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Effect of Treasury Single Account (TSA) on Liquidity of Deposit Money Banks and Effective Control of governments Cash Resources in Nigeria.

*Oru, Anthony Odu[1], Odumusor, Charles Joseph[2]
[1]*(Department of Accountancy, Cross River University of Technology, Calabar, Cross River State, Nigeria)*
[2]*(Department of Accountancy, Cross River University of Technology, Calabar, Cross River State, Nigeria)*
Corresponding Author: Oru, Anthony Odu

Abstract: *The study assessed the effects of Treasury Single Account(TSA)on the Liquidity of Deposit money Banks and effective control of government cash resources in Nigeria.A survey research design was employed in this study and data was obtained fromprimary source. The study used both descriptive and inferential statistics as the person's moment coefficient of correlation as a statistical tool for its data analysis. The study revealed that the policy implementation and its model has significant impact on the liquidity of Deposit Money banks andthe policy implementation has not afforded government effective control of its cash resources as accountability and transparency are not yet at their peak. The study therefore recommends that the TSA policy model of implementation should be reviewed by the Central Bank of Nigeria, While ensuring effective control of government cash resources should also uphold the liquidity theory to bridge the liquidity problems experienced during its implementation by the maintenance of a minimum flexible monetary policy rate of these public funds to deposit money banks. It also recommends further reconsolidation of the banking sector to allow for mergers and outright acquisition. It further recommends that the ministry of finance sets up a desk office to ensure strict compliance with the policy guidelines.*

Keywords: *Treasury Single Account (TSA), Banks Liquidity, Government Cash Resources.*

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I. Introduction

Until the introduction of the Treasury Single Account (TSA) in Nigeria, Ministries, Departments and Agencies (MDAs) which generate revenue have had multiple accounts in commercial banks. The commercial banks used part of the amounts deposited with them to finance businesses and earn interest. As a result, agencies paid into government account what they deem fit as loopholes kept proliferating within the public sector. The result of this situation included leakages of funds which are due the treasury, embezzlement of public funds, and inability of a government to know her account balances at a glimpse; budgets were prepared using unrealistic projections leading to poor implementation. However, the greatest beneficiaries of this situation were the banks that relied on the deposits from the MDAs and government borrowings from the banks with high-interest rates. Above all, banks no longer cared to mobilize deposits from other sectors of the economy as the balances of government accounts lay idle in the banks. All these stunted the growth of the economy.

Section 80 (1) of the 1999 constitution as amended states that; "All revenues, or other monies raised or received by the Federation (Not being revenues or other monies payable under this constitution or any act of the National Assembly into any other public fund of the Federation established for a specific purpose) shall be paid into and form one consolidated revenue fund of the federation". Successive governments have continued to operate multiple accounts for the collection, and spending of government revenue in flagrant disregard to the provision of the Constitution until in 2012 under the administration of President Goodluck Jonathan that the government ran a pilot scheme with 217 MDAs as a test case. This pilot scheme saved Nigeria a whopping N500m billion from frivolous spending(Adeolum,2015).

The success of this test case resulted in the recent demand by the presidency that all agencies and ministries should close their accounts with deposit money Banks (DMBs). The circular was entitled "*Commencement of Federal Government's Independent Revenue Collection Scheme under the Treasury Single Account (TSA) Initiative".*

International Monetary Fund (IMF, 2010) has defined TSA as a "Unified structure of government accounts that gives a consolidated view of government cash resources. Based on this principle and unity of Treasury, a TSA is a bank account or a set of linked accounts through which the government transacts all its receipts and payments.

Adeolum (2015), added that the maintenance of a TSA will help to ensure proper cash management by eliminating idle funds usually left with DMBs and in a way enhance reconciliation of revenue collection and payments. The impact of the implementation of TSA is cash crunch which results to liquidity challenges in the Banking Sector. Prior to the implementation of the TSA banks fed fat on the "float" created by the duplicated and unaccounted MDA's accounts with DMBs in Nigeria. The question is, what is the effect of TSA on DMBs and has it ensured effective control of government cash resources?

As a matter of fact and even urgent national importance, the continuous stimulation of the private sector and its development to redeem the economy in terms of financing the micro-small and medium enterprises, the TSA remains a huge impediment on the DMB. This is because the public sector funds at the beginning of second quarter of 2015 with DMBs amounted to about ₦2.2 trillion (Adeolum,2015). The impact of such amount of Money leaving DMBs can be imagined. When one considers the fact that each time monthly allocation is released, the banking system is usually a washed liquidity and as soon as the public sector funds dry up through withdrawal by the states and local councils, Liquidity tightens again with interbank rates going up, as well as a rise in the lending rate of DMBs. Moreover, the movement of funds of revenue generating agencies and parastatals like the Nigerian National Petroleum Corporation (NNPC) out of the DMBs will constitute a major impact on the liquidity of DMBs and the Nigerian economy a whole. It thus becomes imperative to investigate the extent of this impact on the liquidity of these banks.

