Treasury Single Account (TSA) Implementation and Financial Performance of Commercial Banks in Nigeria

Benjamin Ezugwu Onodi, Adanna Sabina Eyisi, and Jane Chinyere Akujor

Abstract — This work examined the effect of Treasury Single Account (TSA) implementation on the financial performance of commercial banks in Nigeria. The study employed expo-facto survey research design and seven big commercial banks in Nigeria. First Bank of Nigeria, Zenith Bank, Access Bank, UBA, Union Bank, Diamond Bank and Fidelity Bank were judgmentally sampled for this study. Secondary data were gathered through CBN statistical bulletin from 2013 to 2017 (that is two years before and two years after implementation of TSA). Customers deposit was used as proxy for independent variable (Treasury Single Account), while profit after tax, return on equity and return on assets are proxies for dependent variable (financial performance). The data collected were analyzed using comparable mean, while research hypotheses were tested using Simple regression analysis. The findings obtained from the statistical testing of the hypotheses of this study show that customers’ deposit has a significant effect on profit after tax, return on assets and return on equity of commercial banks in Nigeria. The study recommends that Government should create enabling grounds for commercial banks to operate and be profitable to enable investors to have confidence on the economy because banks drive every economy. Commercial banks should increase their customer deposit by engaging in aggressive marketing strategy that will attract private individuals and businesses in order to increase the volume of their liquidity. Merger and acquisition should be encouraged in order to increase the capital base of banks and to make them strong and viable. Also, banks should avoid over-reliance on government deposits and focus more on other banking activities as well as investments that would help in enhancing their performance.

Index Terms — Treasury Single Account, Financial performance, Customers’ deposit, and commercial banks in Nigeria.

I. INTRODUCTION

In recent years, the modus operandi in government transition from manual to more computerized activity in the area of public fund management has enhanced accountability and transparency in the public sector. In Nigeria, Treasury single account therefore is considered most appropriate for modern cash management and is an effective tool for the Ministry of finance/treasury to carry out oversight and centralized control over government’s cash resources. The implementation of TSA policy commenced vides the Federal Government’s directive that all revenue generating MDAs should shut down their accounts with commercial banks. This directive came through a circular from the office of the Head of Service of the Federation, vide circular No. HCSF/428/S.1/120 dated 7th August 2015 titled: “Re: Introduction of Treasury Single Account”. Treasury Single Account (TSA) can be described as a public accounting system in which all revenues, receipts and incomes of Governmental agencies are collected into one single account. TSA is usually maintained by the country’s Central Bank and all payments are done through this account as well. It was envisaged that the operation of TSA will help to ensure proper cash management and eliminate existence of idle funds usually left with different commercial banks. This will further enhance reconciliation of revenue collection and payment system in the economy.

Prior to the directives of 15th September deadline by President Muhammadu Buhari that all government revenues should be remitted to a Treasury Single Account in consonance with the trend and in compliance with the provisions of the 1999 constitution, it is worthy to note that the Federal Government of Nigeria during Dr. Goodluck Jonathan’s administration through the Office of Accountant-General of the Federation (OAGF) directed all MDAs of the federal government to comply with TSA policy drive not later than 28th February, 2015. “This was to ensure centralized transparent and accountable revenue management, facilitate effective cash management, and ensure cash availability to meet immediate needs of government programs and projects”. Government also believes that the operation of TSA will promote efficient management of domestic borrowing at minimal cost, allow optimal investment of idle cash, block loopholes in revenue management, and establish an efficient disbursement and collection mechanism for Government funds.

The establishment of the Government Integrated Financial Management Information System (GIFMIS) by the government of former President Olusegun Obasanjo informed the need for a consolidated single treasury Account. However, TSA was first introduced by President Goodluck Jonathan in its present form, when he commenced TSA pilot implementation with about 42 public institutions comprising MDAs, until September 2015 when President Buhari began full implementation.

