

EFFECT OF TREASURY SINGLE ACCOUNT POLICY ON THE ADMINISTRATION OF FEDERAL TERTIARY INSTITUTIONS IN ANAMBRA STATE, NIGERIA (2011-2022)

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ABSTRACT

This study examined the effect of treasury single account policy on the administration of Federal Tertiary Institutions in Anambra State, Nigeria (2011-2022). The study, modelled variables like Revenue collection using TSA policy, Payment disbursement using TSA, Treasury ledger system using TSA policy and Liquidity management using TSA policy to ascertain how they have influenced cash management in federal tertiary institutions in Anambra State using the theory of the frugality of money. The study adopted a descriptive survey research design that aimed to determine the relationship between the independent variables and dependent variable in a population. The population of this study was 993 with a sample of 285 determined using Taro Yamane formula. The data collected using the questionnaire were analyzed using descriptive statistics like frequency, mean and standard deviation; and also inferential statistics such as factor analysis and regression analysis. All analysis was conducted using SPSS version 23. Findings showed that: Revenue collection using TSA policy, Payment disbursement using TSA, Treasury ledger system using TSA policy and Liquidity management using TSA policy all have significant effects on cash

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management in federal tertiary institutions in Anambra State. Based on the findings of this study, key recommendations among other were made: The government should ensure that all revenue collection by the federal tertiary institutions are carried out within the guideline of the TSA policy. This will enable them to consolidate cash resources on a daily basis and reduce borrowings currently necessitated by perceived cash shortages arising from holding so many government bank accounts and a fragmented system for handling receipts and payments. The government should ensure that all tertiary institution adopt a Unified Payment Services. This will enable them reduce the risk of errors in reconciliation processes, and improve the timeliness and quality of the fiscal accounts. All federal tertiary institutions should keep unified treasury ledger system using TSA policy. This will help to ensure compliance with the principles of unity of cash management and the unity of treasury operations. All tertiary institutions should ensure that all their accounting staff are trained on the guidelines for the operation of treasury single account. This will ensure compliance with the principle of unity of cash management and the unity of treasury operations.

1.1 INTRODUCTION

The Treasury Single Account (TSA) is described as a unified structure of government bank accounts that gives a consolidated view of government cash resources. Based on the principle of unity of cash and the unity of treasury, a Treasury Single Account is a bank account or a set of linked accounts through which the government transacts all its receipts and payments (Pattanayak & Fainboim, 2010). Treasury Single Account Policy ensures that government revenue collection, payment disbursement, accounting using a treasury ledger system and cash and liquidity management are put under check to control multiple accounts created by ministries, departments and agencies, (MDAs). The primary objective of a TSA is to ensure effective aggregate control over government cash balances. The consolidation of cash resources using a TSA arrangement

facilitates government cash management by minimizing borrowing costs (Ogbonna & Amuji, 2018).

In Nigeria, prior to the introduction of Treasury Single Account (TSA), the earnings by the Government such as; fees and earning, debt, fines, regulatory and general taxes were held in fragmented accounts with Deposit Money Banks (DMBs) and also deposited in a Federation account called Consolidated Revenue Fund (CRF) with the Central Bank of Nigeria(CBN). It should be noted that Ministries, Departments and Agencies (MDAs) operate their accounts as it deemed fit with little or no control from the central authorities. These generated a lot of sharp practices and wanton abuses by the operators of the various accounts, making it impossible for accountability; instead it legalized fraudulent activities in the operations of the accounts (Ajugwe, 2020).

1.2 STATEMENT OF THE PROBLEM

This study was informed by the wide spread corruption charges on official in government Ministries, Departments and Agencies (MDAs) thus informing the decision of the federal government to come up with the Treasury Single Account (TSA) to check all government Ministries, Departments and Agencies (MDAs) including the federal tertiary institutions. The Treasury Single Account (TSA) is expected to ensure that revenue collection, payment disbursement, accounting using a treasury ledger system and cash and liquidity management are carried out by the government and its agencies in the most effective and efficient manner that helps the government and its agencies in minimizing transaction costs during budget execution. However, despite the introduction of this Treasury Single Account (TSA) policy, there are still wide spread public outcry on corruption, waste and very hug financial fraud in virtually all government Ministries, Departments and Agencies (MDAs). Thus, the country has continued to witness a number of financial frauds in government Ministries, Departments and Agencies (MDAs) since the introduction of the Treasury Single Account (TSA). One of the most recent, is the over 80billion Naira fraud allegedly committed by Ahmed Idris, the immediate past Accountant General of the Federation. This is according to the Economic and Financial Crimes Commission (EFCC) which stated that the head of the Nigeria's treasury had been arrested for alleged involvement in fraud and money laundering worth over 80 billion naira (\$190m).

A number of studies (Eme, Chukwurah & Iheanacho, 2015; Ajugwe & Ajugwe, 2020; Abodunrin & Omole, 2017; Olayemi & Oshatimi, 2021; Isa, 2016) have been carried out by previous researchers on the Treasury Single Account (TSA) policy as an instrument of financial prudence and management in Nigeria, yet the country still battles with the increasing financial fraud and money laundering in virtually all the government Ministries, Departments and Agencies (MDAs). The study is imperative to ensure that government revenue collection, payment disbursement, accounting using a treasury ledger system and cash and liquidity management are put under check to control multiple accounts created by ministries, departments and agencies, (MDAs). This study fills a literature gap that will contribute to resolving an inevitable consequence of increasing public theft and misappropriation of funds. It therefore examines the effect of treasury single account policy on the administration of federal tertiary institutions in Anambra State, Nigeria (2011-2022).

