DIALECTICS OF TREASURY SINGLE ACCOUNT AND PUBLIC FINANCIAL MANAGEMENT IN TERTIARY INSTITUTIONS IN NIGERIA

Dr. Dennis S.C. Amobi  
Department of Public Administration, Nnamdi Azikiwe University, Awka, Nigeria  
E-mail: successamobi27@gmail.com  
Nneka Grace Ejeteh  
Department of Public Administration, Nnamdi Azikiwe University, Awka, Nigeria

Abstract
This study examined the application of the concept of treasury single account (TSA) in the management of public finances of tertiary institutions in Nigeria. Nnamdi Azikiwe University, Awka was used as case study. TSA is a bank account or a set of linked bank accounts through which the government transacts all its receipts and payments and gets a consolidated view of its cash position at any given time thus minimizing borrowing costs. The study adopted descriptive survey research method. Data for the study was collected from primary and secondary sources. Forty questionnaires were distributed while thirty-two respondents properly responded. The data generated were analyzed using descriptive and inferential statistics. The hypothesis formulated was tested using chi-square contingency test. The findings show, among others, that TSA finance management policy has not effectively succeeded in eliminating fraud in the management of public finances in tertiary institutions in Nigeria. Important recommendations were therefore suggested to remedy defects in the operation of the TSA in our tertiary institutions and the country as a whole.

Keywords: Treasury Single Account, Public Finance Management, Transparency, Accountability

Introduction
Public finance in the words of Browning and Browning (1979) is concerned with the study of how government policy, especially tax and expenditure policy, affects the economy and thereby the welfare of its citizens. Every government the world over is often confronted with the challenges of raising and applying funds judiciously for the provision of public goods. To achieve its aim of service delivery, proper financial management and control of resources in the public sector by the government is a desideratum. In Nigeria however, public financial accountability has always been a serious challenge to successive governments. This is largely because sourcing of funds in the public sector is a matter of legislative authority and subsidy and as such, efficiency in resource allocation, utilization and accountability is unduly compromised. To make up for this lapse, government often resorts to taxes as a convenient way of escaping the rigors of financial performance. Section 80(1) of the 1999 constitution of Nigeria expressly provides that “all
revenues or other moneys raised or received by the federation (not being revenue or other moneys 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. This constitutional imperative however appears to be clearly observed more in the breach by successive administrations in the country going by the activities of the ministries, departments and agencies (MDAs) of the government. These MDAs continue to operate multiple accounts for the collection and disbursement of government revenues.

The fragmented systems of handling government receipts and payments provides safe ground for various categories of financial infractions as the ministry of finance/treasury lacks a unified view and centralized control over government’s cash resources. There has been reported and proven cases of public officials defrauding government of funds by establishing and operating multiple and fake accounts for their various offices through which they siphon public funds. Cases abound also of government officials collecting and stashing their office budgetary allocations into private accounts in commercial banks where they negotiate percentages with their bankers on the funds illegally deposited. In some cases, commercial banks deliberately delay the remittance of revenues collected on behalf of the government for private purposes. A further consequence of this unfortunate arrangement is that cash lies idle for extended periods in numerous bank accounts held by MDAs while the government continues to borrow to execute its budget. The continued delay in returning government accounts to Central Bank adds to the huge cost of government debt due to poor cash flow management. For example, in 2015 the total cost of debt service is ₦1 trillion which is about one-third of the federal government revenue before borrowing. Nobody therefore needs a soothsayer to know that the financial situation of the country is dysfunctional and unsustainable (Oyedele, 2015).

Prompted by intense pressure on the country’s cash flows in the face of growing statutory and social responsibility, the government of Nigeria was forced to initiate actions to arrest the growing spate of financial infractions in the public sector. To this end, the government adopted the treasury single account (TSA) finance management policy with the hope of entrenching transparency, efficiency and accountability in public finance management in Nigeria.