II. STATEMENT OF THE PROBLEM

Nigerians’ government and international community have suffered greatly in terms of poverty, illiteracy, governance, and financial losses by potential investors in their investment in the wake of corrupt practices and lack of accountability of public funds. In view of this, it is clear that Nigeria economy is faced with serious financial challenges where some state governors could not pay the staff salaries for some months. Although the Nigerian economy almost collapsed before the Buhari administration in 2015 where all Ministries, Departments and Agencies

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(MDAs) in one way or the other have crippled the entire system because of corruption and lack of accountability in the public sector. Government, Non-governmental organizations (NGOs) and Investors rely highly on Ministries, Departments and Agencies (MDAs)’s, accounting information prepared and published by the accountants in taking rational decision [16].

However, one issue that undermines the reliability of Ministries, Departments and Agencies (MDAs)’s accounting information is corruption and lack of accountability of public funds in Nigeria. Accounting information is prepared on historical cost basis and by effect such information may be distorted by frauds and corrupt practices. The effect of such distortion may be high in a country that is characterized by poor leadership, frauds, corruption practice and electoral malpractice as in Nigeria. Several efforts have been made to combat corruption in Nigeria but [15] opined that the major drawback in the fight against corruption has been the patent absence of sincerity on the part of the political and related leadership of the country and, on the contrary, their obvious accommodation and tolerance of corrupt practices in both the public and private sectors of the economy. Reference [1] observed that “the Nigerian problem is the unwillingness or inability of its leaders to rise to their responsibility to the challenge of personal example, which is the hallmark of leadership”. Reference [14] opined that Government should not abandon governance to pursue corrupt office holders, instead strong institutions should be allowed to function independently to checkmate corruption. “It was also observed that restructuring will go a long way to bring even development rather than operating amputated fiscal federalism as currently practiced in Nigeria”[17]. The aforementioned inherent challenges of financial leakages in government business motivated the researchers to investigate the effect of TSA implementation on the financial performance of commercial banks in Nigeria.

III. OBJECTIVES OF THE STUDY

The main objective of this study is to examine the effect of Treasury Single Account implementation on the financial performance of commercial banks in Nigeria.

The specific objectives of the study include:
1. To examine the effect of customers’ deposit (pre and post TSA) implementation none the profit after tax of commercial banks in Nigeria.
2. To investigate the effect of customers’ deposit (pre and post TSA) implementation on return on equity of commercial banks in Nigeria.
3. To determine the effect of customers’ deposit (pre and post TSA) implementation on the return on assets of commercial banks in Nigeria.

IV. RESEARCH QUESTIONS

The following questions were raised to guide this study:
1. To what extent does customers’ deposit (pre and post TSA) implementation affect profit after tax of commercial banks in Nigeria?
2. To what extent does customers’ deposit (pre and post TSA) implementation affect return on equity of commercial banks in Nigeria?
3. To what extent does customers’ deposit (pre and post TSA) implementation affect return on assets of commercial banks in Nigeria?

V. RESEARCH HYPOTHESES

A. Hypothesis One

Ho: Customers’ deposit (pre and post TSA) implementation has no significant effect on the profit after tax of commercial banks in Nigeria

B. Hypothesis Two

Ho: Customers’ deposit (pre and post TSA) implementation has no significant effect on the return on equity of commercial banks in Nigeria.

C. Hypothesis Three

Ho: There is no significant effect of customers’ deposit(pre and post TSA) implementation on return on assets of commercial banks in Nigeria.

VI. CONCEPT OF TREASURY SINGLE ACCOUNT (TSA)

Reference [23] defines Treasury Single account “as a unified structure of government bank accounts enabling a consolidation and optimal organization of government cash resources”. While [5], described TSA “as a public accounting system under which all MDAs’ revenue, receipts and income are collected into one single account, and usually maintained by the country’s central bank”.

Reference [12] posits that “Treasury Single Account (TSA) is one of the financial policies adopted by the federal government of Nigeria to consolidate and move all the revenue from all MDA’ s deposit in commercial banks into a single account at central bank of Nigeria”. According to [13] TSA is also “a process and tool for effective management of government’s finances, banking and cash position”. This is a process in which all government accounts are pooled and unified through a single treasury account.