1.1. Research Hypothesis

Ho: There is no significant relationship between the implementation of TSA on the liquidity of DMBs.

1.2 Organization of the study

The rest of the paper is organized in four sections. The review of relevant literature, theoretical framework as well as empirical reviews on the subject matter is contained in section two, section three identifies the research methodology, and section four is on data presentation, analysis and discussion of finding while conclusion and recommendations are stated in section five.

II. Literature Review

2.1 Conceptual Framework

Treasury Single Account (TSA) is one of the financial policies implemented by the Federal Government of Nigeria to consolidate revenue from all ministries, departments and agencies (MDAs) in the country by way of deposits into commercial Banks traceable into a single account at the Central Bank of Nigeria. The policy was introduced to reduce the proliferation of bank accounts operated by MDAs and also to promote transparency and accountability among all organs of the government. Tayo (2015), said that TSA is "The Federal Government independent revenue e-collection initiative that will automate revenue collections of ministries, departments and agencies (MDAs) directly into the Federal Government consolidated revenue fund (CRF) account at the CBN through the Remitta e-collection and other electronic payment channels".

Adeolum (2015), said the adoption of the TSA will involve retail banking which DMBs perform as deposits will yet be made to DMBs and can collect taxes/levies and make disbursements as well as payment of salaries to civil servants, but must operate a zero (O) balance account for all revenue receipt as monies are expected to be transferred electronically to the Consolidated Revenue Account (CRA) at the end of every banking day, hence leaving the banks with no public funds to ensure their operations at no cost of such capital. As a public accounting system, the primary aim of the TSA is to ensure accountability of government revenue, enhance transparency and avoid misapplication of public funds.The few exceptions to the TSA bother on the accounts operated by joint venture partners with government like oil, mining, leases (OMLS) in the oil and gas industry which are not paid to the Consolidated Revenue Funds CBN(2015).

There are particularly two operational models of the Treasury Single Account;

i. The main TSA and associated ledger sub-accounts (where they exist) are to be maintained in a single institution.
ii. The main TSA is maintained in a single banking institution and associated zero balance ledger sub-accounts (ZBA's) (where they exist) are maintained in other institutions from where balances are swept daily to the main TSA in CBN or the appointed main TSA hosting financial institution.

From the above duo models, it is obvious that Nigeria is operating on the second (ii) model.

2.1.1 Importance of the treasury single account

The following are importance of the operation of a treasury single account in any economy (Adeolu,2015).

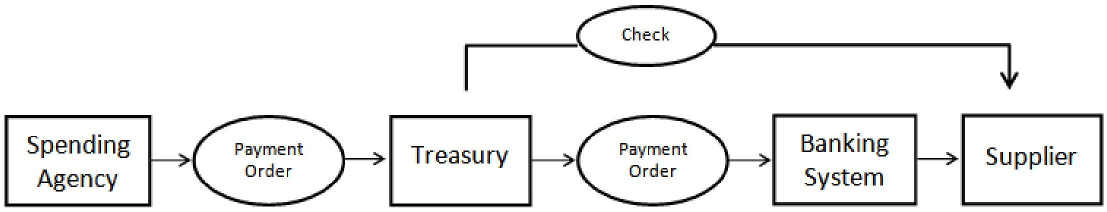
i. The TSA primarily brings all government funds in bank accounts within the effective control and operational purvey of the treasury.

ii. The TSA ensures as well as enthrones centralized, transparent and accountable management of government revenue.
iii. It facilitates effective cash management
iv. It ensures availability of cash
v. The TSA promotes efficient management of domestic borrowings at minimal cost.
vi. The TSA allows optimal investment of idle cash.
vii. The implementation of TSA blocks loopholes in revenue management.
viii. The TSA establishes an efficient collection and disbursement mechanism for government funds.
ix. The TSA improves liquidity reserve
x. Eliminates operational inefficiency and costs associated with maintaining multiple accounts with multiple financial institutions.