Objectives of the study
The broad objective of this study is to assess the impact of the treasury single account policy on the management of public finances in Nigeria’s tertiary institutions. The specific objectives are to:

i. Examine the level of compliance in the application of TSA in our tertiary institutions.
ii. Ascertain if the treasury single account has entrenched transparency and accountability in public financial management particularly in our tertiary institutions.

In order to broaden our knowledge on the issues raised, the literature on the subject is thematically organized under the following sub-themes and reviewed:

(i) The concept of TSA.
(ii) Objectives and benefits of the Treasury single Account.
(iii) Models and dynamics of TSA.

The Concept of Treasury Single Account
A treasury single account (TSA) is 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 TSA is a bank account or a set of linked accounts through which the government transacts all its receipts and payments (Pattanayak and Fainboim, 2010). According to the Central Bank of Nigeria (2016), the treasury single account initiative is the operation of a unified structure of Government Bank Accounts, in a single account or a set of linked accounts for
ALL Government payments and receipts. The emphasis on ‘ALL’ in the CBN’s definition underscores the fact that the TSA directive applies to all fully funded organs of government like the Ministries, Departments, Agencies and Foreign Missions, as well as the partially funded ones, like Teaching Hospitals, Medical Centres, Federal Tertiary Institutions, etc. Agencies like the Central Bank of Nigeria, Securities and Exchange Commission, Corporate Affairs Commission, Nigeria Ports Authority, Nigeria Communications Commission, Federal Airports Authority of Nigeria, Nigeria Civil Aviation Authority, Nigerian Maritime Administration and Safety Agency, Nigeria Deposit Insurance Corporation, Nigeria Shippers Council, Nigeria National Petroleum Corporation, Federal Inland Revenue Service, Nigeria Customs Service, Mining, Minerals and Sustainable Development, Department of Petroleum Resources are also affected. For any agency that is fully or partially self-funding, Sub-Accounts linked to TSA are to be maintained at CBN and the accounting system will be configured to allow them access to funds based on their approved budgetary provisions (Pattanayak and Fainboim, 2010).

Oyedele (2015) offered a metaphorical analysis of the treasury single account concept and why the government is embarking on such exercise. According to him, the implementation of the TSA can be likened to a rich businessman who has 28 wives and 542 children altogether a family of 571 each administering a division or unit of the business empire. Each unit administrator is authorized to spend money based on pre-approval by the family head. For some reasons each unit prefers to keep their monies separate. By implication some divisions have to borrow to keep their operations running even as others may have cash surpluses not immediately required. Incidentally it costs far more to borrow than you get from savings thereby unnecessarily increasing the family‟s debt and related costs. It is even more painful knowing that some of the units end up borrowing the same excess funds kept with the moneylenders by other units. The family head therefore directed all units to henceforth keep all their funds in a central account so that he can have a view of all revenue and expenses and so that there may be less need to borrow externally going forward.

Features of the Treasury Single Account

A full-fledged TSA, according to Pattanayak and Fainboim, (2010) shares three essential features:

i. The government banking arrangement should be unified, to enable Ministry of Finance (or treasury) oversight of government cash flows in and out of these bank accounts. A unified structure of government bank accounts allows complete fungibility of all cash resources, including on a real-time basis if electronic banking is in place. The TSA structure can contain ledger sub-accounts in a single banking institution (not necessarily a central bank), and can accommodate external zero balance accounts (ZBAs) in a number of commercial banks.

ii. No other government agency operates bank accounts outside the oversight of the treasury. Options for accessing and operating the TSA are mainly dependent upon institutional structures and payment settlement systems.

iii. The consolidation of government cash resources should be comprehensive and encompass all government cash resources, both budgetary and extra-budgetary. This means that all public monies irrespective of whether the corresponding cash flows are subject to budgetary control or not (e.g., in the case of reserve funds, earmarked funds and other off-budget/extra-budgetary funds) should be brought under the control of the TSA. The cash balance in the TSA main account is maintained at a level sufficient to meet the daily operational requirements of the government (sometimes together with an optional contingency, or buffer/reserve to meet unexpected fiscal volatility).

