Effect of Treasury Single Account (TSA) on Tax Revenue Collected in Nigeria

ABSTRACT

The study examined the effect of Treasury Single Account (TSA) on tax revenue collected in Nigeria. Company income tax, value added tax, and petroleum profit tax formed the dependent variables of the study. The study adopted an *ex-post-facto* research design, covering the period between 2011 and 2019. Secondary data were extracted from the Federal Inland Revenue Service website. Paired Sample T-test technique was used for the data analysis. In line with the specific objectives of the study which was to ascertain the effect treasury single account implementation on company income tax, value added tax, and petroleum profit tax revenue collected in Nigeria, it was revealed that TSA has a positive and significant effect on company income tax and value added tax revenue collected in Nigeria. TSA has a negative and insignificant effect on petroleum profit tax in Nigeria. This implies that TSA implementation has increased company income tax and value added tax collected in Nigeria. It is recommended therefore that the continuous use of TSA should be guaranteed by the government. This is because it led to an increase in company income tax collection in Nigeria. Every factor that works against its continued existence should be subdued. They should ensure that tax authorities continue to comply with TSA rules in remittance of value added tax collected to the consolidated revenue fund. They should ensure that Nigerian National Petroleum Corporation (NNPC) and other oil and gas regulating authorities comply fully to the dictates of TSA.

1. INTRODUCTION

1.1 Background of the Study

The provision of public goods and services to improve the standard of living is a fundamental responsibility of every responsible government. To fulfill this responsibility, governments rely on various sources of revenue, with taxation being a significant and compulsory means of revenue generation. Taxation not only funds government expenditures but also regulates production and consumption, controls adverse economic conditions, protects infant industries, and reduces income inequality (Anyawu, 1997; Afuberon & Okoye, 2014).

In Nigeria, tax revenue has historically accounted for a small proportion of the total revenue generated, primarily due to the country's heavy reliance on oil revenue. However, the decline in oil prices and the subsequent reduction in funds available for distribution among the Federal, State, and Local Governments have highlighted the need for diversification of the economy and the urgency of generating adequate revenue from taxation. Globally, there is a paradigm shift towards tax revenue as a more sustainable alternative for revenue generation (Afuberon & Okoye, 2014).

The implementation of the Treasury Single Account (TSA) in Nigeria is a financial accounting system that consolidates all government income and expenditure into a single account managed by the Central Bank. The primary objective of the TSA is to optimize the use of cash resources, reduce float costs, and ensure prudent financial resource management. By centralizing and controlling government cash resources, the TSA aims to eliminate gaps and leaks in the financial system, leading to better economic management and reduced borrowing to fund the budget (Sailendra & Israel, 2011; Taiwo, 2016).

While the introduction of the TSA has been hailed as a mechanism to plug revenue leakages and enhance economic development, opinions and perceptions about its merits and drawbacks vary across the country. Positive views highlight the potential benefits, while negative views raise concerns and criticisms. Understanding the impact of the TSA on tax revenue collection is crucial for assessing its effectiveness in improving revenue generation in Nigeria.

1.2 Statement of the Problem

Efficient tax administration plays a crucial role in mobilizing a nation's internal resources for economic growth. However, challenges such as unqualified tax personnel and fraudulent activities of tax collectors pose significant obstacles to revenue generation. Fraudulent tax collectors divert government revenue for personal gain, preventing the government from providing essential amenities and infrastructure to its citizens. The introduction of the Treasury Single Account aimed to address these challenges by curbing financial leakages, promoting transparency, and ensuring accountability in public economic management. Nevertheless, despite the implementation of the TSA, Nigeria's economic situation remains largely unchanged, and the government continues to rely heavily on external debt to finance its budget (Ocheni, 2016).

The Finance Act 2020 was enacted to enhance revenue generation through taxation, indicating the government's recognition of the need to generate more revenue domestically. This study seeks to investigate the effect of TSA implementation on tax revenue collection in Nigeria, specifically focusing on company income tax, value-added tax, and petroleum profit tax.

1.3 Objectives of the Study

The ~~need~~goal of this study is to assess the effect of the Treasury Single Account (TSA) on tax revenue collection in Nigeria. The specific objectives guiding the study are as follows:

i. Ascertain the effect of TSA implementation on company income tax in Nigeria.
ii. Investigate the effect of TSA implementation on value-added tax in Nigeria.
iii. Appraise the effect of TSA implementation on petroleum profit tax in Nigeria.