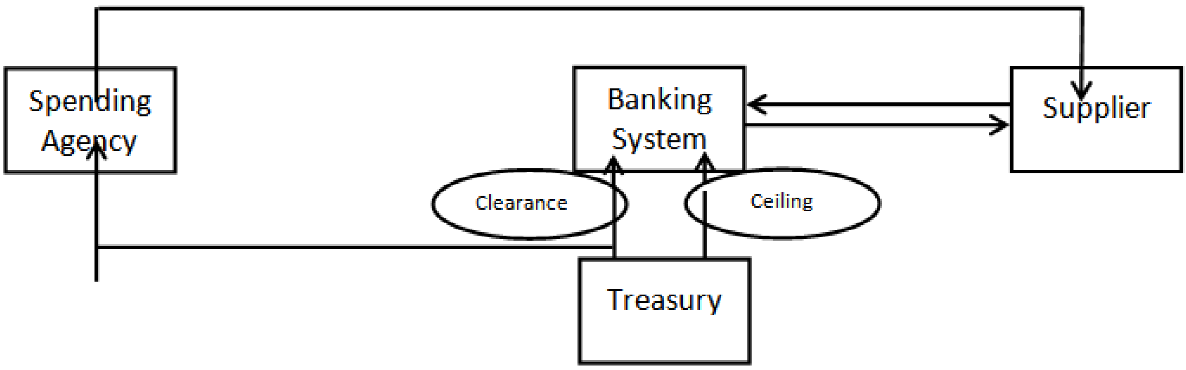
There are three (3) payment system under the treasury single account as opined by (Garamfalvic, 1996).

Fig.1 Three Treasury Payment Systems

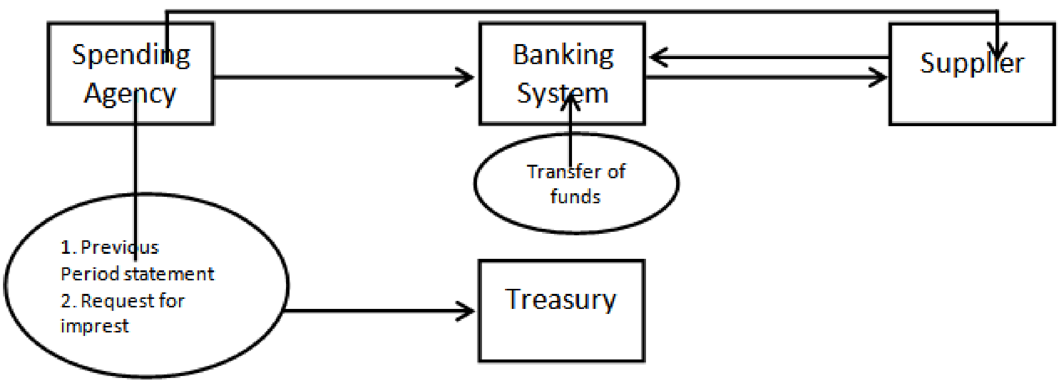
Case 1. Payment via Centralized Treasury



Case 2.Payment via Spending Agencies Bank Account.



Case 3. Payment via Imprest System



In practice, within the broad concept of a Treasury Single Account,there are a variety of methods of centralizing transactions and cash flows. These can be grouped very broadly into the following categories

- **Treasury Single Account and Centralized Accounting Controls:**

Request for payment justifying them (e.g. invoices) are sent to the treasury, which controls them and plans their payment. The treasury manages the float of outstanding invoices.

- **Passive Treasury Single Account consisting of only one Central Account:** Payments are made directly by spending agencies, but through a TSA. The Treasury through the budget implementation plan, sets cash limits for the total amount of transactions, but does not control individual transaction.

- **Passive Treasury Single Account including several Subaccounts:**

In such cases, the TSA is organized according to the following lines: (i)ministries hold accounts at the Central Bank, with subsidiary accounts of the treasury's account, (ii) spending agencies' holds account either at the Central Bank or with Commercial Banks that must be authorized by the treasury, (iii) spending agencies' accounts are zero-balance accounts, with money being transferred to these accounts as specific approved payments are made, or the treasury; (iv) spending agencies' accounts are automatically swept at the end of each day (where the banking infrastructure allows daily clearing); (v) the Central Bank consolidates the government's position at the end of each day including balances in all the government accounts. This system allows but does not require diversified banking arrangement. Payments can be made through banks selected on a competitive basis.

Case 1 in figure 1, summarizes the model where payments transactions are centralized within the Treasury Single Account, which can play either an active or passive role in the sense described above. Case 2 refers to a "passive' Treasury Single Account including several subaccounts.

When the Central Bank does not have an adequate network of regional branches, or does not have the capacity to handle the large volume of transactions that are associated with government payments and receipts, the retail banking operations are delegated to a fiscal agent (normally an authorized commercial bank). The fiscal agent that relate to government operations, and the agent makes daily deposits of all government revenues to the TSA in the Central Bank. These arrangements can be set up both where the payments are channeled through the Treasury and where government agencies are directly responsible for authorizing payments.

