

## **Effect of Loan Loss Provision on Revenue Recognition of Deposit Money Banks (DMBs) in Nigeria**

**LAMBE, Isaac**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: lambe.isaac@binghamuni.edu.ng, Phone No: +234 8027629054

**OLA, Miriam Hilda**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: mariedee247@yahoo.com, Phone No: +234 8027629054

### **Abstract**

*This study examines the effect of loan loss provision on revenue recognition of listed deposit money banks (DMBs) in Nigeria. Secondary sources of data were used from the annual reports, and financial statement of the twelve (12) deposit money banks selected for the period between 2014 and 2018. The methodology employed was panel data analysis including pooled Ordinary least square estimation with fixed effect estimation. The variables studied were Revenue Recognition (RR), Loan Loss Provision (LLR), Income Smoothing (IS) and Value Relevance (VR). The results revealed that income smoothing, Loan Loss Provision and Value Relevance impacted negatively on revenue recognition; however, only the effect of LLP is found to be statistically significant in pre- IFRS adoption while loan loss provision and value relevance impacted positively on revenue recognition and income smoothing impacted negatively on revenue recognition in post- IFRS adoption respectively. However, loan loss provision and value relevance have significant impact on revenue recognition in post IFRS adoption. The study therefore concluded that, the adoption of international financial reporting standard has had significant effects on the mechanics of loan loss provisioning in Nigerian Deposit Money Banks. It is therefore recommended that management should congruence the loan loss provision because it has a critical effect on revenue recognition which will have an inevitable effect on profitability and sustainability.*

Keywords: Income smoothing, IFRS, Loan loss Provision and Revenue Recognition.

### **INTRODUCTION**

The adoption of the International Financial Reporting Standard (IFRS) was brought about by the entire issue of globalization, and the driving forces of globalization have resulted in changes, which enhances unifying the world and improving the financial sector for international competition (ECB, 2001). Though the change leads to all kind of challenges, it unlocks endless opportunities which can be exploited for long term benefits (Camacho, 2011). The globalization of financial reporting is an unchangeable process that has many potential advantages to be gained from commonly recognized and respected international accounting standards. The adoption of uniform standards decreases the costs of doing business beyond borders by reducing the need for additional information and enhances more comparability of data by improving evaluation and analysis by users of financial statements (Adekayo, 2011).

The global financial crisis has indeed influenced the importance of financial reporting in the banking and commercial sectors. Recently, there has been deliberation on the way and manner in which the banking sector accounts for specific features such as the fair value. Fair value accounting has been assumed to be the contributive factor to the bank crisis and increasing the effects of the financial meltdown. However, the recent controversy around fair value accounting neglects the fact that the vital part of Interest revenues of the deposit money bank is generated principally from loans, and the loans are measured on a cost basis both by local GAAP and IFRS requirement. Non-performing loans are recognized by loan loss provision by applying the impairment rules of the particular accounting year.

## *Effect of Loan Loss Provision on Revenue Recognition of Deposit Money Banks (DMBs) in Nigeria*

Loan loss provisions are a crucial accounting decision that significantly affects the reported revenue of deposit money banks. The mandatory adoption of IFRS by deposit money banks represents a significant change in the revenue recognition and measurement of the loan loss provision. However, the IFRS conditions of measurement and revenue recognition of incurred losses and that of loss provisions are substantially different from the local GAAP. The banks recognized losses in part to anticipate the losses expected to occur due to future events. However, the principles based rules gave considerable room for the banks to use discretion, which enhances smoothing of income. With the fundamental changes in the recognition measurement of loan loss provision, it is assumed to have a significant influence on the reported revenue recognized by the deposit money banks. Therefore, this study seeks to determine the effect of loan loss provision on revenue recognition of the deposit money banks. In order to achieve the main objective of the study, the following null hypotheses are those which underlines the study:

H01: Loan loss provision does not have a significant effect on revenue recognition of the listed DMBs in Nigeria during pre and post IFRS adoption

H02: Income smoothing does not have a significant effect on revenue recognition of the listed DMBs in Nigeria during pre and post IFRS adoption

### **LITERATURE REVIEW**

#### **Conceptual Framework**

##### **Concept of Loan Loss Provision**

Loan loss provision is a non-cash expense that banks need to account for as a result of likely future losses due to the default of loan payment. It is a provision the Banks make on the assumption that a certain percentage of loans will not be paid as at when due. Loan loss provision is a vital accounting decision that significantly determines the incomes and capital demands of banks (Curcio & Hasan; 2013). In giving out loans, banks stand the risk that borrowers may fail, and the full amount of the loan might not be recovered. A possible loan loss provision is made to guide the default or future loss. Loan loss provision is an essential subject to investors, bank regulators, standard setters and bank's management Based on the operations of a bank, an annual provisional charge to the income statement creates a loan loss reserve (shown in the bank's position statement). The loan loss provision allocated each year increases with the perceived riskiness of the loans advanced to customers. The loan loss provisions are categorized into two namely: specific provisions and general provisions. The specific loan loss provision is losses expected from individual or loans, which are identified as impaired while general provision for loans that may be impaired that is losses expected as a result of future event may not be recognized (Lobo, 2016).