1.3 OBJECTIVES OF THE STUDY

1. Ascertain the effect of revenue collection using TSA policy on cash management in tertiary institutions in Anambra State.
2. Determine the effect of payment disbursement using TSA policy on cash management in tertiary institutions in Anambra State.
3. Examine the effect of treasury ledger system using TSA policy on cash management in tertiary institutions in Anambra State.
4. Ascertain the effect of liquidity management using TSA policy on cash management in tertiary institutions in Anambra State.

1.4 HYPOTHESES

(1) Revenue collection using TSA policy has no significant effect on cash management in tertiary institutions in Anambra State.

(2) Payment disbursement using TSA has no significant effect on cash management in tertiary institutions in Anambra State.

(3) Treasury ledger system using TSA policy has no significant effect on cash management in tertiary institutions in Anambra State.

(4) Liquidity management using TSA policy has no significant effect on cash management in tertiary institutions in Anambra State.

2.0 REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

Treasury Single Account Policy

The TSA policy was first recommended by the Federal Government's Economic Reform and Governance (ERG) Programme in 2004. Also, the TSA is a part of The Public Financial Management (PFM) reforms which falls under Pillar 3 of the National Strategy for Public Service Reforms towards Vision 20:20:20 to address impediments to effective and efficient cash management. The government embraced electronic payment (e-payment) system for all its financial transaction in 2008. Consequently, the Accountant General of the Federation issued a treasury circular for its take-off on January, 1st 2009 in all MDAs (Odia & Odia, 2016).

Treasury Single Account in Nigeria became operational in 2012 under the administration of then President Goodluck Jonathan. But not much was known about it until 2015 when President Muhammadu Buhari took over the reins of governance and the full-fledged implementation of TSA took effect with all the Federal Government Ministries, Department and Agencies. Prior to the full-fledged introduction and implementation of TSA, Nigeria paraded fragmented multiple banking systems. (Odewole, 2016). The TSA, a single pool for harvesting revenue inflows of MDAs was not Buhari's idea. It was conceived by the administration of President Goodluck Jonathan, but it remained a mere policy on paper due to lack of political will on the part of the administration to enforce it (Eme & Chukwurah, 2015). TSA was in line with a series of treasury reforms, which began in 2012, aimed at ensuring transparency and accountability in the management of the nation's finances.

The TSA policy directive is not the only Jonathan's 'dead' policy that President Buhari has revived by not making any addition, change, circular or by rolling out enforcement, but just by mere

pronouncement at a public function. Others include, the Integrated Personnel and Payroll Information System (IPPIS) for payment of federal government workers, introduced to block ghost workers syndrome, but was resisted by some MDAs and the harmonisation of the country's various data banks hosted by different government agencies such as, the CBN; National Population Commission, INEC, Customs, Immigration Service and others. (Guardian Editorial, 2015).

2.2 Effect of revenue collection on cash management

In accounting, revenue is the total amount of income generated by the sale of goods and services related to the primary operations of the business. Commercial revenue may also be referred to as sales or as turnover. Some companies receive revenue from interest, royalties or other fees. "Revenue" may refer to income in general, or it may refer to the amount, in a monetary unit, earned during a period of time. Profits or net income generally imply total revenue minus total expenses in a given period. In accounting, in the balance statement, revenue is a subsection of the Equity section and revenue increases equity, it is often referred to as the "top line" due to its position on the income statement at the very top. This is to be contrasted with the "bottom line" which denotes net income (gross revenues minus total expenses) (Hamisu, 2015; ; Larson & Corinne, 2007; Ter-Minassian & Parente, 1995).

Sales revenue is income received from selling goods or services over a period of time. Tax revenue is income that a government receives from taxpayers. Fundraising revenue is income received by charity from donors to further social purposes. In more formal usage, revenue is a calculation or estimation of periodic income based on a particular standard accounting practice or the rules established by a government or government agency. Two common accounting methods, cash basis accounting and accrual basis accounting do not use the same process for measuring revenue. Corporations that offer shares for sale to the public are usually required by law to report revenue based on generally accepted accounting principles or on International Financial Reporting Standard (Okechukwu, Chukwurah, Daniel & Iheanacho, 2015; ; Larson & Corinne, 2007).

Government revenue or national revenue is money received by a Government from taxes and non tax sources to enable it to undertake government expenditures. Government revenue as well as government spending are components of the government budget and important tools of the government's Fiscal Policy. The collection of revenue is the most basic task of a government, as revenue is necessary for the operation of government and enforcement of its laws and this necessity of revenue was a major factor in the development of the modern bureaucratic state (Okwe, 2015; Larson & Corinne, 2007).

2.3 Effect of payment disbursement on cash management

The main objectives of a disbursement system are to pay the government's obligations in a timely and cost-effective manner, and to reduce opportunities for fraud and theft. Manual or semi-automated treasury systems imply slow payment processes. Many developing countries have very basic financial management systems and communication infrastructure, together with a manual or semi-automated (and often not integrated) treasury system and limited communication capabilities. In such countries, payment requests often go through regional or local treasury offices and are submitted for payment and settlement against the TSA. This results in slower payment processes than with fully automated systems (Okwe (2015; EIU, 2005).