Adeolu (2015),opines that the stakeholders in the accounting system of a unified payment platform (TSA) have various roles and responsibilities in the optimal implementation of the TSA policy of the Federal Government of Nigeria. The long-term success of the scheme requires the effective collaboration of different stakeholders, during the pre-implementation, implementation and post-implementation phases of the policy. The stakeholders shall include but not limited to;

-Central Bank of Nigeria
-Accountant General
-Ministries,Departments and Agencies
-Commercial Banks

2.1.2 Features of treasury single account

According to IMF (2010), full-pledge TSA shares three essential features.

- First, the banking arrangement of government is unified, to enable the Ministry of Finance (MOF) or Treasury has an oversight responsibility for, over government cash flow in and out of these bank accounts.
- Second, no other Government agency operates bank accounts outside the Treasury Single Account arrangement.
- Thirdly, the consolidation of resources should be comprehensive, and encompass all funds both budgetary and extra-budgetary. Therefore the TSA in a payment system in which all revenues due for the government are paid into a unified account domiciled with the CBN. Its objective is to ensure fiscal discipline and transparency management of the nation's finances (CBN, 2015).

2.1.3 Treasury single account and banks liquidity.

In Nigeria, Deposit money banks have been the custodians of government funds and therefore, with the introduction and maintenance of the treasury single account, banks will be deprived of the free flow of funds from ministries, departments and agencies.

Indeed, it was estimated that Banks held about ₦2.2 Trillion of public funds in the second quarter of 2015 which have been a float in the account of MDAs with Banks which would have constituted their excess cash holdings for operational transactions (Adeolu,2016). As a matter of fact, commercial banks tend to lose immensely from the implementation of Treasury Single Account as this has caused insufficiency of available cash in the banking system, resulting in a surge in money market rates as banks source for funds to cover their liquidity position. The Nigerian Banking system will be affected with the implementation of the TSA regarding deposits and funding cost structure. The TSA generated much more fear in the Banking Industry even before its implementation, as it had a high monetary policy rate at 13%, cash reserve ratio at 20% and 75% available for private and public sector respectively revealing an unfavorable situation for banks on implementation.

The IMF (2010) paper entitled Treasury Single Account; concept, designs and implementation issues also stated that the implementation of TSA is combined with the elimination of the "float" in the banking and payment system. Irrespective of how tough this policy will be on banks, it will perhaps compel the banks to focus on the funds of the real sector of the economy rather than spending on Federal Government projects, oil and gas transactions, forex dealings etc. Any bank that fails to operate based on the core banking functions for which they were licensed must definitely close shop, as it will cause retrenchment/downsizing of staff and increase under-employment in the banking industry.

However, it is on record that the Nigerian foreign market capitalization dropped by ₦55 billion as at 27th July, 2016 (NSE,2016) and five (5) of the seven (7) major participants where Banks, hopefully this may have been trigged by their liquidity short fall.

Rossi (2016), Global Head of Liquidity and Investment Product Development of Deutsche Bank said "*Previously, banks were able to leverage end-of-day liquidity to maximize returns for corporations with extra cash, but regulations around operational risk and liquidity are altering the way in which Banks classify, report on, and balance liquidity and deposits".* That tightening rules around non-operational deposits, leverage ratios and other balance-sheet factors ultimately mean that overnight deposits are not attributed to operational flow, hence, are not valuable as operational balances. At the same time, the cost of credit is also rising with both trends compounded by negative interest rates in Europe and other regions of the world.

Rossi(2016), *Treasurers must first acknowledge the market circumstances and that of its banking partners.* After assessing their current liquidity setup-including Global visibility from forex payments and subsidiary flows to existing investments, they must leverage portfolio management techniques even for operating cash and current accounts. This he opines can be achieved by utilizing scenario building to identify where and how their cash reserve ratio(CRR)are best employed. This however, reflects on the effect of TSA on the liquidity of banks which has impeded on the liquidity base of commercial banks as there have prior to its implementation relied on the idle funds in their coffers which constituted their operational balances.

For deposit money banks not to make profits from deposits is one aspect of failure in liquidity optimization and as such the zero balance accounts of MDAs held by banks really mean nothing to its liquidity as its not built into its operational balances and can't accrue any interest for the banks.

2.1.4 Treasury single account and effective control of government cash resources

Garamfalvi(1996),government sees TSA as a useful tool to establish centralized control over its revenue through effective cash management.The implementation of TSA in Nigeria is meant to block financial leakages and tame the tide of corruption and embezzlement, and enable the MOF monitor the inflow and outflow of funds, hence, augment the fallin oil revenue due to falling oil prices. CBN(2015),reasoned in the same direction and said that the implementation of the TSA will enable the MOF monitor funds flow as no agency or parastatal will maintain any operational bank account besides the approved accounts by the Ministry of Finance (MOF).

