
</tbody>
</table>

Source: CBN Statistical Bulletin 2019

Table 4.2: Post-TSA Performance indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>RGDP</th>
<th>GRE</th>
<th>GTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>69,023.93</td>
<td>3,831.95</td>
<td>818.35</td>
</tr>
<tr>
<td>2016</td>
<td>67,931.24</td>
<td>4,160.11</td>
<td>653.61</td>
</tr>
<tr>
<td>2017</td>
<td>68,490.98</td>
<td>4,779.99</td>
<td>1,242.30</td>
</tr>
<tr>
<td>2018</td>
<td>69,799.94</td>
<td>5,675.20</td>
<td>1,682.10</td>
</tr>
<tr>
<td>2019</td>
<td>71,387.83</td>
<td>6,997.39</td>
<td>2,289.00</td>
</tr>
</tbody>
</table>

Source: CBN Statistical Bulletin 2019

Figure 1: Graphical representation of preTSARGDP and postTSARGDP presented in Tables 4.1 and 4.2

Source: Researcher’s Drawing
**Figure 2:** Graphical representation of pre-TSAGRE and post-TSAGRE presented in Tables 4.1 and 4.2

![Graphical representation of pre-TSAGRE and post-TSAGRE](image1)

**Source:** Researcher’s Drawing

**Figure 3:** Graphical representation of pre-TSAGTE and post-TSAGTE presented in Tables 4.1 and 4.2.

![Graphical representation of pre-TSAGTE and post-TSAGTE](image2)

**Source:** Researcher’s Drawing
Analysis of Data and Interpretation of Results
Using the t-test, the data presented above is tested and analyzed.

Descriptive Analysis

Table 4.3: Result of Descriptive Analysis

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreTSARGDP</td>
<td>5</td>
<td>54612.26</td>
<td>67152.79</td>
<td>60484.9400</td>
<td>4888.10569</td>
</tr>
<tr>
<td>PostTSARGDP</td>
<td>5</td>
<td>67931.24</td>
<td>71387.83</td>
<td>69326.7840</td>
<td>1342.53670</td>
</tr>
<tr>
<td>PreTSAGRE</td>
<td>5</td>
<td>3109.44</td>
<td>3426.94</td>
<td>3278.2000</td>
<td>120.54848</td>
</tr>
<tr>
<td>PostTSAGRE</td>
<td>5</td>
<td>3831.95</td>
<td>6997.39</td>
<td>5088.9280</td>
<td>1277.11406</td>
</tr>
<tr>
<td>PreTSAGTE</td>
<td>5</td>
<td>783.12</td>
<td>1108.39</td>
<td>913.7260</td>
<td>119.78072</td>
</tr>
<tr>
<td>PostTSAGTE</td>
<td>5</td>
<td>653.61</td>
<td>2289.00</td>
<td>1337.0720</td>
<td>665.27922</td>
</tr>
</tbody>
</table>

| Valid N (listwise)     | 5  |          |         |           |                |

Source: Computer Estimate

With regards to the performance of Nigerian economy measured by RGDP, the mean of the post-TSA RGDP is greater than the mean of pre-TSA RGDP. The increase from pre-TSARGDP mean figure of N60,484.94bn to post-TSARGDP mean figure of N69,326.78bn shows an increase of 14.62%. This is an indication that the economy is performing well during the post-TSA period.

Also, the Government Recurrent Expenditure has an increase in both pre-TSA mean and standard deviation from N3278.20bn and N120.55bn respectively to post-TSA GRE mean and standard deviation of N5,088.93bn and N1,277.11bn respectively.

Equally, the pre-TSA GTE mean increased 46.33% during the post-TSA period. This is a confirmation that the economy is picking up gradually.

The above descriptive analysis confirmed by the result of the paired sample statistics stated in Table 4.4.