A computerized treasury system (such as an IFMIS) and an advanced communication infrastructure allow electronic fund transfers from the TSA to the recipient's account, eliminating payment delays and idle balances and thus reducing operational risks. As with revenue collection, one of the objectives of the treasury should be to eliminate or shorten any delay in payments. Good international practice has been to automate the payment processes, and adopt an electronic payment system, with direct payments to the bank account of the beneficiary. Many governments offer direct deposits (of salaries, pensions, etc.) to employees' and pensioners' accounts. This is efficient and less prone to fraud than other options, such as payments in cash or by check (Obinna, 2015; EIU, 2005).

Payment by check has advantages, but also important disadvantages. Checks provide a paper trail. However, they slow the speed of disbursements by payors due to time delays between the issuance, encashment and clearing of a check, which also gives rise to significant check floats in some cases. There is also a high incidence of fraud related to such transactions. Writing and delivering checks is expensive and can introduce errors, creating the need for a separate reconciliation process, and affecting the effectiveness of the cash management system. Checks can also be stolen or altered. This does not mean that electronic payment systems are not potential areas for fraud and do not require fraud prevention measures such as sound internal controls, passwords, restricted access, and restricted authorization to prevent access to fund transfer initiation systems (EIU, 2005).

2.4 Effect of treasury ledger system on cash management

The government accounting system should be designed to record all transactions and capture relevant information independently of the cash flows in specific bank accounts. There may be problems, in practice, in achieving this result. In many countries with manual accounting systems, a comprehensive treasury ledger system does not exist and a significant part of the information required for budgetary and financial accounting purposes continues to be derived from the government's bank accounts structure such as information specific to spending agencies, budget lines, etc. If a computerized Integrated Financial Management Information System (IFMIS) is being considered, it comes with an inbuilt treasury general ledger (TGL). TGL systems typically have layers of sub-accounts for handling all types of treasury operations related to receipts, payments, financing, and surplus cash placement (Schmitz & Wood, 2006). Depending upon how it is implemented, a TSA system could have implications for the accounting system. Two particular issues need to be addressed:

- i. First, important financial information may be lost if budget agencies' bank accounts are closed as part of the implementation of a TSA. For example, in some countries, the implementation of a TSA has necessitated the addition of codes providing required geographical and organizational information. The coding structure used in the chart of accounts (including that to be used in an IFMIS) should be reviewed for adequacy in the context of the implementation of the TSA.
- ii. Second, the implementation of a TSA might require changes to accounting systems and processes, including the redistribution of accounting roles and responsibilities between the central treasury unit, ministries, spending agencies, etc. Depending on the structure of the TSA, either the treasury or line ministries/agencies, or both, would maintain the initial accounting records such as cash books and have bank reconciliation responsibilities. Accounting system should also be able to track and control annual appropriations and monthly/quarterly allocations to spending agencies.

2.6 Concept of Treasury Single Account

A Treasury Single Account is a public accounting system under which all government revenue, receipts and income are collected into one account usually maintained by the country's Central Bank. As well, all payments are effected through this same (The Stalwart Report. 2015). Sailendra and Isreal (2015) define Treasury Single Account as "a unified structure of government bank accounts enabling consolidation and optimum utilization of government cash resources". In their submission, "a Treasury Single Account transacts all its receipts and payments and gets a consolidated view of its cash position at the end of each day". In their words, the TSA is "a banking arrangement for government transactions which is based on the principle of fungibility of all cash irrespective of its end use". Ocheni, (2016) also defines Treasury Single Account (TSA) "as a unified arrangement which enhances the interchangeability of all the government cash resources, and implies that no other government agency should be allowed to operate bank accounts without the oversight of the treasury". He stated that the TSA is comprehensive and encompassing all government cash. He is, however, of the opinion that TSA does not have a "single model or design". He emphasized that the implementation in each country depends on the stage of development of the quality of its public institutions and financial management system, its technological development and communications infrastructure and the degree of maturity its banking system. Public monies, irrespective of whether the corresponding cash flows are subject to budgetary control or not, should be brought under the direct control of government. Government banking should be unified to give room for control by the Accountant-general of the Federation and Ministry of Finance.

Adebisi and Okike (2016) views TSA as an accounting system in the public sector where all government revenue made are paid into a single account at the Central Bank. TSA is considered to be an efficient and effective means of managing government revenue generation and thus provide and enforce sufficient self-control mechanism on revenue generation and budget implementation using a daily return of account balances of Ministries, Departments and Agencies in CBN.

Lucy (2017) also sees TSA as one of the financial policies initiated by the federal government of Nigeria to integrate all the revenue from all the MDAs in the country by which all revenues go into one account called TSA maintained with the CBN. The policy was introduced to reduce the multiple bank accounts operated by MDAs and also to promote transparency and accountability among all organs of the government

Ahmad (2016) sees solvency as a measure of the ability of a company to meet its long term debts.

It provides an assessment of the likelihood of a company to continue congregating its debt obligations. Solvency ratios are however used to indicate the ability of the bank to cover its long term obligation, whereas a liquidity ratio is the ability to cover short term (current) obligation. Solvency indicates the ability to meet long term financial obligation. It is also viewed traditionally as arising from financing activities where firms borrow to raise cash for operations where liquidity indicates whether an entity will be able to meet its financial obligations in the short- term (Waqas & Mobeen, 2014). Yousigma (2008) also sees solvency as a measure of financial soundness of a business and how well the firm can satisfy its long term obligations.