Udoma (2016), says that the implementation of the TSA will have a positive effect on the National economic planning, as it will enable swift and full budgetary implementation; reduce leakages and other irregularities in the MDAs.

Adeolum (2015), opines that the primary benefit of the TSA is to provide for proper monitoring of government receipts and expenditures. In Nigeria's case, it will help to block most leakages if not all that have been the bane on the economy. The TSA is expected to curb situations where ministries, departments, and agencies manage their finances like independent empires, and remit less than generated revenue to government treasury and also ensure agencies of government spend in line with duly approved budgetary provision. Tayo(2015),stated that the government should make banking arrangements for efficient management and control of its cash resources. It should be designed to minimize the cost of government borrowing and maximize the opportunity cost of fund.

IMF (2010), made it clear in its 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 banks accounts often fail to earn market-related remuneration. Second, the government, being unaware of these resources, incurs unnecessary borrowing cost on raising funds to cover a perceived cash shortage.

Thirdly, idle government cash balances in banks are not idle for banks themselves, and can be used to extent credit.These obviously have been the case in the Nigeria economy as Nigeria still owes a huge amount of both external and internal debts. Therefore, the implementation of the TSA will promote a healthy public financial management system in Nigeria. Hence, a member of the Monetary Policy Committee (MPC), in his contribution said that it has indeed become very clear that the total economic restructuring is an urgent imperative one. Although the falling oil price is making the fiscal space more complicated, it is believed that there is room for improvement. One area of necessary improvement is the reduction of wastages in government finances, which is a result of poor financial management. By far, the greatest single example of this is the absence of the TSA.

In a paper titled Treasury Single Account; concept, design and implementation issues outlined the benefits of operating a TSA. It explained its primary objective to an economy is to ensure effective aggregate control over government cash balances. The IMF also stated that TSA results in substantially lower transaction cost because of economies of scale in processing settlements and on its establishment, it is combined with the elimination of the "float" in the banking and payment systems, and the introduction of patent fee and penalty structures for payment services. Many governments have achieved substantial reduction in their real cost of banking services by introducing the TSA(IMF,2010).

Central planning has left institutional and organizational legacy characterized by ill-defined boundaries between the budgetary and banking sectors. There was no appreciation of the fact that idle cash is costly because of foregone interest revenues, nor that borrowing made necessary by shortages of cash resources at the aggregate level increased future expenditures in terms of interest payments.(Premchard ,1995).

2.2 heoretical framework

The study into the effect of the Treasury Single Account on the liquidity of banks and effective control of government cash resources is anchored on:

2.2.1 Agency theory

The agency theory resonates from the separation of ownership and control in modern corporation which creates a principal agent relationship. The principal agent relationship evokes transfer of trust and duty to the agent with the belief that the agent is opportunistic and will pursue interest including executive fraud, which antagonizes interest of the principal (Jensen and Meckling, 1976). The theory, therefore, presumes tension between the agent and principal, necessitating the latter to put in place mechanisms that will constrain the latter from engaging in activities that are inimical to the existence of the organization (Tsegba and Upaa, 2015).In the business world such constraining mechanisms include close monitoring of entrenched management (the agent) through the board of directors (BoD), the attest function of the external auditors and ownership structure that places the owners (shareholders) as close as possible to the agent(Dockery, Tsegba and Herbert, 2012). In government circle the internal auditfunction is presumed to ensure lead procedures are followed strictly especially with respect to cash receipts and payment. The TSA is one of the mechanisms that monitor the movement of cash in terms of inflows (receipts) and outflows (payments).

2.2.2 Liquidity management theory

The theory of liquidity management deals with the management of internal capital investing and lending to subsidiaries and working to optimize commercial cash flows, working capital, and minimize idle cash through netting and cash concentration, confirmation and reconciliation of receipt for timely disbursement to minimize external borrowings, optimize interest expenses, tax expenses, avoid liquidity problems and creating the "cash is king' culture for smooth operations and suppliers relationship(Premchad,1996).

Liquidity management upholds that avoiding losses around deposits is only one aspect of liquidity optimization (Rossi,2016).

2.3Empirical review

Kanu (2016) investigated the impact of Treasury Single accounts on the liquidity of commercial banks in Nigeria. The sample was ten (10) banks drawn from a population of Twenty(24) banks. Data were collected through primary sources via a structured questionnaire. The descriptive and inferential statistics and the chi-square were used for data analysis.