2. REVIEW OF RELATED LITERATURES

2.1.1 Treasury Single Account (TSA)

TSA, as defined by Onyekpere (2015), is an integrated organization of government books of accounts that allows for the merging and optimal utilization of government cash incomes. It functions as a bank account or a set of interconnected bank accounts through which the government conducts all its income and expenditure activities, providing a consolidated view of its cash position at any given time. According to Kanu (2016), TSA is a financial policy implemented in Nigeria to integrate all incomes and funds from various government departments, agencies, ministries, and extra ministerial departments. Under this policy, all remittances are consolidated into a single account at the country's top bank, the Central Bank of Nigeria (CBN), through the Remita e-collection payment system, as stated by Akande (2016).

Yusuf (2015) further highlights that the Treasury Single Account serves as a unified structure for government bank accounts, enabling the consolidation and optimal utilization of government cash resources. It was initially conceived during the administration of President Goodluck Jonathan but only became a mandatory policy under President Buhari. The primary objective behind its implementation is to combat corruption by centralizing and streamlining revenue collection. All revenue-generating Ministries, Departments, and Agencies (MDAs) are now required to deposit their earnings into a single account with the Nigerian Central Bank (CBN).

2.1.2 Tax Revenue

The tax system of a country plays a crucial role in determining its macroeconomic indicators. As the population of Nigeria continues to grow, there is a proportional increase in the needs that must be met in order to achieve development. To address these growing demands, governments, including Nigeria, rely on increased revenue generation, with taxation being a vital source. Tax revenue in Nigeria is derived from various sources such as profits from oil and gas exploration, profits from limited liability companies, value added on goods and services, as well as personal incomes of individuals and partnerships.

The primary purpose of taxation is to finance government expenditures and redistribute wealth, thereby contributing to the country's development (Brartia, 2009). However, whether the tax revenue collected is sufficient to finance the country's development depends on its specific needs. Countries may explore alternative sources of revenue to ensure sustainable development (Unegbu & Irefin, 2011).

2.1.3 Company Income Tax

According to Appah (2010), all incorporated companies operating in Nigeria are required to pay Company Income Tax (CIT) on profits earned within the country. This tax also applies to non-resident companies conducting business in Nigeria, and it is collected by the Federal Inland Revenue Service (FIRS). The Companies Income Tax Act (CITA) of 1979 established the CIT, which traces its

roots back to the Income Tax Management Act of 1961. CIT is a vital source of revenue for the Nigerian government, and it encompasses profits accrued in Nigeria, regardless of their origin or whether they were brought into the country.

Under CIT, various types of income are included, such as income from trade or company, rent on business land, dividends, interest, royalties, discounts, charges, annuities, payments for services rendered, and other sources of annual profits or gains. Therefore, both Nigerian and international companies are subject to the provisions of the Company Income Tax Act when operating in Nigeria. This tax represents one of the major revenue streams for the Nigerian government (Ugochukwu & Azubike, 2015).

2.1.4 Value Added Tax

According to Abata (2014), Value-Added Tax (VAT) is a consumption tax where the tax burden is ultimately borne by the consumers. The burden is transferred from the producer to the wholesaler, then to the retailer, and finally to the buyer, who experiences the primary impact of the tax. The only way to avoid paying VAT is to refrain from purchasing and using taxable goods and services. On the other hand, Olurofimi (2013) explains that VAT is an indirect tax levied throughout the production and distribution cycle, with the ultimate cost being borne by consumers as part of their purchase expenses. VAT is essentially a consumption tax that is collected at various stages of the supply chain, except for certain exemptions. The rate of VAT varies from country to country.

According to Okoye and Gbegi (2013), Value Added Tax (VAT) is a multi-stage tax that is imposed on the value addition~~ed~~ to products and services, as they progress through different stages of the manufacturing and distribution process. It is also applied to services at the point of their provision. The burden of VAT is ultimately borne by the final customer, and it is collected at each stage of the manufacturing and distribution chain.