Reasons for the Adoption of Treasury Single Account in Nigeria

Until the introduction of the TSA, the country faced numerous challenges with management of Public Finances that affect government efficiency and effectiveness in service delivery, transparency and accountability. Some of these challenges were:

Loss of Control on the Number of government Bank Accounts:

MDAs are required under FR 701 to get the approval of the Accountant-General of the Federation (AGF) for all their banking relationship. In addition, each MDA is required by regulation to maintain four bank accounts, one each for revenue, personnel costs, overhead costs and capital. However, many MDAs failed to comply, hence the number of bank accounts became over bloated and monitoring the accounts became a herculean task for the OAGF. A survey of the number of such accounts with both the Central Bank of Nigeria (CBN) and Deposit Money Banks (DMBs) carried out by the OAGF in 2010 puts the number of accounts at over 10,000. With such a large number, government could not have timely consolidated information of cash position necessary for efficient cash management in the country.

2.7 Challenges of Treasury Single Account:

1. They are certain institutions they included in the operation of the TSA which must be excluded for the smooth operation of such institutions considering their peculiar establishment such as CBN, University and Nigeria National Petroleum Company, maritime sector recently has even requested the government for exemption bearing in mind the nature of their operation etc. It has been observed to include them will cause financial rigidity in the receipt and dispensation of finance. The Committee of Vice Chancellors of Federal University has urged the government to exclude the universities from the TSA.

Accordingly, to them it should be regarded as peculiar establishments, which should not be treated as purely public organization in function or categorized as revenue generating agencies as government revenue are hardly enough to cater for the needs of the institutions

2. Some financial analysts are of the view withdrawing of the government accounts from the banks may lead to a massive run down on the banks which may cause systematic banking crises in banking industry and lead to economic problem bearing in mind the banks are the bedrock of the economy. President Goodluck Jonathan would have fully implemented the policy of TSA, but they were studying its negative effects on the banking industry and how it will be ameliorated and cushion its effects on the economy. They noted that it may affect the ability of the banks to lend to the real sector of the economy or rather may be forced to lend at high interest rate, which will inevitably affect the growth and the development of the economy. The banks may be incapable of lending to the real sector of the economy for its growth. This will have a negative impact on the liquidity level of the banking system more especially if the NNPC withdraws its deposit from the banking sector to the TSA in the CBN in compliance to government directives. Some banks are delaying the operation of the TSA because of the negative effects on their liquidity position. It becomes necessary to determine the inclusion of all the above mentioned MDAs, if for the overall interest of the economy. Prior to the implementation of TSA, public sector deposit accounted for 75 percent of total deposit of DMBs. With full implementation of the policy, the banking sector is projected to record a net debit of N1 trillion, as noted by Kingsley Imandojemu (2016), he went further to argue that though the implementation of the TSA as targeted at federal agencies, it will also affect both Naira and Dollar deposit levels and balance sheets of banks, as the deposits/assets have to be transferred from banks to the CBN. The withdrawal of these massive funds hitherto held in commercial banks, may cause to downsize in a bid to survive.

3. It must be mentioned that the operation of the TSA has generated and elicited many controversies on the possible demerit of the scheme, according Dino Melaye, a Nigerian. Senator representing Kogi West, raised a motion that the operation of the TSA be investigated for possible corruption. He claimed that “the appointment of REMITA, an e-collection agent, is a violation of section 162 (1) of Nigeria Constitution and the banks and other financial institution Act. “He claimed the constitution only recognized a banking institution to be collector of government funds, that the REMITA was not a bank. The provision of the constitution cited by Dino Melaye states “the federation shall maintain a special account to be called the federation account into which all revenues collected by the government of the federation except the proceeds from personal income tax of the personnel of the Armed Forces of the Federation, the Nigeria Policy Force, the ministry or department of government charged with foreign affairs and the federal capital, Abuja” According to Meleye, the total inflow of 1% commission charged and received by System Specs fall all revenue collected on behalf of the government from the various ministries, departments, and agencies to be 25 billion as of November, 2015 was fraud and must be returned to the account of the CBN. One of the major objectives of management of public finance is ensure accountability, Meleye argued that it will exacerbate the corruption which is the main objectives of establishing.

TSA. The aim to curtail corruption in the fiscal interface may pose some serious problems if not handled with caution and determination. Therefore, all efforts must be made for the scheme of TSA to install accountability and internal control if all objectives are to be achieved.

4. The existence of weak capacities in operating and maintain TSA infrastructures constitute a problem and must be checked and corrected if the main objectives of the TSA will be achieved.

5. Problems associated with the banking interface with TSA infrastructure, such as bank statement, changing transaction status, among others have been seen to constitute a major problem and efforts must be taken to resolve them for the TSA to take off effortlessly and seamlessly.

6. The objective of the government to put all the funds in one consolidated may even constitute some problems and affects negatively operation of some organizations and prevents them from achieving their objectives. This was posited by Soludo (2015) by noting that TSA is a great initiative, however, we do not have to return to the past by having every penny of government largely redundant in the Central bank of Nigeria is not a sound economics.

7. One of the main objectives of establishing TSA is to curb corruption that has been endemic and cancerous to the development of Nigeria, however, it has not entirely succeeded in fighting corruption and installs accountability and transparency as it was envisaged. It can be argued that it has actually put an end for MDA accountants having multiple accounts or placing government money at ridiculous interest rate while borrowing at very high interest rate at the same bank. But however, it has increased the instance of over invoicing, taken of bribing before contract are awarded and executed, the chief executive cornering the juice contract for himself and his cronies these are the corrupt practices that made it impossible for accountability and abane to foster a positive operation of fiscal policy.

3.0 METHODOLOGY

3.1 Research Design

This study adopts a descriptive survey research design.

3.2 Population of the Study

The population or unit of analysis of the study will consist of all the staff in the bursary and payroll in the three federal tertiary institutions in the state. Available data shows that the tertiary institutions have a total number of 992.