The study revealed that: The implementation of treasury Single Account influenced the liquidity base and performance of the banking sector in Nigeria. It is certain that when there is liquidity problem, the performance of banks will be affected.

Kanu (2016) recommends that;CBN should come up with an arrangement to address this.

Banks should source for funds from other sectors of economy, and reduce concentration on government funds.

Private savings and investments should be encouraged.

The choice of the TSA should be informed and guided by the availability of clear operational basic technological infrastructure that supports the implementation of the model of their choice.

CBN should go beyond the guidelines and put in place measures to correct any lapses of negative impact of the policy both on the banking sector and the economy at large.

Banks should give credit facilities, investment and saving opportunities to people who are denied as this will improve the economy and result to a sustainable banking sector in the country.

Bashir(2016),also conducted an investigation into the extent the Treasury Single Account (TSA) can blog financial leakagespromote transparency and accountability in public financial management and promote the Nigerian economy. The sample constituted of 72 people of knowledge and experience in the area under study from the Federal pay offices, Nigerian Custom Service offices, Federal Polytechnics and Corporate Affairs Commission drawn from workers in the Federal offices of MDAs in Bauchi State. Data were obtained through primary source via structured questionnaire designed with response using the likert-type five scales.The study used the descriptive statistics and cronbach'salpa coefficient, coefficient of correlation by Pearson's were used for data analysis.

The study revealed that Treasury Single Account is capable of blocking financial loopholes and promoting transparency and promoting accountability.

Bashir(2016), recommended the following;

Government should engage in massive enlightenment campaign on the importance of the policy and also overhaul the capacity of the Ministry of Finance and the CBN to cope with the challenges associated with implementing the TSA.

Government should secure as soon as possible, the appropriate legislative support to facilitate the relevant regulatory environment which will drive effective implementation of the TSA, as well as need for more legislation to cover the states and local governments.

For TSA policy to be effective, the fiscal sunshine bill needs to be put in place, the existence of the Act in place, budgetary process and implementation, including contract awards, should be in the open for Nigerians, to see both how revenue are generated and how public money is being spent by those in government, and why.

Government should review the TSA to specifically safeguard the financial autonomy in the Nigerian educational institutions.

III. Methodology

A survey research design was employed in this study. Primary data was obtained from respondents through the administration of structured questionnaires to top ten (10)systematic important banks out of the twenty-three(23) DMBs in Nigeria during the field work.

The main techniques used for data analysis in this study are the descriptive & inferential statistics and Pearson's moment coefficient of correlation (r); for analyzing data to test the hypothesis.

The person's product-moment correlation co-efficient(r) is presented as thus;

$$r = \frac{N \sum X y - (\sum X)(\sum y)}{\sqrt{(N(\sum X^2 - (\sum X^2)(N \sum Y^2 - (\sum Y)^2}}$$

Where: r = coefficient of correlation

$\sum X$ = the sum of X in the distribution

$\sum Y$ = the sum of Y in the distribution

$\sum XY$ = the sum of the product of X and Y

$\sum X^2$ = the sum of X^2 in the distribution

$\sum Y^2$ = the sum of Y^2 in the distribution

n = the number of data observed.

The relationship is determined to be significant or not by the assertion of Althoen(1994) which assert that a relationship is positive when the value of (r) is between zero (0) and (+1) and negative when (r) is between zero (0) and (-1) and no relationship at all when (r) is zero (0).

The hypothesis is tested by the student's t-test where:

$$t = r \frac{n - 3}{\sqrt{1 - r^2}}$$

Where t = output of the model

r = coefficient of correlation

r^2 = coefficient of determination

The T-test has t_t = 3.182 (constant)

Reliability and Validity of Data: The information on the questionnaire have been provided by experienced respondents as seen in the service data of respondents.

IV. Data Presentation, Analysis And Presentation Of Results

4.1. Data presentation:

The study is on effect of treasury single account on the liquidity of deposit money banks as well as examining the objectives of the policy implementation. The data presented is from a field survey using structured questionnaires thereby presenting data from respondent on their personal information,effectof TSA implementation on effective control of government cash resources, and its effectson liquidity of banks. Data is analyzed and the result presented to validate as well state which hypothesis is accepted and the effect of the policy on the liquidity of banks and control of governments cash resources.

The Tables represent the views of respondents on effect of TSA on the liquidity of DMBs and the benefit of TSA to the Nation.