Single treasury account according to [10] “is a network of subsidiary accounts all linked to the main account in such a way that, transactions are in the subsidiary accounts are transferred to the main account at the end of each business day”. Reference [2] further sees “Treasury Single Account as a public accounting system in which all MDAs revenue, receipts and income are collected into one single account maintained by Central Bank from which all payments are made there from”.

As stated in [5] the refusal of some MDAs to declare and remit the 25% of their annual revenue generated to the treasury as required by law was the major reason Treasury single account was introduced. In 2012, government forcefully collected about the sum of N120 billion from MDAs being 25 percent of their gross revenue to the treasury and in 2013 another sum of N30 billion was collected as required by law into the treasury (Daily Trust Editorial, 2015:16). TSA helps to block all the leakages that...
have been the bane of the growth of the economy and also stop all corrupt and fraudulent practices.

VII. IMPLEMENTATION OF TREASURY SINGLE ACCOUNT IN NIGERIA

The adoption of TSA in Nigeria was in response to President Muhammadu Buharis’ directive that all the Ministries, Departments and Agencies (MDAs) to close all their accounts domiciled in the commercial banks and transfer them to the federation account on or before September 15, 2015. According to the Accountant General of Federation, (AGF), “out of the 900 MDAs, about 600 of them have so far fully complied with the directive on TSA, while others are still at different stages of compliance”. It was expected that TSA initiative would facilitate the Independent Revenue e-collection Scheme implementation hence Treasury Single Account (TSA) scheme requires that government revenue collection, is put into a single account for proper cash management. The major role of independent e-collection was “to provide enabling ground for MDAs to automate revenue collections directly into the Federal Governments Consolidated Revenue Fund (CRF) account at the Central Bank of Nigeria, through the Remita e-collection platform and other electronic payment channels” [7]. Reference [3], observed that this policy measure and directive “was aimed at promoting transparency, ensure compliance with sections 80 and 162 of the 1999 Constitution and end the previous public accounting system of several fragmented accounts for government revenues, incomes and receipts”. The directive further stated that the implementation of TSA “applies to fully funded organs of government like the MDAs and foreign missions, as well as the partially funded ones, such as teaching hospitals, medical centers’ and federal tertiary institutions”.

VIII. TREASURY SINGLE ACCOUNT AND NIGERIA ECONOMY

Treasury Single Account is a useful tool established in order to centralize control over revenue and ensure effective cash management. Policy makers of government and international community believe that implementation of TSA would enhance accountability and enable government curb corruption. The implementation of Treasury Single Account (TSA) will enable Ministry of Finance to monitor the inflows and outflows of oil revenue since our economy is largely dependent on petrodollars. According to [7] no agency of government will be allowed to maintain any operational bank account outside the oversight of the ministry of finance to enable the Ministry to monitor fund flow. Reference [19], posits that banking arrangements should be made by Government for efficient management and control of government’s cash resources to enhance the operation of TSA in Nigeria”. He further opined that “TSA should be designed to minimize the cost of government borrowing and maximize the opportunity cost of fund”. The implementation of TSA will ensure that all money received is available for carrying out government’s projects and ensuring that contractors and recurrent expenditures are paid on time. Handling of Government receipts and payments have fragmented in many low-income countries like Nigeria and in these countries, the ministry of finance/treasury lacks a unified view and centralized control over government’s cash resources. In most cases fund lies idle for extended periods in numerous bank accounts held by spending agencies while such government continues to finance its budget from borrowed fund. The reverse should be the case because implementation of TSA will enhance funding of government budget when all the resources of revenue generating entities are pooled into the dedicated account vide remita platform. Over dependent on Federal allocation will be reduced and there will be available fund to run other sectors of the economy. Where the budget is fully funded, the economic activities will be sustained, and sustainable political and social development will be achievable.

The benefits of TSA were captured in the IMF report of 2010 where the following advantages of TSA are stated:
1. TSA implementation will allow complete and timely information on government revenue.
2. TSA implementation will improve appropriation control.
3. TSA will improve operational control during budget execution.
4. TSA implementation will enable efficient fund management.
5. TSA implementation will eliminate bank fees and transaction costs.
6. TSA implementation will facilitate efficient payment mechanisms.
7. TSA implementation will improve bank reconciliation and quality of fiscal accounting system; and
8. TSA implementation will lower liquidity reserve needs.