Table 4.4: Paired Samples Statistics

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>PreTSARGDP</td>
<td>60484.9400</td>
<td>5</td>
<td>4888.10569</td>
</tr>
<tr>
<td></td>
<td>PostTSARGDP</td>
<td>69326.7840</td>
<td>5</td>
<td>1342.53670</td>
</tr>
<tr>
<td></td>
<td>PreTSAGRE</td>
<td>3278.2000</td>
<td>5</td>
<td>120.54848</td>
</tr>
<tr>
<td></td>
<td>PostTSAGRE</td>
<td>5088.9280</td>
<td>5</td>
<td>1277.11406</td>
</tr>
<tr>
<td>Pair 2</td>
<td>PreTSAGTE</td>
<td>913.7260</td>
<td>5</td>
<td>119.78072</td>
</tr>
<tr>
<td></td>
<td>PostTSAGTE</td>
<td>1337.0720</td>
<td>5</td>
<td>665.27922</td>
</tr>
</tbody>
</table>

Source: Computer Estimation
Hypothesis testing and T-test interpretation

Table 4.5: Result of Paired Sample Test

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
<th>Paired Differences t df Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>Pair 1</td>
<td>PreTSARGDP – PostTSARGDP -8841.8400</td>
</tr>
<tr>
<td>Pair 2</td>
<td>PreTSAGRE – PostTSAGRE -1810.72800</td>
</tr>
<tr>
<td>Pair 3</td>
<td>PreTSAGTE PostTSAGTE -423.34600</td>
</tr>
</tbody>
</table>

Source: Computer Estimation

Hypothesis One
$H_0^I$: There is no significance difference between Real Gross Domestic Product during the pre-TSA period and Real Gross Domestic Product during the post-TSA period.

Considering pair 1 in Table 4.5, the pre-TSA RGDP and post-TSA RGDP has mean value of -8841.84, t-value of -5.108 and probability of 0.007. However, the probability is less than 0.05 which is an indication that the relationship is statistically significant. Based on this therefore, the null hypothesis is rejected in favour of the alternative hypothesis. Hence, the work concludes that there is significance difference between Real Gross Domestic Product during the pre-TSA period and Real Gross Domestic Product during the post-TSA period.

Hypothesis Two
$H_0^2$: There is no significance difference between Government Recurrent Expenditure during the pre-TSA period and Government Recurrent Expenditure during the post-TSA period.

Considering pair 2 in Table 4.5, the Pre-TSA GRE and post-TSA GRE has mean value of -1810.73, t-value of -3.374 and probability of 0.028. Also, the probability is less than 0.05 meaning that the relationship is statistically significant. Based on this therefore, the null hypothesis is rejected while the alternative hypothesis is accepted. Hence, the work concludes that there is significance difference between Government Recurrent Expenditure during the pre-TSA period and Government Recurrent Expenditure during the post-TSA period.

Hypothesis Three
$H_0^3$: There is no significance difference between Government Total Expenditure during the pre-TSA period and Government Total Expenditure during the post-TSA period.

Considering pair 3 in Table 4.5, the pre-TSA GTE and post-TSA GTE has mean value of -423.35, t-value of -1.370 and probability of 0.243. However, the probability is more than 0.05 indicating that the relationship is not statistically significant. As a result, the null hypothesis is accepted against the alternative hypothesis. Hence, the work concludes that there is no significance difference between Government Total Expenditure during the pre-TSA period and Government Total Expenditure during the post-TSA period.
CONCLUSION
From the result above, the following can be deduced:

1. The Nigerian economy witnessed growth as a result of the introduction of Treasury Single Account. There is an increase in Real Gross Domestic Product (RGDP) from pre-TSA mean figure of N60,484.94bn to post-TSA mean figure of N69,326.78bn showing an increase of 14.62%.

2. Recurrent expenditure of the government increased significantly as a result of the introduction of Treasury Single Account. From the result in table 4.5, the Pre-TSA Recurrent expenditure and post-TSA Recurrent expenditure has mean value of -1810.73, t-value of -3.374 and probability of 0.028. Also, the probability is less than 0.05 meaning that the relationship is statistically significant.

3. However, total expenditure of the government showed no significant change as a result of the introduction of Treasury Single Account. In table 4.5, the pre-TSA Total expenditure and post-TSA Total expenditure has mean value of -423.35, t-value of -1.370 and probability of 0.243. However, the probability is more than 0.05 indicating that the relationship is not statistically significant.

The introduction of Treasury Single Account (TSA) impacted positively on the Nigerian economy. The Real Domestic Product and Recurrent Expenditure improved significantly.

Recommendations
Based on the foregoing, the following were recommended:

1. The financial regulatory bodies, CBN inclusive should be proactive and initiate measures to correct any lapses on the implementation of this laudable policy.

2. The authorities should ensure strict compliance with rules and procedures of operation of Treasury Single Account by the relevant agencies. Any deviation should attract sanctions.

3. Government agencies, banks and the business community should be educated on the need for the system.
References

Books


Journals


Internet


News Papers