2.1.5 Petroleum Profit Tax

The Petroleum Profit Tax (PPT) in Nigeria is governed by the Petroleum Profit Tax Act (PPTA), and it falls under the jurisdiction of the Federal Inland Revenue Board. The tax is imposed on the profits earned by companies involved in petroleum operations. According to the Act, petroleum operations encompass activities such as the extraction, transportation, and acquisition of petroleum or chargeable oil within Nigeria, excluding refinery processes, conducted by a company for its own account as part of its business operations, along with any associated operations and the sale or disposal of chargeable oil on behalf of the company. Fasoranti (2013) emphasizes that the PPT involves the taxation of income derived from petroleum operations. The researcher highlights the significance of petroleum to Nigeria's economy, which necessitates the enactment of specific laws to regulate the taxation of income generated from petroleum operations.

2.2 Theoretical Framework

This work is underpinned by Stakeholder Theory, Management Theory, and Public Finance Management Theory.

The stakeholder theory, proposed by Freeman in 1984, emphasizes that managers' need to address the interests of various stakeholders such as investors, employees, customers, suppliers, and government. The adoption of the Treasury Single Account (TSA) by the Nigerian government can be attributed to the pressure exerted by stakeholders to combat corruption. The government responded to the demands of critical stakeholders by implementing the TSA as a strategic measure to eliminate corruption (Freeman, 1984).

The management theory, originally presented by Henry Fayol in 1919, highlighteds the importance of effective management of financial resources by the government for the benefit of the citizens. It encompasses resource mobilization, program prioritization, budgetary processes, efficient resource management, and control measures to prevent misuse of public funds. The primary objective of the TSA is to prevent the misapplication of public funds, aligning with the principles of the management theory (Fayol, 1919).

The public finance management theory, proposed by Minogue and Polidano in 1998, emphasizes the prudent management of government expenditures and the mobilization of revenue for the benefit of the citizens. It advocates forthe prioritization of resources and programs, efficient management of resources, and prevention of embezzlement. The TSA aligns with this theory as it aims to prevent the misappropriation of public funds and promote sound public finance management (Minogue & Polidano, 1998).

2.3 Empirical Review

Ogbonna and Amuji (2018) conducted a study on the impact of the treasury single account (TSA) on the performance of banks in Nigeria from 2007 to 2017. By analyzing data from two banks, Diamond Bank Plc and the First Bank Plc, and using statistical tests such as Hotelling's T2 statistic and F statistic, the study found that there were no significant differences in liquidity ratio, capital adequacy, and credit to customers between the two periods, indicating that the TSA did not have a noticeable effect on banks' performance.

Ndubuaku, Ohaegbu, and Nina (2017) examined how the introduction of the Treasury Single Account affected banks' credit to the private sector, deposit mobilization, and loans and advances. Their study utilized descriptive and ex post-facto research designs, focusing on the 24 commercial banks in Nigeria. Time series data from the Central Bank of Nigeria Statistical Bulletin for the period 2010-2015 were analyzed using OLS regression and correlation analysis. The study concluded that the

introduction of the Treasury Single Account significantly reduced credit to the private sector, for deposit mobilization, and loans and advances.

Uzoka and Chiedu (2018) investigated the effect of taxation revenue on Nigeria's economic growth from 1997 to 2016. Their study revealed that company tax, customs and excise duty, and gains from the sale of capital assets exhibited stationary behavior at the level, while Real Gross Domestic Product (RGDP), Petroleum Profit Tax (PPT), Value Added Tax (VAT), and RDT became stationary after first-order differencing. Co-integration tests indicated a long-run relationship between economic growth and RGDP, PPT, VAT, RDT, CIT, and CED. The analysis showed that CGT and EDT had no significant effect on economic growth, whereas PPT, CIT, VAT, and CED had a significant impact on Nigeria's economic growth.

Okwara and Amori (2017) conducted a study to examine how revenue from taxation affected the growth of Nigeria's economy between 1994 and 2015. The researchers used Gross Domestic Product (GDP) as an indicator of economic growth and measured tax revenue using Value Added Tax (VAT) and non-oil income. The results of the study revealed that non-oil income had a significant positive impact on gross domestic product, indicating its contribution to economic growth. On the other hand, value-added tax showed an adverse association and was found to be statistically insignificant during the period under review.

Asaolu, Olabisi, Akinbode, and Alebiosu (2018) focused on exploring the relationship between tax revenue and economic growth in Nigeria. Their research adopted a descriptive and historical approach, analyzing secondary data from the Central Bank of Nigeria (CBN) statistical bulletin and annual reports spanning a period of twenty-two years (1994-2015). By employing Auto Regressive Distributed Lag (ARDL) Regression, the study found that Value Added Tax (VAT) and Corporate Income Tax (CIT) had a significant positive relationship with economic growth, indicating their influence on the economy. However, Petroleum Profit Tax (PPT) did not show a significant relationship with economic growth.