Additionally, establishing a TSA usually requires a legal basis to ensure its robustness and stability. Being legally recognized is thus a precondition that is particularly important in those
countries where the “presumed” autonomy of some institutions is an obstacle to the implementation of a TSA.

Objectives and Benefits of the Treasury Single Account

The primary objective of the TSA is to ensure effective aggregate control over government cash balances. The consolidation of cash resources through a TSA arrangement facilitates government cash management by minimizing borrowing costs. In the absence of a TSA, idle balances are maintained in several bank accounts. Effective aggregate control of cash is also a key element in monetary and budget management.

There are other objectives for setting up the TSA. They include:

(a) Minimizing transaction costs during budget execution, notably by controlling the delay in the remittance of government revenues (both tax and nontax) by collecting banks, and making rapid payments of government expenses.
(b) Facilitating reconciliation between banking and accounting data
(c) Efficient control and monitoring of funds allocated to various government agencies and
(d) Facilitating better coordination with the monetary policy implementation.

The benefits of the TSA, which flow from its objectives, are as follows:

(a) Allows complete and timely information on government cash resources. 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, complete updated balances should be available daily.
(b) Improves appropriation control. The TSA ensures that the Ministry of Finance has full control over budget allocations, and strengthens the authority of the budget appropriation. When separate bank accounts are maintained, the result is often a fragmented system, where funds provided for budgetary appropriations are augmented by additional cash resources that become available through various creative, often extra-budgetary, measures.
(c) Improves operational control during budget execution. When the treasury has full information about cash resources, it can plan and implement budget execution in an efficient, transparent, and reliable manner. The existence of uncertainty regarding whether the treasury will have sufficient funds to finance programmed expenditures may lead to sub-optimal behavior by budget entities, such as exaggerating their estimates for cash needs or channeling expenditures through off-budget arrangements.
(d) Enables efficient cash management. The TSA facilitates regular monitoring of government cash balances. It also enables higher quality cash out turn analysis to be undertaken (e.g., identifying causal factors of variances and distinguishing causal factors from random variations in cash balances).
(e) Reduces bank fees and transaction costs. Reducing the number of bank accounts results in lower administrative cost for the government for maintaining these accounts, including the cost associated with bank reconciliation, and reduced banking fees.
(f) Facilitates efficient payment mechanisms. 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 payments. The establishment of a TSA is usually combined with 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 the TSA.
(g) **Improves bank reconciliation and quality of fiscal data.** TSA allows for effective reconciliation between the government accounting systems and cash flow statements from the banking system. This reduces the risk of errors in reconciliation processes, and improves the timeliness and quality of the fiscal accounts.

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

**Models of TSA**

There are basically two treasury single account models. A type relates to a system where the main TSA and associated ledger sub-accounts (where they exist) are to be maintained in a single banking institution. Another type is where the main TSA is maintained in a single banking institution and associated zero balance ledger sub-accounts (ZBAs) (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.

As the central bank acts as the fiscal agent of the government, the custody of the TSA in most countries is with the central bank. Although in theory, the main account of a TSA system may also be held at a commercial bank. In fact, there is no realistic alternative for economies without a well-developed commercial banking system. In practice, the government banking arrangements may consist of several bank accounts which can be at both the central bank and commercial banks. However, the balances in commercial banks should be cleared every day and all government cash balances should be consolidated in one central account—the TSA main account—of the treasury at the central bank. There are also instances, particularly in Latin American countries, where a large publicly owned commercial bank operates the TSA.

**Locating the TSA at the central bank offers several advantages:**

(i) Provides a safe haven for government cash deposits which minimizes credit risk exposure.

(ii) Aids the efficient management of government liquidity, and facilitates the central bank’s coordination of its monetary policy operations in managing liquidity in the economy with government’s cash and debt management functions.