IX. TREASURY SINGLE ACCOUNT AND PUBLIC SECTOR DEPOSITS IN COMMERCIAL BANKS

Public sector deposits prior to introduction of TSA constitute significant proportion of total customer deposits in commercial banks in Nigeria. At the wake of adoption of TSA by MDAs in Nigeria it was estimated that commercial banks hold about N2.2 trillion public sector funds at the beginning of the first quarter of 2015. This would be about 33% of the proposed annual budget of N6.7 for the Federal Government in 2015 fiscal year and this staggering public sector deposits can cover about twenty (20) non-oil producing States’ annual budget for 2015 fiscal year. There is no doubt that the withdrawal of public sector deposit would have adverse effect on the performance of commercial banks operation since customer deposit is the largest assets of deposit money banks. It was a well-known fact in Nigeria that “each time the monthly federal allocation is released, the banking system is usually awash with liquidity, and as soon as this public sector fund dries up, the result is liquidity problem with an increase in interbank rates”. When high revenue generating parasternal like the NNPC moves out of commercial banks, the bank’s operations must be affected, and commercial banks stand to lose immensely from the implementation of Treasury Single
Account. There was a surge in money market rates as a result of withdrawal of public sector fund with the commercial banks and banks have to source for funds to cover their poor liquidity positions. It should be noted that deposits and funding cost structure on an aggregate basis, were affected in the banking industry regarding the implementation of TSA in Nigeria.

X. THE TSA MECHANISM IN NIGERIA

This is a method of achieving the effective implementation of TSA in Nigeria by mandating the Central Bank of Nigeria to open a Consolidated Revenue Account to receive all government revenue and effect payments through this account. The operation of TSA requires that all MDAs should remit their revenue collections to CBN through the individual commercial banks who act as collection centers. The TSA mechanism means that commercial serving as collection agents for Central Bank of Nigeria will continue to maintain revenue collection accounts for MDA’s but daily transactions ( monies collected) by these banks are to be remitted to the Consolidated Revenue Accounts with the CBN. It is expected that MDA’s accounts with commercial banks must be Zero razed at the end every banking day and all revenues collected remitted to dedicated Consolidated Revenue Account domiciled with Central Bank of Nigeria. The operation of TSA has does not allow commercial banks to have access to the float provided by the accounts they maintained for the MDA’s any longer. TSA mechanism provides for maintenance of difference types of account. Such accounts to be maintained under TSA platform include the TSA main account, subsidiary or sub-accounts, transaction accounts and zero balance account. Impress accounts, transit accounts and correspondence accounts can be operated, and these accounts mentioned above are maintained for transaction purposes for funds movement in and out of the TSA.

A. TSA Main Account

This type of TSA account is domiciled with the central bank of Nigeria to enable government consolidates revenue and know the cash position at any given point in time. It is the main TSA account and consists of a set of linked accounts in which all government receipts finally flow into, and all disbursements are met from central TSA account on regular basis.

B. TSA Subsidiary Accounts or Sub-Accounts

These are special sub-accounts within the main TSA account and not separate bank accounts per se. It is basically an accounting process where a set of transactions are grouped together and helps government identify areas of needs during budget for line ministries/agencies effectively. During budget implementation cash disbursement ceiling for each entity can be enforced against identified areas and balances in these accounts are netted off with the TSA main account for cash management.

C. Transaction Accounts

These are transaction accounts opened for government entities that need banking services but do not have a direct access to the TSA main account or a subsidiary account. Specific operations like special funds are maintained in these accounts. Cash disbursement limit can be imposed on concerned agency on a particular transaction account and monitored by the deposit money bank.

D. Zero-Balance Accounts (ZBAs)

These are transaction accounts generally opened on zero-basis which means that end of day cash balances is swept into the TSA main account periodically preferably daily. Such accounts are opened in commercial banks and used for collection of government revenues.