3.4 Sample Size and Sampling Procedure

The sample size for the study was obtained using Taro Yamane formula. The formula is stated thus:

$$n = \frac{N}{1+N(e)^2}$$

Where: n = sample size
 N = population
 e = Margin of error (5% or 0.05)
 I = Constant

Substituting in the above formula:

$$\begin{aligned} n &= \frac{992}{1+992(0.05)^2} \\ &= \frac{992}{1+992(0.0025)} \\ &= \frac{992}{3.48} \\ &= 285 \end{aligned}$$

For the purpose of allocation of sample stratum, the researcher adopted R. Kumaison's formula. Below is the R. Kumaisons formula for sample size distribution:

$$nh = \frac{nN_h}{N}$$

Where n = Total sample size
 N_h = The number of items in each stratum in the population
 N = Population size
 nh = The number of units allocated to each stratum
 n = 285

Table 3.1: Distribution of Private Label retailers/owners by Population and Sample

Institutions	Population	Sample
Nnamdi Azikiwe University Awaka	467	196
Federal Polytechnic Oko	275	113
Federal Colledge of Education Technical Umunze	251	15
Total	993	285

Substituting in the above formula:

$$\text{Nnamdi Azikiwe University Awaka;} \Rightarrow nh = \frac{285 \times 467}{993} = 134$$

$$\text{Federal Polytechnic Oko;} \Rightarrow nh = \frac{285 \times 275}{993} = 79$$

$$\text{Federal Colledge of Education;} \Rightarrow nh = \frac{285 \times 251}{993} = 72$$

3.4 Data Collection instrument

The instrument used for the data collection was the questionnaire which was designed and administered to 285 staff in the bursary and payroll in the three federal tertiary institutions in the state. The questionnaire was titled effect of treasury single account policy on the administration of federal tertiary institutions in Anambra State, Nigeria (2011-2022). The questionnaire has two sections. Section A and Section B. Section A sought information on demographic profile of the respondents. Section B was made up of items designed to elicit information relating to the effect of treasury single account policy on the administration of public organizations: A study of selected tertiary institutions in Anambra State. Using a close ended questions and a five (5) point likert summative scale question of Very Great Extent (VGE) 5 points; Great Extent (GE) 4 points; Undecided (U) 3 points; Some Extent (SE) 2 points; and No Extent (NE) 1 point.

3.5 Method of Data Analysis

Data collected were analyzed using descriptive statistics (frequencies, percentages, mean, and standard deviation) and the inferential statistics such as factor analysis, t-test statistics and the linear regression model. The demographic profiles were processed using descriptive statistics. Objectives one to four were subjected to factor analysis for the purpose of data reduction in order to avoid having spurious result. Thereafter, the four objectives were processed using descriptive statistics (like percentages, mean and standard deviation) and the regression model of the Ordinary Least Square (OLS). T-test and F-test statistics were used to test the hypotheses of the study and the overall fitness of the model. All the analyses were done using SPSS version 23. Linear regression model of the Ordinary Least Square (OLS) approach was used to analyse the objectives in order to ascertain the influence and also determine the relationship between the independent variables and dependent variable in the conceptualized model of the study. The use of Ordinary Least Square (OLS), is informed by the fact that under normality assumption for α_i , the Ordinary Least Square (OLS) estimator is normally distributed and is said to be best, unbiased linear estimator (Gujarati and Porter, 2008).

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Demographic Profile of Respondents

Table 4.1: Distribution of respondents according to Gender

Variables	Freq	(%)
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Male	119	41.8
Female	166	58.2
Total	285	100.0

Source: Field Survey, 2023

Table 4.1 shows the distribution of respondents according to Gender. 41.8% of the respondents are males while 58.2% of the respondents are female.

Table 4.2: Distribution of respondents according to Age

Years	Freq	(%)
18-30	51	17.9
31-40	135	47.4
41-50	46	16.1
51-60	53	18.6
Total	285	100.0

Source: Field Survey, 2023

Distribution of respondents according of to age as shown in table 4.2 revealed that 17.9% of the respondents are between 18-30years. 47.4% of the respondents are between 31-40years. 16.1% of the respondents are between 41-50years while 18.6% of the respondents are between 51-60years.

Table 4.3: Distribution of respondents according to Educational Qualification

Variables	Freq	(%)
Primary	-	-
Secondary	11	3.9
Tertiary	274	96.1
Total	285	100.0

Source: Field Survey, 2023

As shown in table 4.3, with respect to Educational Qualification, all the respondents had formal education. 3.9% of the respondents had secondary education while 96.1% of the respondents had tertiary education.

Table 4.5: Distribution of respondents according to Marital Status

Variables	Freq	(%)
Married	168	58.9
Single	101	35.4
Divorce	11	3.9
Widow/Widower	5	1.8
Total	285	100

Source: Field Survey, 2023

Table 4.4 reveals the marital status of the respondents. 58.9% of the respondents are married, 35.4% of the respondents are single, and 3.9% of the respondents are divorced while 1.8% is widow/widower.

4.2 Factor Analysis

The variables of the objectives were variously subjected to factor analysis using the Principal Component Analysis (PCA), with the aid of SPSS version 23. Prior to performing PCA, the suitability of the data for factor analysis was assessed using Kaiser-Meyer-Oklin measure of sampling adequacy and the rotation method is the varimax with Kaiser Normalization. The PCA

was initially used to process the data because the researcher sought to reduce large amount of data to uncover the underlying principal factors that explain the topic under investigation.