(iii) Can facilitate cost effective banking arrangements and speedy settlements.

(iv) Allows for clarity of banking arrangements and remuneration policies between the treasury and the central bank.

In many cases, the central bank, while maintaining the TSA, may not necessarily maintain bank accounts for agency-specific transactions. In these instances, it is regarded as inappropriate for the central bank to undertake the government’s retail banking transactions, particularly as the government is usually its only direct customer. This is a task more effectively and efficiently performed by the commercial banks. Indeed, in at least one country—New Zealand—the entire daily retail transactions of the TSA are performed at a commercial bank with only a single nightly sweep of the balance going into the government account at the central bank. In competitive bidding for this business, the central bank has stated that it has no intention to play a role in retail banking.

Technological changes and recent innovations in banking practices have facilitated the operation of a TSA for government transactions. Developments in electronic banking and communication systems, including payment clearing systems and interbank settlement systems—such as the Real Time Gross Settlement System (RTGS)—have enabled the banking sector to provide single-window banking services to clients. Such facilities are used by private firms whose operations spread across large geographical areas. Centralized cash and accounts management takes place using facilities offered by the commercial banking sector.
TSA Coverage

Delineating the boundary of a TSA is an important issue, and needs to be carefully considered in light of each country’s institutional and legal/regulatory framework. In defined circumstances, there could be a case for maintaining some bank accounts that cannot be fully integrated into the TSA. For example, there are situations where geographical factors or the non-availability of banking facilities preclude the use of a TSA. At a minimum, the TSA should cover all central government entities and their transactions. These include accounts managed by social security funds and other trust funds, extra-budgetary funds (EBFs), and autonomous government entities, and loans from the multilateral institutions and donor aid resources. A TSA could also be extended, in theory at least, to include subnational levels of government and other public institutions through the use of correspondent accounts. Even when the central TSA does not cover subnational or state governments in a federal system, TSAs should be established at each subnational government level.

Theoretical Framework

For the purpose of this study, we find New Public Management (NPM) theory a term formally conceptualized by Hood (1991) useful here. This is because when issues of Information and Communication Technology, Efficiency, Effectiveness, and Service Delivery are raised in this contemporary time, especially with regards to public institutions and agencies, the New Public Management theory comes to mind.

New Public Management is a modern management practice with the logic of economics and retaining the core public values which are not a static phenomenon but an evolving one. The traditional concepts of public administration have been transformed to cope with the emerging geo-political and economic challenges. Indeed, the greater role of the government until the 1960s in socio-economic transformation, market oriented reforms, production, provision and regulatory activities came under severe criticism as there were fiscal crisis, imperious bureaucracy, poor performance and lack of accountability in public organizations, wide spread corruption, changes in public expectation and emergence of better alternative forms of service delivery that have given rise to the emergence of NPM (Sarker, 2006). After appearance, NPM becomes a leverage of managing public sector organizations with two key features which include, the separation of policy formulation from operation and secondly, the importance of management driven by private sector management strategy.

Methodology

The study was carried out in Nnamdi Azikiwe University, Awka, using descriptive survey research design. A sample size of 40 respondents was chosen for the study. Stratified and simple random sampling techniques were used to select the respondents comprising undergraduates and postgraduate students, teaching and non-teaching staff, and all other category of persons that earn their means of livelihood from within the university community, specifically the bank staffs and café operators. These categories of persons have one or two dealings with the implementation of TSA in the University. Questionnaires were used to collect data which were validated through a pilot study. The hypothesis was tested using chi-square statistical tool.

Method of Data Analysis

Data generated from primary sources were analyzed using descriptive statistics such as tables and simple percentages. Of the 40 copies of questionnaires administered, only 32 were properly returned representing 80 percent response rate, which is not bad for the study.