Fatile and Adejuwon (2017) investigated the implications of implementing the Treasury Single Account (TSA) on the cost of governance during the Buhari civilian administration in Nigeria. This qualitative study relied on secondary sources to examine the subject. The findings of the research suggested that the increase in the cost of governance was primarily attributed to corruption rather than an over-bloated bureaucracy. The Treasury Single Account (TSA) was implemented primarily to ensure the accountability of government revenue, enhance transparency, and prevent misappropriation of public funds.

Abiola (2018) conducted a study to investigate the opinions and perceptions of individuals regarding the adoption of the Treasury Single Account (TSA) in Nigeria. The researcher collected data through structured questionnaires administered to a sample size of 200 participants selected from Federal,

State, Local Government, and Private Sector Employees. The outcome variable, perception, was categorized into positive and negative perceptions. The analysis of the data using frequency, percentages, and analytic weighted mean revealed variations in the acceptance attitude towards the implementation of the TSA in Nigeria. Approximately 23.4% of respondents reported a negative perception, indicating non-acceptability, while 76.6% reported a positive perception, indicating acceptability.

Nwankwo (2017) examined the transition to the Treasury Single Account (TSA) in Nigeria, focusing on the associated issues, challenges, and prospects. The study employed a descriptive survey research method and utilized a convenience sampling technique to select respondents, including ten Professors and twenty Senior lecturers from the faculties of Management and Social Sciences at Enugu State University of Science and Technology, ESUT. Questionnaires were administered to collect data, and statistical weighted means, scores, and standard deviation were used in the analysis. The findings revealed that the current economic recession and the high level of corruption in Nigeria compelled the government to introduce the long-awaited TSA program.

Onyeizugbe, Igbodo, and Enaini (2017) examined the impact of the Treasury Single Account (TSA) on university administration in South East Nigeria. The research utilized a survey research method, collecting primary data through questionnaires. The collected data were subjected to analytical regression. The study found that the newly implemented Treasury Single Account (TSA) had affected financial operations in the bursary units of universities and consequently slowed down activities. It indicated a departure from the past, where planned programs were executed as intended in universities.

Ikya, Akaa, and Ucherwuhe (2017) conducted a study to explore the nature, origin, challenges, and lessons learned from the Nigerian experience with the Treasury Single Account (TSA). The study drew upon stakeholder theory, management theory, and modern money theory as its theoretical foundations. The research revealed that the TSA serves as a unified structure of government bank accounts, allowing for the consolidation and optimal utilization of government cash resources. It facilitates regular monitoring of government cash balances and enables a more accurate analysis of cash out turn~~outturn~~, including the identification of causal factors behind variances and distinguishing them from random variations in cash balances.

Igbekoyi and Agbaje (2017) assessed the implications of adopting the TSA on accountability and transparency in the Nigerian public sector, aiming to determine whether the policy can enhance government accountability. The study included all ministries, departments, and agencies (MDAs) in the public service, with a sample size of ten MDAs involved in revenue generation selected through purposive sampling. The hypotheses were tested using regression analysis (ANOVA). The findings of

the study demonstrated that the TSA had a significant positive impact on reducing financial leakages, enhancing transparency, and curbing financial misappropriation.

Adebayo, Akinleye, and Adeduro (2020) examined the relationship between the Treasury Single Account (TSA) and government expenditure in Nigeria. The researchers employed a secondary method of data collection, encompassing pre- and post-implementation years from 2011 to 2018. The dependent variable in the study was government expenditure, which included both recurrent and capital expenditure. The independent variable was represented by Federal Government Time Deposits (TSA). The data underwent correlation and regression analysis using the E-View econometrics package. The results indicated that Federal Government Time Deposits had a positive but insignificant effect on both the pre- and post-implementation eras of the TSA.

2.5 Gap in Empirical Review

From the foregoing empirical literature, it could be seen that most works on treasury single account did not investigate~~examined~~its effect on independent sources of revenue collection in Nigeria. None of these studies ~~tried~~either tried to evaluate how it affect~~ed~~ government spending especially capital expenditure. This created a knowledge gap which this study filled by investigating the effect of treasury single account on independent sources of tax revenue collection in Nigeria.