Table 4.5: Distribution of respondents according to the effect of revenue collection using TSA policy on cash management in tertiary institutions in Anambra State

Variables	
TSA policy helps to block financial leakages.	.970
TSA policy helps to reduce corruption	.969
TSA policy helps to promote transparency	.893
TSA policy helps to prevent mismanagement of government's revenue in public sector organisations	.804
TSA policy helps to prevent revenue loss	.966
A TSA allows for effective reconciliation between the government accounting systems and cash flow statements from the banking system	.950

Source: Field Survey, 2023

Note that items eigen values of variables less than 0.4 were excluded.

Table 4.5 above shows the eigen values with respect to effect of revenue collection using TSA policy on cash management in tertiary institutions in Anambra State. All items eigen values of variables were above the cut-off of 4.0 and are thus reliable and valid for subsequent analysis. One principal component emerged with the highest eigen values; the output shows that TSA policy helps to block financial leakages.

Table 4.6: Distribution of respondents according to the effect of payment disbursement using TSA policy on cash management in tertiary institutions in Anambra State

Variables	
TSA policy helps in minimizing transaction costs during budget execution,	.848
TSA policy helps in making rapid payments of government expenses	.803
TSA policy helps in facilitating reconciliation between banking and accounting data	.910
TSA policy helps in controlling the delay in the remittance of government revenues by collecting banks	.921
TSA policy allows complete and timely information on government cash resources	.966
TSA policy improves appropriation control.	.842
TSA policy improves operational control during budget execution.	.803
TSA policy reduces bank fees and transaction costs.	.910

Source: Field Survey, 2023

Table 4.6 above shows the eigen values with respect to effect of payment disbursement using TSA policy on cash management in tertiary institutions in Anambra State. All items eigen values of variables were above the cut-off of 4.0 and are thus reliable and valid for subsequent analysis. One principal component emerged; the output shows that TSA policy allows complete and timely information on government cash resources.

Table 4.7: Distribution of respondents according to the effect of treasury ledger system using TSA policy on cash management in tertiary institutions in Anambra State

Variables	
Reduces bank fees and transaction costs.	.767
Facilitates efficient payment mechanisms.	.971
Improves bank reconciliation and quality of fiscal data.	.960
Lowers liquidity reserve needs.	.785
Provides a safe haven for government cash deposits which minimizes credit risk exposure.	.531
Aids the efficient management of government liquidity	.983

Source: Field Survey, 2023

Table 4.7 above shows the eigen values with respect to effect of treasury ledger system using TSA policy on cash management in tertiary institutions in Anambra State. All items eigen values of variables were above the cut-off of 4.0 and are thus reliable and valid for subsequent analysis. One principal component emerged; the output shows that TSA policy Aids the efficient management of government liquidity.

Table 4.8: Distribution of respondents according to the effect of liquidity management using TSA policy on cash management in tertiary institutions in Anambra State

Variables	
Can facilitate cost effective banking arrangements and speedy settlements	.595
TSA facilitates regular monitoring of government cash balances.	.899
It also enables higher quality cash out-turn analysis to be undertaken	.890
identifying causal factors of variances and distinguishing causal factors from random variations in cash balances	.912
Makes it possible to monitor payment mechanisms precisely.	.906
It can result in substantially lower transaction costs because of economies of scale in processing payments.	.745

Source: Field Survey, 2023

Table 4.8 above shows the eigen values with respect to effect of liquidity management using TSA policy on cash management in tertiary institutions in Anambra State. All items eigen values of variables were above the cut-off of 4.0 and are thus reliable and valid for subsequent analysis. One principal component emerged; the output shows that TSA policy helps in identifying causal factors of variances and distinguishing causal factors from random variations in cash balances.

Table 4.9: Distribution of respondents according to the benefits of TSA on cash management in tertiary institutions in Anambra State

Variables	
When the treasury has full information about cash resources, it can plan and implement budget execution in an efficient, transparent, and reliable manner.	.970

TSA facilitates regular monitoring of government cash balances	.969
It also enables higher quality cash out-turn analysis to be undertaken	.893
TSA facilitates regular monitoring of government cash balances.	.804
TSA Reduces the number of bank accounts results in lower administrative cost	.966
TSA makes it possible to monitor payment mechanisms precisely.	.950
TSA ensures that there is no ambiguity regarding the volume or the location of the government funds,	.893
TSA reduces the volatility of cash flows through the treasury	.804

Source: Field Survey, 2023

Note that items eigen values of variables less than 0.4 were excluded.

Table 4.9 above shows the eigen values with respect to benefits of TSA on cash management in tertiary institutions in Anambra State. All items eigen values of variables were above the cut-off of 4.0 and are thus reliable and valid for subsequent analysis. One principal component emerged; the output shows that when the treasury has full information about cash resources, it can plan and implement budget execution in an efficient, transparent, and reliable manner.

4.3 Descriptive Statistics

Table 4.10: Distribution of respondents according to the effect of revenue collection using TSA policy on cash management in tertiary institutions in Anambra State

Variables	Mean	SD	Accepted
TSA policy helps to block financial leakages.	4.34	0.647	Accepted
TSA policy helps to reduce corruption	4.21	0.740	Accepted
TSA policy helps to promote transparency	4.40	0.709	Accepted
TSA policy helps to prevent mismanagement of government's revenue in public sector organisations	4.64	0.534	Accepted
TSA policy helps to prevent revenue loss	3.33	0.207	Accepted
A TSA allows for effective reconciliation between the government accounting systems and cash flow statements from the banking system	3.73	0.082	Accepted

Source: Field Survey, 2023

As shown in Table 4.10, with respect to effect of revenue collection using TSA policy on cash management in tertiary institutions in Anambra State, all the variables met the theoretical mean threshold of 3.0, which is the established mean cut-off. Thus, the descriptive statistics suggests that revenue collection using TSA policy has influenced cash management in tertiary institutions in Anambra State.