The questionnaire instrument was structured using the Likert five-point response scale and was ranked as follows;
SA – Strongly Agreed = 5
A – Agreed = 4
U – Undecided = 3
D – Disagree = 2
SD – Strongly Disagreed = 1

**Decision Rule:** A mean score of less than 3.0 is considered disagreed, while a mean score of 3.0 and above is considered agreed.

Consequently, in order to test the hypotheses and establish the degree of dependence or independence of the variables under consideration, the ‘Z’ test statistical tool was used. The formula is given here below.

\[ z = \frac{X_1 - X_2}{\sqrt{\frac{SD_1^2}{n_1} + \frac{SD_2^2}{n_2}}} \]

where:
- \(X_1\) = mean of positive responses
- \(X_2\) = mean of negative responses
- \(SD_1^2\) = variance of positive responses
- \(SD_2^2\) = variance of negative responses

**Demographic Data of the Respondents**

This section represents the socio-demographical data of the respondents such as sex, age, education background and official status/occupation.

<table>
<thead>
<tr>
<th>Profile</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td>62.5</td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
<td>37.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 25</td>
<td>12</td>
<td>37.5</td>
</tr>
<tr>
<td>26 – 35</td>
<td>11</td>
<td>34.4</td>
</tr>
<tr>
<td>36 and above</td>
<td>9</td>
<td>28.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>Educational Background</strong></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>10</td>
<td>31</td>
</tr>
<tr>
<td>Graduate qualifications</td>
<td>14</td>
<td>44</td>
</tr>
<tr>
<td>Postgraduate qualifications</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
The demographic data of the respondents as presented in table 1 indicates that majority of the respondents are male, representing 62.5 percent of the total population, while the rest are female. The indication of this is that the men showed more interest in this study than the female, even though the researcher tried to achieve gender balancing. The table also showed that the age distribution is almost evenly spread in the sense that while 37.5 percent of the respondents are within the age bracket of 18 – 25; 34.4 percent fall within the category of 26 – 35 while the remaining 28.1 percent are 36 years and above. This goes to show that majority of the respondents are within the youthful category who will better appreciate the issue in this study. On the educational background of the respondents, only 31 percent of them are undergraduates. The rest have either graduate or post graduate qualifications. This is indicative of the fact that there is an appreciable level of understanding among the respondents on the issues under study. Finally, while 37 percent of the respondents are students, 16 percent are staff, specifically of the bursary department. Also, 25 percent of the respondents are bank employees working within the school premises and the remaining 22 percent are cyber café operators, meaning that all of the respondents have one thing or the other to do with the TSA policy, either by paying fees, generating Remita code, processing payments or confirming payments and issuing receipts.

### Table 2: Presentation of the Responses

<table>
<thead>
<tr>
<th>S/N</th>
<th>VARIABLES</th>
<th>FX</th>
<th>Mean (X)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TSA has helped to increase financial probity in the institution</td>
<td>86</td>
<td>2.56</td>
<td>Disagreed</td>
</tr>
<tr>
<td>2</td>
<td>The policy is also more efficient as it reduces the cost of</td>
<td>90</td>
<td>2.81</td>
<td>Disagreed</td>
</tr>
<tr>
<td></td>
<td>operating multiple bank accounts.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>TSA lacks the capacity to eliminate fraud in the management of</td>
<td>108</td>
<td>3.38</td>
<td>Agreed</td>
</tr>
<tr>
<td></td>
<td>public finance.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Making payment using the TSA platform is ineffective and time consuming.</td>
<td>101</td>
<td>3.16</td>
<td>Agreed</td>
</tr>
<tr>
<td>5</td>
<td>Poor internet reception on campus makes the TSA policy a waste of time in</td>
<td>109</td>
<td>3.41</td>
<td>Agreed</td>
</tr>
<tr>
<td></td>
<td>the institution.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Not all categories of payments in the institution are executed</td>
<td>120</td>
<td>3.75</td>
<td>Agreed</td>
</tr>
<tr>
<td></td>
<td>through the TSA platform; hence, the policy lacks transparency.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Banks on campus exploit students with exorbitant charges for</td>
<td>122</td>
<td>3.81</td>
<td>Agreed</td>
</tr>
<tr>
<td></td>
<td>making payments through TSA.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>The institution should adopt an online payment system along with the TSA</td>
<td>106</td>
<td>3.31</td>
<td>Agreed</td>
</tr>
<tr>
<td></td>
<td>to reduce excessive bank charges.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Number</th>
<th>Mean</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>TSA is a welcome development in the institution and has, so far, performed satisfactorily.</td>
<td>83</td>
<td>2.6</td>
<td>Disagreed</td>
</tr>
<tr>
<td>10</td>
<td>TSA should be scrapped, having failed to meet required expectations.</td>
<td>91</td>
<td>2.84</td>
<td>Disagreed</td>
</tr>
</tbody>
</table>