3. METHODOLOGY

3.1 Research Design

The research design chosen for this study was an ex-post-facto design, which relies on historical data to examine the impact of the Treasury Single Account (TSA) implementation on tax revenue collection in Nigeria. The study was conducted in Nigeria, using tax revenue data collected before and after the implementation of TSA as a benchmark for measuring its impact. Secondary sources of data were utilized, specifically time series data from the Central Bank of Nigeria Statistical Bulletin spanning from 2011 to 2019. The data were divided into two periods: the period before the implementation of TSA (2011 to 2014) and the period after the implementation of TSA (2016 to 2019).

The population of the study encompassed all government revenue heads. As for the sample size determination, the researcher selected tax revenue as the sample for the study, specifically focusing on company income tax, value-added tax, and petroleum profit tax. The method of data analysis employed was the paired sample t-test, facilitated by the Microsoft Excel program (version 2016). The paired sample t-test is a statistical procedure used to assess whether the mean difference between two sets of observations is zero. In this case, each subject or entity was measured twice, resulting in pairs of observations (before TSA implementation and after TSA implementation). The study's objectives were pursued by conducting descriptive statistics to examine the normality of the

distribution of the time series data and performing a paired sample t-test to analyze any differences in public financial management before and after the implementation of TSA.

3.2 Model Specification

The model was specified as follows:

$$t = \frac{\bar{x}_{\text{diff}} - 0}{s_{\bar{x}}}$$

Where; $s_{\bar{x}} = \frac{s_{\text{diff}}}{\sqrt{n}}$

Where;

$\bar{x}_{\text{diff}}$ = Sample means of the differences

n = Sample size (i.e., number of observations)

s_{diff} = Sample standard deviation of the differences

$s_{\bar{x}}$ = Estimated standard error of the mean (s/sqrt(*n*))

To analyse the respective differences, the mathematical representation of the null and alternative hypotheses is defined as follows;

H_0: $\mu_d = 0$

H_1: $\mu_d \neq 0$ (two-tailed)

H_1: $\mu_d > 0$ (upper-tailed)

H_1: $\mu_d < 0$ (lower-tailed)

The assumptions are as follows:

1. The null hypotheses (H_0) assumes that the true mean difference (μ_d) is equal to zero.
2. The two-tailed alternative hypotheses (H_1) assume that (μ_d) is not equal to zero.
3. The upper-tailed alternative hypotheses (H_1) assume that (μ_d) is greater than zero.
4. The lower-tailed alternative hypotheses (H_1) assume that (μ_d) is less than zero.

4 DATA ANALYSIS

Table 1: Descriptive Statistics for the Focal Variables

	CIT	VAT	PPT
Mean	1088197.	883565.6	2331545.
Median	1068471.	815581.9	2460764.
Maximum	1604698.	1184580.	3201320.
Minimum	654448.2	659153.6	1157808.
Std. Dev.	305417.4	187189.0	710229.6
Skewness	0.268375	0.502537	-0.450700

Kurtosis	2.192761	1.906586	2.063978
Jarque-Bera	0.313245	0.735243	0.562887
Probability	0.855027	0.692379	0.754694
Sum	8705577.	7068524.	18652364
Sum Sq. Dev.	6.53E+11	2.45E+11	3.53E+12
Observations	8	8	8

Source: ~~**Eviews 10.0 Statistical Software**~~**Source cannot be software. Sourceis always related to data source andtime period and page number of data books**

Table 1 above reveals the variable description of the 8 observations of the time series data collected from CBN Economic Report. The normality of the distribution of the data series is shown by the coefficients of Skewness, Kurtosis, and Jarque-Bera Probability. From the Table, the probability of the Jarque-Bera Statistics for all the explanatory variables have insignificant p-values as follows, Company Income Tax (0.855027), Value Added Tax (0.735243), and Petroleum Profit Tax (0.562887). The insignificance of the p-values depicts normal distribution for all the variables. This is further confirmed by the skewness coefficients which is less than the figure one in all the variables under study. The kurtosis coefficient also provides a second level of confirmation that all the explanatory variables are normally distributed with a Kurtosis coefficient that is less than three.