E. Impress Accounts

These categories of transaction accounts are necessary particularly when there is limited availability of interbank settlement facilities. It can hold cash up to a maximum authorized amount and can be recouped from time to time. However, impress accounts should be kept at a minimum and progressively transformed into zero-balance accounts.

F. Transit Accounts

These types of accounts are used to monitor major revenue streams collection and remittance by the banking system and to facilitate revenue sharing among tiers of government in a federal system. The sharing formula will be in line with constitutional and/or legal requirements not meant for day-to-day transaction banking operations of government units. A transit account simply serves as a transit for movement of cash into the TSA main account.

G. Correspondent Accounts

This category of account ensures the correspondent entity real-time information on the balances it maintains in the TSA. A separate ledger account is opened for the correspondent entity. 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 has the obligation to make payments to the extent of the available balances in a correspondent’s account.

XI. THEORETICAL FRAMEWORK

The following theories of socioeconomic accounting were adopted to form sound foundation for our discussion on Treasury Single Account implementation and financial performance of commercial banks in Nigeria.

A. Stakeholder Theory

Stakeholders as those groups who have an interest in the actions of the corporations or individual or group who had an interest in the firm, because he/she could affect or was affected by the firm’s activities. Reference [6] has defined a stakeholder “as any individual or group who can affect or is affected by the actions, decisions, policies, practices, or goals of the organization”. Stakeholders can be identified by a relationship of exchange between themselves and the organization, and hence, stakeholders include stockholders,
creditors, managers, employees, customers, suppliers, local communities, and the general public. The adoption of Treasury Single Account by the federal government is to ensure accountability and transparency as a result of the pressure from stakeholders/citizens against corruption.

B. Modern Money Theory (MMT)

This theory was popularized by [22] and the proponents argue that countries that issue their own currencies can never run out of money the way people or businesses can. Modern money theory which was once an obscure unorthodox branch of economics has now become a major topic of debate among economists. It is a theory that explained how monetarily sovereign governments operate and their impacts on the economy. MMT shows that it is relevant to merge the central bank and the treasury into a government sector that finances itself through monetary creation. Fiscal and monetary policy run smoothly when financial position of the treasury and the central bank are so consolidated that both of them interact constantly.

XII. EMPIRICAL REVIEW

Reference [12] in her work on effect of treasury single account on the banks liquidity in Nigeria administered questionnaires to the management staff of ten banks selected for the study. chi-square statistical tool was used for analysis of the data and the result obtained confirmed that the implementation of TSA in the public accounting system impacted negatively on the liquidity base and the performance of banking sector in Nigeria.

Reference [9] investigated adoption of TSA by state governments of Nigeria using descriptive cross-sectional survey design. Two hundred (200) professional accountants in Akwa Ibom state were surveyed with the aid of questionnaire. Data obtained were analyzed using descriptive statistics and t-test statistics. The findings revealed that TSA adoption and full implementation by the state governments will be of greatest benefit.

Reference [5] employed both primary and secondary data in his study on the effects of TSA on public finance management in Nigeria. MDAs within Bauchi metropolis were selected using a sample of 72 respondents and data obtained were analyzed using Pearson correlation techniques. The result revealed that adoption of TSA would promote transparency and accountability in the public finance system.

Reference [18] studied treasury single account (TSA) policy in Nigeria using secondary/ex-post facto methodology. Data collected were analyzed using incremental model framework. They recommend that proper monitoring of government account should be carried out, in all government institutions and strong punitive measure applied against defaulters and corrupt officers, that fail to comply with TSA implementation.

Reference [20] in their research on treasury single account of the public sector: Implications for financial management in Nigeria examined the effect of TSA implementation on Deposit Money Banks (DMBs) ability to grow credit in the economy. They employed survey research method. The population of the study consists of stakeholders (organizations and individuals) involved in public financial management in Nigeria. The elements of the population consist of accountants, bankers, economists/statisticians and others. The statistical tools used were ANOVA and Pearson’s chi-square technique. The study found that TSA is a prerequisite for modern financial management. Their findings suggest a negative relationship between TSA and DMBs’ ability to grow credit in the economy. In addition, they established that the adoption of TSA would aid the provision of timely and accurate information about government financial resources. They recommended that Nigerian government should provide alternative means of credit to grow the economy.