Table 2 presented the responses of the respondents to the question items in the questionnaire. Using the 5 point Likert scale, the results indicate that with a means score of 2.56, the respondents disagreed that the TSA has helped to increase financial probity in the institution. They also disagreed to the notion that the policy is also more efficient as it reduces the cost of operating multiple bank accounts.

However, there is an agreement among the respondents that TSA lacks the capacity to eliminate fraud in the management of public finance. Also, items in numbers 4, 5, 6, 7 and 8 also received positive responses, going by the fact that the mean scores in those question items are above 3.0. The questions in those items border on time factor in using the TSA payment platform, internet reception and connectivity, exploitation of students by the banks through the use of TSA, adopting the online payment option and the fact that the TSA in the institution does not cover all categories of financial payments and receipts.

The penultimate question, which sought to give the TSA a general pass mark got a negative response from the respondents, while, in a twist of responses, the respondents, through the last question, disagreed that the policy should be scrapped altogether.

Test of Hypotheses

It will be recalled that in section one, the study identified a hypothesis. It will at this juncture test the hypothesis using the ‘Z’ test statistical tool. The formula is given here below.

\[
z = \frac{X_1 - X_2}{SD_1^2 + SD_2^2} \left(\frac{1}{n_1} + \frac{1}{n_2}\right)
\]

where:

\[
X_1 = \text{mean of positive responses}
\]
\[
X_2 = \text{mean of negative responses}
\]
\[
SD_1^2 = \text{variance of positive responses}
\]
\[
SD_2^2 = \text{variance of negative responses}
\]

Hypothesis

\[H_0: \quad \text{TSA has not increased transparency and accountability in financial management in UNIZIK.}\]
\[H_1: \quad \text{TSA has increased transparency and accountability in financial management in UNIZIK.}\]

This hypothesis will be tested using questions 1 and 2; 6, 7 and 8.

Computation of Z test statistics:

\[
X_1 = \frac{\sum x}{n} \quad \text{for questions 1 and 2}
\]

\[
3 + 4 + 10 + 10 + 5 + 5 + 6 + 5 + 10 + 6 = 64
\]
\[
64 \quad = 6.4
\]
\[ X_2 = \frac{\sum x}{n} \]

for questions 6, 7 and 8

\[
12 + 10 + 3 + 4 + 3 + 12 + 7 + 8 + 5 + 9 + 9 + 1 + 9 + 4 = 96
\]

\[ 96 = 6.86 \]