Table 4.1.1 Years of Service of Respondent

Duration of Work (Years)	Number of Respondent	Percentage (%)
0 –1	0	0
1–5	5	16. 13
5–10	9	29.03
10 and above	17	54.84
Total	**31**	**100**

Source: Questionnaire Administered 2016

In Table 4.1.1; Nine (9) respondents have worked with their banks for five (5) years and above and 17 have worked with their banks for 10 years and above totaling 26 respondents representing 83.87% of the total respondents. This implies most of the people who answered the questions were experienced therefore may give useful information required for the study.

Table 4.1.2 Impact of Implementation of TSA on Effective Control of Government Cash Resources

Opinion	Respondent	Percentage (%)
Strongly Disagree	1	3.22
Disagree	5	16.13
Undecided	6	19.35
Agree	13	41.95
Strongly Agree	6	19.35
Total	**31**	**100**

Source: Questionnaire Administered 2016

In Table 4.1.2; One (1) respondent, representing 3.22%, strongly disagreed that the implementation of TSA has not afforded government effective control over its cash resources, five (5) respondents representing 16.13% disagreed that the implementation had no impact on effective control of government cash resources totaling a disagreeable respondents of 6 and 19.35% of respondents. Six (6) respondents representing 19.35% were undecided. Thirteen (13) respondents representing 41.95% of the respondent agree that implementation of TSA has afforded government effective control over its cash resources, and six (6) respondents representing 19.35% strongly agreed it has afforded government control over its cash resources.
However, a total of 19 respondents, representing 61.3% of the total respondents agree that TSA implementation has afforded government effective control over its cash resources.

Table 4.1.3 Impact of Implementation of TSA on Liquidity of Deposit Money Banks

Opinion	Respondent	Percentage (%)
Strongly Disagree	1	3.22
Disagree	0	0
Undecided	0	0
Agree	11	35.48
Strongly Agree	19	61.30
Total	**31**	**100**

Source: Questionnaire Administered 2016

Table 4.1.3 Indicates that 96.78% representing 30 respondents subscribed that the implementation of TSA impacted on the Liquidity of DMBs, with 11 respondents out of the 30 representing 35.48% agreeing and 19 respondents representing 61.30% strongly agreeing that the implementation impacted on the Liquidity of

DMBs while one (1) respondent and 3.22% of the total respondent disagreed. This implies that the implementation of TSA does correlate with the Liquidity of DMBs.

4.2 Data analysis

The main technique for data analysis used in this research is inferential statistics using the Pearson moment-product coefficient of correlation to test the hypothesis of the study.

There is a correlation analysis using SPSSWIN to determine the effect of TSA implementation on the Liquidity of Banks, from table 4.1.2 and 4.1.3.

Impact of the implementation of TSA on the Liquidity of Banks

N=31

Variables	$\sum x$	$\sum x^2$	$\sum xy$	
	$\sum y$	$\sum y^2$		r-value
Impact of implementation Of TSA on liquidity of bank	88	6400	3040	
				0.00001*
Impact of implementation of TSA On effective control of governments Cash resources.	38	1444		

*Correlation is sig. at the 0.05 level critical r=1.70 df = 29

The coefficient of 0.00001 proofs there exist a strong positive relationship between the implementation of TSA and the Liquidity of Banks in Nigeria.

4.3 Test of hypothesis:

In testing the hypothesis,the Null hypothesis is tested using the critical table decision rule and the student t-test.

Testing Hypothesis

The hypothesis states in its null form;

Ho; Thereis no significant relationship between implementationof Treasury single accountand Liquidity of Deposit money banks.

Decision Rule

Reject the Null hypothesis and accept the alternate hypothesis if the calculated r-value is more than the value of the critical table.

The result of the coefficient of correlation using the SPSSWIN shows that the calculated r-value 0.00001 is less than the critical value of 1.70 at 0.05 level of significance with 29 degree of Freedom. The null hypothesis is rejected that; there is no significant relationship between implementation of TSA and the Liquidity of DMBs.

In testing hypothesis, the student t-test will be used as odu, E.N(2001) described it as the one among all the t-test available which makes use of information in its original data.

Reject Ho if $t_c > t_t$
Accept H_1 if $t_c < t_t$

$$t_c = \frac{r \quad n-3}{\sqrt{1-r^2}}$$

Where $t_t = 3.182$
$t_c = 0.000058$

The Null hypothesis (Ho) which state there's no significant relationship between implementation of the TSA and the Liquidity of DMBs, is rejected as $t_c < t_t$(0.000058< 3.182). The alternate hypothesis (HA1) which states that; Thereis a significant relationship between implementation of TSA and the Liquidity of Deposit money banks.