Table 4.11: Distribution of respondents according to the effect of payment disbursement using TSA policy on cash management in tertiary institutions in Anambra State

Variables	Mean	SD	Remark
TSA policy helps in minimizing transaction costs during budget execution,	3.93	.852	Accepted
TSA policy helps in making rapid payments of government expenses	4.16	.840	Accepted

TSA policy helps in facilitating reconciliation between banking and accounting data	3.97	.704	Accepted
TSA policy helps in controlling the delay in the remittance of government revenues by collecting banks	4.09	.757	Accepted
TSA policy allows complete and timely information on government cash resources	3.54	.665	Accepted
TSA policy improves appropriation control.	3.46	.785	Accepted
TSA policy improves operational control during budget execution.	4.09	.757	Accepted
TSA policy reduces bank fees and transaction costs.	3.54	.665	Accepted

Source: Field Survey, 2023

As shown in Table 4.11, with respect to the effect of payment disbursement using TSA policy on cash management in tertiary institutions in Anambra State, all the variables met the theoretical mean threshold of 3.0, which is the established mean cut-off. Thus, the descriptive statistics suggests that payment disbursement using TSA policy has influenced cash management in tertiary institutions in Anambra State.

Table 4.12: Distribution of respondents according to the effect of treasury ledger system using TSA policy on cash management in tertiary institutions in Anambra State

Variables	Mean	SD	Remark
Reduces bank fees and transaction costs.	3.64	.869	Accepted
Facilitates efficient payment mechanisms	3.55	.945	Accepted
Improves bank reconciliation and quality of fiscal data.	3.59	1.047	Accepted
Lowers liquidity reserve needs.	3.53	.909	Accepted
Provides a safe haven for government cash deposits which minimizes credit risk exposure.	3.79	.928	Accepted
Aids the efficient management of government liquidity	3.41	.970	Accepted

Source: Field Survey, 2023

From Table 4.12, it is observed that all the variables construct that examine the effect of treasury ledger system using TSA policy on cash management in tertiary institutions in Anambra State met the theoretical mean threshold of 3.0. Thus, the descriptive statistics suggests that treasury ledger system using TSA policy has influenced cash management in tertiary institutions in Anambra State.

Table 4.13: Distribution of respondents according to the effect of liquidity management using TSA policy on cash management in tertiary institutions in Anambra State

Variables	Mean	SD	Remark
Can facilitate cost effective banking arrangements and speedy settlements	3.59	.960	Accepted
TSA facilitates regular monitoring of government cash balances.	4.21	.640	Accepted
It also enables higher quality cash out-turn analysis to be undertaken	4.33	.471	Accepted
identifying causal factors of variances and distinguishing causal factors from random variations in cash balances	3.52	.728	Accepted
Makes it possible to monitor payment mechanisms precisely.	3.86	.697	Accepted

It can result in substantially lower transaction costs because of economies of scale in processing payments. | 3.82 | .830 | Accepted |

Source: Field Survey, 2023

Table 4.13 shows the mean score of the effect of liquidity management using TSA policy on cash management in tertiary institutions in Anambra State. All the variables meet the theoretical mean threshold of 3.0. Thus, the descriptive statistics suggests that liquidity management using TSA policy has influenced cash management in tertiary institutions in Anambra State.

Table 4.14: Distribution of respondents according to the benefits of TSA on cash management in tertiary institutions in Anambra State

Variables	Mean	SD	Remark
When the treasury has full information about cash resources, it can plan and implement budget execution in an efficient, transparent, and reliable manner.	4.34	.647	Accepted
TSA facilitates regular monitoring of government cash balances	4.21	.740	Accepted
It also enables higher quality cash out-turn analysis to be undertaken	4.40	.709	Accepted
TSA facilitates regular monitoring of government cash balances.	4.64	.534	Accepted
TSA Reduces the number of bank accounts results in lower administrative cost	3.33	1.207	Accepted
TSA makes it possible to monitor payment mechanisms precisely.	3.73	1.082	Accepted
TSA ensures that there is no ambiguity regarding the volume or the location of the government funds,	4.64	.534	Accepted
TSA reduces the volatility of cash flows through the treasur	3.33	1.207	Accepted

Source: Field Survey, 2023

As shown in Table 4.13, with respect to the benefits of TSA on cash management in tertiary institutions in Anambra State, all the variables met the theoretical mean threshold of 3.0, which is the established mean cut-off. Thus, the descriptive statistics suggests that TSA has benefits on cash management in tertiary institutions in Anambra State.