Reference [4] examined treasury single account policy implementation in Nigeria: An assessment of TSA stakeholders’ policy drive capacity for sustainable development, employed primary and secondary sources of data. The study was conducted in Ikom metropolis of Cross River State, Nigeria. They adopted descriptive survey research design, used questionnaire for collection of data adopting a five likert scale rating system. 150 respondents were purposively selected. The result showed that there is need for publication of TSA operational manual and that stakeholders are not adequately trained to properly key in into the policy drive.

Also [10] investigated pros and cons of TSA policy in Nigeria and concluded that, “for an administration that has unwritten social contract signed with Nigerians in terms of service delivery has the obligation to consolidate state’s resources to provide services and amenities promised to the people”. They posit that any move plug leakages in revenue generating agencies should be seen as a measure to curb corruption and enthrone accountability in government business. Although many works including the above review on TSA abound but none did not compare pre and post implementation of the system on the financial performance of commercial banks in Nigeria. Hence, this study is set out to investigate the pre and post implementation of TSA on the financial performance of commercial banks in Nigeria.

XIII. RESEARCH METHOD

This study adopted the expo-facto research Design because secondary data were sourced from financial statements of listed commercial banks in Nigeria Stock Exchange (NSE) as contained in NSE Fact Book 2017.

XIV. MODEL SPECIFICATION

PAT = (a + β0 + βCMD…….) ……..1
ROE = (a + β0 + βCMD…….) ……..2
ROA = (a + β0 + βCMD…….) ……..3

where,

\(a = \text{intercept.}\)
\(\beta = \text{Co-efficient.}\)
\(\text{PAT} = \text{Profit after tax.}\)
\(\text{ROE} = \text{Return on Equity.}\)
\(\text{ROA} = \text{Return on Assets.}\)
\(\text{CMD} = \text{Customers Deposit.}\)
Decision Rule: Where the P-value is greater than 0.05, the null hypothesis is accepted while alternate hypothesis is rejected, otherwise the null hypothesis is rejected, and alternate is accepted.

XV. DATA PRESENTATION AND ANALYSIS

A. Presentation of Data

See appendix for details.

<table>
<thead>
<tr>
<th>TABLE I: EFFECT OF TSA ON PAT (PRE-IMPLEMENTATION)</th>
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<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Customer Deposit</td>
</tr>
</tbody>
</table>

R 0.733; R-Square 0.539; Adjusted R-Square 0.475; F–ratio 5.163; Prob. of ratio 0.047; Durbin-watson 1.226; Source: SPSS computation; Dependent variable: PAT.

<table>
<thead>
<tr>
<th>TABLE II: EFFECT OF TSA ON PAT (POST-IMPLEMENTATION)</th>
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<tbody>
<tr>
<td>Variable</td>
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<tr>
<td>Constant</td>
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<tr>
<td>Customer Deposit</td>
</tr>
</tbody>
</table>

R 0.635; R-Square 0.519; Adjusted R-Square 0.419; F–ratio 17.026; Prob. of ratio 0.015; Durbin-watson 2.819. Source: SPSS computation Dependent variable: PAT.

From Table I above, the R squared showed that 0.539 of the total variation in profit after tax (PAT) is as a result of variations in customers’ deposit (TSA). This implied that 53.8% of the sample variation in the dependent variable PAT is explained or caused by the explanatory variables while 46.2% is unexplained.

The adjusted R-square has the value of 0.475 which shows there is a relationship between customers’ deposit and profit after tax. This implies that 47.5 variations in PAT is explained by customer deposit.

The Durbin –Watson statistic of 1.226 lies within the upper limit of 1.420 on the Durbin-Watson d statistic table at 5% level of significance at n =26 and k = 3. This signifies that there is an evidence of autocorrelation in the model.