Table 2: t-Test: Paired Two Sample for Means (CIT)

	CIT AFTER	*CIT BEFORE*
Mean	1273405.375	902988.7898
Variance	77716164370	48464327320
Observations	4	4
Pearson Correlation	0.993631361	
Hypothesized Mean Difference	0	
df	3	
t Stat	11.4052814	
P(T<=t) one-tail	0.000723157	
t Critical one-tail	2.353363435	
P(T<=t) two-tail	0.001446313	
t Critical two-tail	3.182446305	

Source: Computed by Researcher Using Microsoft Excel 2016 Software

The t-Test result in table 2 reveals that Company Income Tax revenue before implementation of TSA has a mean of ₦902,988.7898, while the mean after implementation of TSA is ₦1,273,405.375. At two- tailed, the t- calculated of 11.405 is greater than the t-tabulated of 3.1824.

Table 3: t-Test: Paired Two Sample for Means (VAT)

	VAT AFTER	*VAT BEFORE*
Mean	1023291.871	743839.2295
Variance	24617509803	5079318501
Observations	4	4
Pearson Correlation	0.975971436	
Hypothesized Mean Difference	0	
df	3	
t Stat	6.300174615	
P(T<=t) one-tail	0.004039539	
t Critical one-tail	2.353363435	
P(T<=t) two-tail	0.008079078	
t Critical two-tail	3.182446305	

Source: ***~~Computed by Researcher Using Microsoft Excel 2016 Software~~***

The t-Test result in table 3 reveals that Value Added Tax revenue before implementation of TSA has a mean of ₦743,839.2295, while the mean after implementation of TSA is ₦1,023,291.871. At two-tailed, the t- calculated of 6.300 is greater than the t-tabulated of 3.1824.

Table 4: t-Test: Paired Two Sample for Means (PPT)

	PPT AFTER	*PPT BEFORE*
Mean	1815034.619	2848056.275
Variance	3.44688E+11	1.20883E+11
Observations	4	4
Pearson Correlation	-0.794940628	
Hypothesized Mean Difference	0	
df	3	
t Stat	-2.324324222	
P(T<=t) one-tail	0.051339002	
t Critical one-tail	2.353363435	
P(T<=t) two-tail	0.102678004	
t Critical two-tail	3.182446305	

Source: Computed by Researcher ~~Using Microsoft Excel 2016 Software~~

The t-Test result in table 4 reveals that Petroleum Profit Tax revenue before implementation of TSA has a mean of ₦2,848,056.275, while the mean after implementation of TSA is ₦1,815,034.619. At two- tailed, the t- calculated of 2.3243 is less than the t-tabulated of 3.1824.

Explain outcome of single tail andtwo tails?

4.3 Test of Hypotheses

Decision Rule: If the P-value is greater than Alpha Level of 0.05, the null hypothesis of no significant effect will be accepted; if otherwise, reject the null and accept alternative. Also, if the t-tabulated is less than t-calculated null hypotheses should be accepted.

Hypothesis One: Treasury single account (TSA) implementation do not significantly affect company income tax in Nigeria.

The t-Test for the paired two sample for means in table 2 shows a two-tail probability of 0.0014 which is less than the alpha value of 0.05. Therefore, the null hypothesis is rejected and the alternative hypotheses accepted. The t-tabulated (11.4053) which is greater than t-calculated (3.1824) also suggest that the null hypotheses should be rejected. This implies that TSA has a significant effect on company income tax revenue collected in Nigeria.

Hypothesis Two: Treasury single account (TSA) implementation do not significantly affect value added tax in Nigeria.

The t-Test for the paired two sample for means in table 3 shows a two-tail probability of 0.0081 which is less than the alpha value of 0.05. Therefore, the null hypothesis is rejected and the alternative hypotheses accepted. The t-tabulated (6.3002) which is greater than t-calculated (3.1824) also suggest that the null hypothesis is rejected. This implies that TSA significantly affect value added tax revenue in Nigeria.

Hypotheses Three: Treasury single account (TSA) implementation do not significantly affect petroleum profit tax in Nigeria.

The t-Test for the paired two sample for means in table 4 shows a two-tail probability of 0.1027 which is greater than the alpha value of 0.05. Therefore, the null hypothesis is accepted and the alternative hypotheses rejected. The t-tabulated (2.3243) which is less than t-calculated (3.1824) also suggest that the null hypotheses should be accepted. This implies that TSA do not significantly affect petroleum profit tax in Nigeria.