14

ii. **Determination of the standard deviation for the two samples**

\[
\begin{array}{c|c|c}
X_1 & X_1 - X_2 & (X_1 - X_2)^2 \\
3 & -3.4 & 11.56 \\
4 & -2.4 & 5.76 \\
10 & 3.6 & 12.96 \\
10 & 3.6 & 12.96 \\
5 & -1.4 & 1.96 \\
5 & -1.4 & 1.96 \\
6 & -0.4 & 0.16 \\
5 & -1.4 & 1.96 \\
10 & 3.6 & 12.96 \\
6 & -0.4 & 0.16 \\
\hline
\text{Total} & & 62.4
\end{array}
\]

\[
SD_1 = \sqrt{n-1} \frac{(X_1 - X_2)^2}{N-1} = \sqrt{62.4} = 6.93 = 2.63
\]

\[
\begin{array}{c|c|c}
X_1 & X_1 - X_2 & (X_1 - X_2)^2 \\
12 & 5.14 & 26.42 \\
10 & 3.14 & 9.86 \\
3 & -3.86 & 14.9 \\
4 & -2.86 & 8.18 \\
3 & -3.86 & 14.9 \\
12 & 5.14 & 26.42 \\
7 & 0.14 & 0.02 \\
8 & 1.14 & 1.3 \\
5 & -1.86 & 3.46 \\
9 & 2.14 & 4.58 \\
9 & 2.14 & 4.58 \\
1 & -5.86 & 34.34 \\
9 & 2.14 & 4.58 \\
4 & -2.86 & 8.18 \\
\hline
\text{Total} & & 161.72
\end{array}
\]

\[
SD_1 = \sqrt{\frac{(X_1 - X_2)^2}{n-1}} = \sqrt{\frac{161.72}{13}} = \frac{12.44}{3.53}
\]
iii. Determination of the Z test score;

\[ X_1 = 6.4 \]
\[ X_2 = 6.86 \]
\[ SD_1^2 = 2.63 \]
\[ SD_2^2 = 3.53 \]
\[ z = \frac{X_1 - X_2}{\sqrt{\frac{SD_1^2}{n_1} + \frac{SD_2^2}{n_2}}} = \frac{6.4 - 6.86}{\sqrt{\frac{2.63}{9} + \frac{3.53}{13}}} = \frac{-0.46}{8.17} = -0.06 \]

iv. Determination of the degree of freedom;

\[ DF = n_1 + n_2 - 2 = 9 + 13 - 2 = 20 \]

v. Determination of the critical value

0.05 level of significance and 20 degree of freedom = 0.4793

vi. Decision: Since the calculated value is less than the table value, we accept the null hypothesis which states that TSA has not increased transparency and accountability in financial management in UNIZIK.

Summary of Findings

This study dwelt on the dialectics of the Treasury Single Account and Public Financial Management in tertiary institutions in Nigeria. Nnamdi Azikiwe University, Awka was selected for the study. Using data obtained from the study, it was discovered, among other things, that the TSA policy, given the way it is being implemented has not fully increased transparency and accountability in financial management in tertiary institutions in particular and the nation in general. This finding corroborates allegation cases of mismanagement and corruption making rounds in tertiary institutions in Nigeria even as the TSA policy is operational in the country.

Other findings of this study are as follows:

1. That the policy lacks the capacity to eliminate fraud in the management of public finance.
2. That poor internet reception on campus makes the TSA policy a waste of time.
3. Banks on campus exploit students with exorbitant charges for making payments through the TSA platform and

Conclusion

With the New Public management theory underlying the foundation for this study, we therefore conclude this study by asserting that for governments to operate the most efficient and effective policy on public financial management, it should do well to address most of the issues that might play out to thwart its efforts. Issues such as monitoring, evaluation and feedback are critical to any policy making process, the TSA is not different in this regard.

Recommendations

Relative to the findings of this study, it is clear that the Treasury Single Account has, so far, achieved some measure of progress in its effort at curbing financial recklessness in the public sector and reducing the cost of governance. However, in order to sustain and improve on the successes already achieved, the following is recommended:
1. There should be proper monitoring and evaluation to ensure strict compliance on the implementation of the policy.
2. The policy should be made more flexible to accommodate the full range of electronic banking – online payments, wire transfers etc.
3. The issue of poor internet reception and connectivity should be addressed to improve on the effectiveness of the policy.
4. Finally, the government should have a robust and interactive feedback channel where citizens can make inputs to better improve on the policy.

References