The result of the F-statistics shows that there is a relationship between the variables concerned. This is because the F-statistics has the value of 17.026 which is greater than the table value of 1.96.

B. Test of Hypothesis 1

Ho.1: Customers’ deposit has no significant on profit after tax of commercial banks in Nigeria.

Comparing the pre and post implementation of TSA, the R squared of post implementation of TSA is slightly higher than the values in the pre implementation of TSA (538 > 519) which implies that the implementation of TSA has affected the profitability of commercial banks in Nigeria. Customers’ deposit is one of the determinants of profitability in banking industry. However, the reduction of customer deposit as a result of the implementation of TSA by government significantly affected the profitability of commercial banks in Nigeria.

C. Decision

Both the pre and post implementation of TSA have P-value less than 0.05 (0.047 and 0.015 respectively). In that case we accept alternate hypothesis and conclude that implementation of TSA has a significant effect on the profit after tax of commercial banks in Nigeria.

<table>
<thead>
<tr>
<th>TABLE III: EFFECT OF TSA ON ROE (PRE-IMPLEMENTATION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Customer deposit</td>
</tr>
</tbody>
</table>

R 0.966; R-Square 0.934; Adjusted R-Square 0.867; F–ratio 14.064; Prob. of ratio 0.0166; Durbin-watson 2.819. Source: SPSS computation Dependent variable: ROE.

<table>
<thead>
<tr>
<th>TABLE IV: EFFECT OF TSA ON ROE (POST-IMPLEMENTATION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Customer deposit</td>
</tr>
</tbody>
</table>

R 0.625; R-Square 0.555; Adjusted R-Square 0.519; F –ratio 2.059; Prob. of ratio 0.049; Durbin-watson 1.229. Source: SPSS computation Dependent variable: ROE.

From Table 3 above, the R squared showed that 0.966 of the total variation in return on equity (ROE) is as a result of variations in customers’ deposit (TSA). This implied that 96.6% of the sample variation in the dependent variable ROE is explained or caused by the explanatory variables while 3.4% is unexplained.

The adjusted R-square has the value of 93.4% which shows there is a relationship between customers’ deposit and return on equity. This implies that 93.4 variations in ROE is explained by customer deposit.

The Durbin –Watson statistic of 2.819 lies outside the upper limit of 1.420 on the Durbin-Watson d statistic table at 5% level of significance at n =26 and k = 3. This signifies that there is an evidence of autocorrelation in the model.

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The result of the F-statistics shows that there is a relationship between the variables concerned. This is because the F-statistics has the value of 14.064 which is greater than the table value of 1.96.

Also, from the result of the post implementation from Table4 above the R squared showed that 0.555% of the total variation in return on equity (ROE) is as a result of variations in customers’ deposit (TSA). This implied that 55.5% of the sample variation in the dependent variable ROE is explained or caused by the explanatory variables while 44.5% is unexplained.

The adjusted R-square has the value of 51.9% which shows there is a relationship between customers’ deposit and ROE. This implies that 51.9 variations in ROE is explained by customer deposit.

The Durbin –Watson statistic of 1.229 lies outside the upper limit of 1.420 on the Durbin-Watson d statistic table at 5% level of significance at n =26 and k = 3. This signifies that there is no evidence of autocorrelation in the model.

D. Test of Hypothesis 2

Ho.2: Customers’ deposit has no significant effect on return on equity of commercial banks in Nigeria.

Comparing the pre and post implementation of TSA, the R squared and adjusted R squared of post implementation of TSA is slightly higher than the values in the pre implementation of TSA (0.934>0.555) which implies that the implementation of TSA has affected the return on equity of commercial banks in Nigeria. This is because most fund that are normally deposited to banks are now paid direct to government account thereby affecting deposits in banks. Bank uses deposit for investment in both asset and equity. As such, any things that affect deposit will also affect investment (ROE) in commercial banks.

E. Decision

Both the pre and post implementation of TSA have P-value less than 0.05 (0.0166 and 0.049 respectively). In that case we accept alternate hypothesis and conclude that implementation of TSA has a significant effect on return on equity of commercial banks in Nigeria.