4.5 Regression Analysis Result

Table 4.14: Regression Result on Effect of Treasury Single Account Policy on the Administration of Federal Tertiary Institutions in Anambra State, Nigeria

Model	B	Std. error	T	Sig.
Constant(C)	0.013	0.445	4.520	0.000
Revenue collection using TSA policy	0.258	0.056	4.581	0.000
Payment disbursement using TSA policy	0.165	0.090	4.839	0.019
Treasury ledger system using TSA policy	0.242	0.087	4.775	0.006
Liquidity management using TSA policy	0.116	0.095	4.227	0.032

R	0.912			
R²	0.884			
Adj. R²	0.805			
F-statistic	97.247			0.000

Source: Field Survey 2023

Dependent Variable: Benefits of TSA on cash management in tertiary institutions in Anambra State

The regression results were used to assess effect of treasury single account policy on the administration of federal tertiary institutions in Anambra State, Nigeria. To test the extent to which the results of regression coefficients have impacted on the regressand we shall compared the R², Adj. R², F-statistic and the significant levels of the individual coefficients of the regression results. As showed in the table 4.14, it is observed that the regression lines has a positive intercept as presented by the constant (c) = 0.013. This means that if all the variables are held constant or fixed (zero), the benefits of TSA on cash management in tertiary institutions in Anambra State will increase by 1.3%%. The result also conforms to the a priori expectation. This states that the intercept could be positive or negative, so it conforms to the theoretical expectation (Gujarati, 2008).

In order to assess effect of treasury single account policy on the administration of federal tertiary institutions in Anambra State, Nigeria, the analysis was also done based on statistical criteria by applying the coefficient of determination (R²) and the F-test. In general, the joint effect of the explanatory variables-independent variables-in the model account for 0.884 or 88.4% of the variations in the variables influencing benefits of TSA on cash management in tertiary institutions in Anambra State. This implies that for 0.884 or 88.4%, of the variations in benefits of TSA on cash management in tertiary institutions in Anambra State are being accounted for or explained by the variations in revenue collection using TSA policy, payment disbursement using tsa policy, treasury ledger system using TSA policy, and liquidity management using TSA policy.

The F-statistic shows that the combine effect of the variables of the regression coefficients is significant in enhancing benefits of TSA on cash management in tertiary institutions in Anambra State.

4.5 Test of Hypotheses

The t-test is used to know the statistical significance of the individual parameters at 10% significant levels. The result is shown on table 4.19 below.

Table 4.15: Summary of t-statistic and their statistical significance

Variables	t-cal (t_{cal})	Sig.	RMK
Constant(C)	4.520	0.000	Statistically Significant
Revenue collection using TSA policy	4.581	0.000	Statistically Significant
Payment disbursement using tsa policy	4.839	0.019	Statistically Significant
Treasury ledger system using TSA policy	4.775	0.006	Statistically Significant

Liquidity management using TSA policy	4.227	0.032	Statistically Significant
F-statistic	97.247		

Source: Researchers computation

We begin by bringing our working hypothesis to focus in considering the individual hypothesis. From table 4.15, the t-test result is interpreted below:

Hypothesis One

Ho₁: Revenue collection using TSA policy has no significant effect on cash management in tertiary institutions in Anambra State.

From table 4.15, the t-test value of revenue collection using TSA policy is significant. We, therefore, reject the null hypothesis and conclude that revenue collection using TSA policy has significant effect on cash management in tertiary institutions in Anambra State.

Hypothesis Two

Ho₂: Payment disbursement using TSA has no significant effect on cash management in tertiary institutions in Anambra State.

From table 4.15, the t-test value of payment disbursement using TSA is significant. We, therefore, reject the null hypothesis and accept the alternate by concluding that Payment disbursement using TSA has significant effect on cash management in tertiary institutions in Anambra State.

Hypothesis Three

Ho₃: Treasury ledger system using TSA policy has no significant effect on cash management in tertiary institutions in Anambra State.

From table 4.15, the t-test value of treasury ledger system using TSA policy is significant. We, therefore, reject the null hypothesis and accept the alternate by concluding that treasury ledger system using TSA policy has significant effect on cash management in tertiary institutions in Anambra State.

Hypothesis Four

Ho₄: Liquidity management using TSA policy has no significant effect on cash management in tertiary institutions in Anambra State.

From table 4.19, the t-test value of liquidity management using TSA policy is significant. We, therefore, reject the null hypothesis and conclude that liquidity management using TSA policy has significant effect on cash management in tertiary institutions in Anambra State.

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

1. Revenue collection using TSA policy has significant effect on cash management in tertiary institutions in Anambra State.
2. Payment disbursement using TSA has significant effect on cash management in tertiary institutions in Anambra State.
3. Treasury ledger system using TSA policy has significant effect on cash management in tertiary institutions in Anambra State.
4. Liquidity management using TSA policy has significant effect on cash management in tertiary institutions in Anambra State.

5.2 Conclusion

The study concludes that Treasury Single Account Policy has significant effect on the Administration of Federal Tertiary Institutions in Anambra State, Nigeria (2011-2022). With respect to the variables of the regression coefficients, like: revenue collection using TSA policy, payment disbursement using tsa policy, treasury ledger system using TSA policy, and liquidity management using TSA policy, all the variables of the models have also significantly influenced cash management in tertiary institutions in Anambra State.

5.3 Recommendations

Based on the findings of this study, the following recommendations are made:

1. The government should ensure that all revenue collection by the federal tertiary institutions are carried out within the guideline of the TSA policy this will enable them to consolidate cash resources on a daily basis and reduce borrowings currently necessitated by perceived cash shortages arising from holding so many government bank accounts and a fragmented system for handling receipts and payments.
2. The government should ensure that all tertiary institution adopts a Unified Payment Services. This will enable them reduce the risk of errors in reconciliation processes, and improves the timeliness and quality of the fiscal accounts.
3. All tertiary institution should keep unified treasury ledger system using TSA policy. This will help ensures compliance with the principle of unity of cash management and the unity of treasury operations.
4. All tertiary institution should ensure that all their accounting staff is trained on the guidelines for the operation of treasury single account. This will ensures compliance with the principle of unity of cash management and the unity of treasury operations.

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