4.4 Discussion of Result

The t-Test for the paired two sample means in table 2 indicates that the Treasury Single Account (TSA) has a positive and significant effect (P-value 0.0014) on company income tax in Nigeria. This finding suggests that the implementation of the TSA has significantly increased the revenue from company income tax in the country. This result is consistent with the findings of Mutalib, Bulkachuwa, Uarame, and Chijioke (2015), who demonstrated that the introduction of the TSA improves accounting information in Ministries, Departments, and Agencies (MDAs), addresses issues of corruption and mismanagement of public funds, and enhances the government's capital base. It is

likely that these factors contributed to the observed increase in company income tax revenue in Nigeria.

The t-Test for the paired two sample means in table 3 shows that the Treasury Single Account has a positive and significant effect (P-value 0.0081) on value-added tax revenue in Nigeria. This outcome suggests that the implementation of the TSA has significantly increased the revenue from value-added tax in the country. Akujuru and Enyioko (2017) support this finding by highlighting that the introduction of the TSA aimed to prevent financial leakages, reduce corruption, promote transparency, and prevent mismanagement of government revenue in public sector organizations. The blockage of financial leakages and reduction of corruption, resulting from the implementation of the TSA, likely contributed to the observed increase in value-added tax revenue in Nigeria.

The t-Test for the paired two sample means in table 4 indicates that the Treasury Single Account has a negative and insignificant effect (P-value 0.1027) on petroleum profit tax revenue in Nigeria. This finding suggests that the implementation of the TSA has not significantly affected the revenue generated from petroleum profit tax in the country. This finding contradicts the intended purpose of implementing the TSA in Nigeria. It implies that either those responsible for managing the petroleum profit tax are not remitting the funds to the federal government via the TSA, or the funds are being misappropriated at the source. No existing study has reported similar findings, possibly due to a lack of literature on the Treasury Single Account's impact on petroleum profit tax revenue.

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

It is evident that the TSA policy will play a crucial role in curbing identified financial leakages in revenue generation and promoting transparency and accountability in the public financial system when fully implemented. It will also facilitate the timely payment and accurate capture of all revenues entering the government treasury, eliminating the need for multiple banking arrangements. Moreover, the policy will enable the central government to have real-time knowledge of its cash position without any obstacles. Furthermore, the system is likely to reduce the occurrence of round-tripping of government deposits.

Based on the findings of the pre-post analysis conducted on the impact of TSA on tax revenue collected in Nigeria, the study concludes that the implementation of the Treasury Single Account has significantly enhanced the collection of company income tax revenue and value-added tax revenue. However, although the TSA has had a negative effect, it is statistically insignificant, on the collection of petroleum profit tax revenue in Nigeria.

5.2 Recommendation

Consequent to the findings of this study, the study therefore recommends that:

i. Ensure the continuous use of TSA: The government should guarantee the ongoing implementation of the Treasury Single Account policy to maintain the increase in company income tax collection. Addressing obstacles to its effectiveness and sustainability, such as enacting supportive legislation and allocating sufficient resources, is crucial.

ii. Tax authorities must comply with TSA rules for VAT remittance: To maximize the positive impact of TSA on value-added tax revenue collection, tax authorities should strictly adhere to TSA guidelines when remitting VAT funds to the consolidated revenue fund. This will improve transparency and accountability in the financial system.

iii. Enhance compliance with TSA by oil and gas regulating authorities: Although TSA had a limited impact on petroleum profit tax revenue, it is recommended that bodies like NNPC comply fully with TSA requirements. Aligning their accounting and remittance processes with TSA guidelines will ensure prompt deposit of all petroleum profit tax revenue into the government treasury.

Implementing these recommendations will bolster the Treasury Single Account's positive influence on revenue collection, promoting financial transparency, efficiency, and accountability in Nigeria's public financial system.

5.4 Contribution to Knowledge

Existing research on the Treasury Single Account (TSA) in Nigeria has predominantly focused on its impact on revenue collection, overlooking its influence on government spending, particularly capital expenditure. Furthermore, the majority of these studies relied on primary data, resulting in a knowledge gap. This study aimed to bridge this gap by examining the effect of the Treasury Single Account on tax revenue collection in Nigeria using secondary data obtained from the Federal Inland Revenue Service website.

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My Comments:

1- CheckKnowledge gaps and then formulate Objectives

2- Data source under each table should refer to sources of data collection. Then author's calculation..and not software used.

3- Explain the possible implication of single tail and two tail results in the methodology.

4- Make the grammatical corrections.

Otherwise, the paper isgood and an orginal piece of work.

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