The adjusted R-square has the value of 0.435 which shows there is a positive relationship between customers’ deposit and return on asset. This implies that 43.5% variation in ROA is explained by customer deposit.

The Durbin –Watson statistic of 1.229 lies outside the upper limit of 1.420 on the Durbin-Watson d statistic table at 5% level of significance at n =26 and k = 3. This signifies that there is an evidence of autocorrelation in the model.

The result of the F-statistics shows that there is a relationship between the variables concerned. This is because the F-statistics has the value of 2.058 which is greater than the table value of 1.96.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandard coefficient</th>
<th>Std error</th>
<th>Standard coefficient</th>
<th>T-Statistic</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>60.104</td>
<td>30.229</td>
<td>.150</td>
<td>.249</td>
<td>.018</td>
</tr>
<tr>
<td>Customer Deposit</td>
<td>31.201</td>
<td>215.458</td>
<td>.032</td>
<td>.028</td>
<td></td>
</tr>
</tbody>
</table>

Also, in the result of the post implementation from Table 6 above the R squared showed that 0.455 of the total variation in return on asset (ROA) is as a result of variations in customers’ deposit (TSA). This implied that 45.5% of the sample variation in the dependent variable ROA is explained or caused by the explanatory variables while 54.5% is unexplained.

The adjusted R-square has the value of 0.418 which shows there is a relationship between customers’ deposit and profit after tax. This implies that 41.8% variation in ROE is explained by customer deposit.

The Durbin –Watson statistic of 1.229 lies outside the upper limit of 1.420 on the Durbin-Watson d statistic table at 5% level of significance at n =26 and k = 3. This signifies that there is no evidence of autocorrelation in the model.

The result of the F-statistics shows that there is a relationship between the variables concerned. This is because the F-statistics has the value of 2.059 which is greater than the table value of 1.96.

F. Test of Hypothesis 3

Ho.3: There is no significant effect of customers’ deposit on return on assets of commercial banks in Nigeria.

Comparing the pre and post implementation of TSA, the R squared and adjusted R squared of post implementation of TSA is slightly higher than the values in the pre implementation of TSA (0.490>0.455) which implies that the implementation of TSA has affected the return on asset of deposit money banks in Nigeria. This is because most funds that are meant to be deposited in commercial banks are now paid directly to government account thereby affecting deposits in Nigeria banks. Such reduction in deposit significantly affects investment in commercial banks.

G. Decision

Both the pre and post implementation of TSA have P-value less than 0.05 (0.036 and 0.018 respectively). In that case we accept alternate hypothesis and conclude that
implementation of TSA has a significant effect on return on asset of commercial banks in Nigeria.

XVI. CONCLUSION AND RECOMMENDATIONS

A. Conclusion

The main purpose of adoption of TSA by Federal Government of Nigeria in 2015 was to do away with existence of numerous corrupt practices in the Nigerian Public Accounting System. The stability of the banking industry determines the economic development of any nation because any issue that affects banks has an impact on the economy of the nation. Prior to the adoption of Treasury Single Account (TSA) in Nigeria in 2015, Government Ministries, Departments and Agencies (MDAs) which generate revenue, had multiple accounts in commercial banks. They use part of the revenue generated to fund their operations and then remit the surplus to the federation account. This practice has led to abuse because MDAs pay into government account what they deem fit and as a result government is short paid. The adoption and full implementation of TSA in a dwindling economy cannot be over-emphasized because it discourages corruption and enthrones transparency and accountability in government business.

B. Recommendations

(i) Government should create enabling grounds for commercial banks to operate and be profitable to enable investors to have confidence on the economy because banks drive every economy.

(ii) Commercial banks should increase their customer deposit by engaging in aggressive marketing strategy that will attract private individuals and businesses in order to increase the volume of their liquidity.

(iii) Merger and acquisition should be encouraged in order to increase the capital base of banks and to make them strong and viable.

REFERENCES


APPENDIX

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Source: Researcher’s computation from financial Statements of selected banks from 2013 to 2017.

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