4.4. Discussion of findings

The findings agrees to the underlying principle that TSA implementation has brought about effective control of Government cash resources as its primary objective as stated in an (IMF 2010) paper, Treasury Single Account;, concept, design and practice. This also agrees with the findings of Yusuf (2016), that the implementation of TSA can blog leakages, promote transparency and accountability in public finance management as well as in agreement with Kanu (2016) who agreed strongly that TSA is implemented and is in line with the theory of cash management and Treasury function, Garamfalvic(1996). Furthermore, the finding which is stated in hypothesis (HA); that the implementation of TSA has significant relationship with the Liquidity of Deposit Money Banks, is also in conformity with the findings of Kanu (2016) that the implementation of the TSA has impacted on the Liquidity of DMBs and all this are in consonance with the postulations of Rossi (2016) of the Deutsche Bank that overnight deposits that do not constitute part of operational balances are not beneficial to the Liquidity of the Banking Institutions as banks now hold zero-balance accounts for MDAs. These Liquidity problems are common to all regions of the world today particularly in Europe and Africa. This is however, not in total agreement with the postulation of Rossi(2016),which further opines that treasurers must first acknowledge the market circumstances and those of their Banking partners.

V. Summary Of Findings, Conclusion And Recommendations

5.1. Summary of Findings:

The study is intended to examine the extent to which the implementation of the TSA has impacted on the Liquidity of DMBs and effective control of government cash resources. The study employed descriptive and inferential statistics for data analysis.

The highlights of findings in this research are that;

i. There is a significant relationship between the TSA and the Liquidity of Banks.
ii. The implementation of TSA has negatively impacted on the Liquidity of Banks. Hence the cash crunch and eliminated float in the banking sector.
iii. The crunch through the implementation of TSA and withdrawal of idle-funds from the Banks has made surge in the inter-bank call rate.
iv. The Liquidity problem of Bank has reduced the value and volume of credit to its customers as well as negatively impacted on economic activities in the country.
v. TSA actually blocks loopholes and curbs corruption as it has afforded government effective control of its cash resources.

5.2. Conclusion:

The impact of TSA on banks liquidity depends mainly on the model of TSA adopted and the policy response of the Central Bank of Nigeria (CBN).

The study reveals that the implementation of TSA has influenced the Liquidity base of Banks and this is basically so because of the great level of reliance of Banks on public funds which is being left idle and used to extent credit at no cost of such operational balances.

More so, it was discovered that the primary objective of the TSA which is to afford government effective control of its cash resources is not optimally achieved as revealed in Table 4.2. This is expository to the fact that corruption has not being eradicated but may have been reduced to its barest minimum and that which TSA seeks to promote; Accountability and Transparency is not at its peak yet, hence government needs to enforce total compliance of the implementation of TSA within its stakeholders through effective collection and reconciliation of revenue and other receipts of government. Pertinent of notice is the fact that the theory of cash management and Treasury function is actually being practiced but that of Liquidity management, government has failed to recognize the assertion of optimizing commercial cash flow, working capital and avoiding Liquidity problems but it upheld only minimization of idle cash (*Rossi, 2016).*

Rossi (2016) also opined that treasurers must note the market circumstances and those of their banking partners. This consolidation would have kept us on the alternative model for the TSA implementation as experienced in the test case of 2015 like Peru using the deposit money banks.

However, it is also imperative for banks to avoid arm chair activities by meeting their customers where they are and reducing concentration on government funds but source for funds from other sectors of the economy. Banks should deliver credit facilities, investment and saving opportunities to people, and encourage people denied of such access as this will improve their liquidity base and result to a sustainable banking sector in the country, as they look inward to face the core functions of which it is licensed to operate.

5.3 Recommendations

In order to improve on the Liquidity base of the Banks in the midst of affording government effective control of cash resources as well as eradicating corruption in entirety while improving on accountability and transparency through the implementation of TSA, it is necessary that it undertakes the following;

i. The Central Bank should maintain a flexible minimum monetary policy rate (MPR) or discount rate so as to enable the Banks take advantage of the alternative measures of meeting the unexpected withdrawal and Lending demands and reduce the tendency of maintaining idle cash at expense of profitability.

ii. The CBN should maintain the implemented TSA policy, but on a different model which accepts the Banks as the custodian of the main account as this will provide for Liquidity problems as well as reduce the inter-bank call rate surge.

iii. A TSA compliance desk should be constituted with the Federal Ministry of Finance to ensure total compliance to the policy and ensure reconciliation between MDAs, Banks, collection agent, payers and the treasury to ensure total compliance to the policy thereby eradicating corruption, as well as improving accountability and transparency within its stakeholders.

iv. The CBN should call for another round of consolidation to open up for mergers and outright acquisition to enable availability of mega banks that can meet the liquidity needs of teeming Nigerians.

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