Consequently, a bank making fewer risky loans will have a low loan loss provision compared to banks making higher risky loans. Before the compulsory adoption of IFRS, Nigerian banks operated under the CBN Prudential Guidelines 2010, which allowed loss provisions for specific loans identified as impaired and a general requirement for loans that may be impaired. The normal practice used by the bank is that banks are expected to make provision for future losses as a result of non-performance of the loans. The prudential guidelines categorized non-performing loans into three, namely: sub-standard, doubtful, and loss with their respective percentage of provision as; Sub-Standard- 10% provision of the outstanding balance is made for loans that remain unpaid for both principal and interest for more than 90days but less than 180days. Doubtful- 5% provision should be made for the outstanding balance, which remains unpaid for at least 180days but less than 360days without a legal or secured asset as collateral. Loss Loan- 100% provision should be made for a loan that remains unpaid for 360days or more without any legal or secured collateral, while each deposit money bank is expected to make at least 1% general provision for the risky credit facility (CBN, 2010). When IFRS was adopted in Nigeria in 2012, Banks were required to make provisions for loans as prescribed in the relevant IFRS Standards. Loan loss provision is recognized based on the requirement of IFRS in the income statement. Though the regulations for IFRS should be compared with rule determined under prudential guidelines and the changes in general reserve should be

## *Effect of Loan Loss Provision on Revenue Recognition of Deposit Money Banks (DMBs) in Nigeria*

recognized as follows: when that of prudential guideline Provision is greater than the provision under IFRS, the difference should be transferred from the general reserve to a non-distributable regulatory reserve. When prudential guideline Provision however is less than IFRS provision; the excess charges should be moved from the statutory reserve account to general reserve to the extent of the non-distributable reserve previously recognized (Atoyebi & Simeon; 2018).

### **Concept of Income Smoothing**

Income smoothing is described as an effort to reduce the amount of recognized revenue if actual income is higher than regular profits and attempts to increase the number of revenues recognized if actual earnings are smaller than regular profits (Amanza, 2012). Income smoothing is a kind of earnings management. It can also be stated as manipulating an accrual item in the income statement to smooth the firm's reported earnings. The need for income smoothing arises as a result of reducing information asymmetry which will help the DMB to reduce the risk from activities that are outside management control and boost investor confidence. It will also decrease the cost of capital and increase firm value. Income smoothing happens when bank authority undervalues expected loan losses to increase net income and capital in the current year (Benston and Wall, 2005). Ozili and Thankom (2018), state that Income smoothing is the process of recognizing a steady profit over time. Loan loss provisions are regarded as the primary tool for income smoothing because the estimate for loan loss provisions is determined based on the discretion of the authority of the deposit money banks, which make loan loss provisions a useful tool in the hand of the banks, that give them easy access to manipulate or alter the financial statement to suit the expected outcome of profit (Ozili & Outa, 2017). However, managerial discretion in loan loss provision for income smoothing purposes can be limited by strict accounting standards.

### **Concept of Value Relevance**

Value relevance is a kind of measure used in ascertaining financial quality. Barth (2000) defines value relevance as the extent to which the accounting value is associated with some measure of value, such as shares prices. Value relevance can also be referred to as “the ability of information that is presented in financial statements to capture and summarize firm value” (Kargin, 2013). Barth et al. (2001) expect that firms with higher financial quality have higher connections between share price, earnings and equity book value because higher accounting quality has a better reflection on the firm's actual value. Prather-Kinsey et al. (2008) study the influence of IFRS on value-relevance, information quality, and cost of capital by using 157 listed companies in Europe. They find the adoption of IFRS enhances the value relevance of accounting information, reduces the cost of equity, and improve the accounting quality.

### **Concept of Revenue Recognition (IAS18 replaced with IFRS 15)**

Revenue, as defined by IAS 18, is the gross inflow of the economic benefit during an accounting period of an organization. The different types of revenue classified under IAS 18 are goods sold, services rendered, interest received or receivable, dividend received and commissions, etc. IAS 18 is now replaced by IFRS 15(Revenue contracts with customers). The core principles of the standard are to determine revenue recognition and to depict the transfer of promised goods and services to customers that reflect the consideration to which the entity expects to be entitled in exchange for goods and services. Adeadebayo (2018), which presented the five core principles of delivering the model framework according to the requirement of IFRS 15 states thus:

- i. Identify the contract with a customer;
- ii. Identify the performance obligation in the contract;
- iii. Determine the transfer price;
- iv. Allocate the transaction price to the performance obligation in the contract;
- v. Recognize revenue when or as the entity satisfies a performance obligation

### **Revenue Recognition and Measurement**

## *Effect of Loan Loss Provision on Revenue Recognition of Deposit Money Banks (DMBs) in Nigeria*

Revenues of the DMBs are obtained mainly from banking business, and other related activities including net interest income and non-interest income (KPMG, 2017). Revenue is recognized on an accrual basis in the period in which it accrues. Net Interest Income and expenses are recognized in the statement of profit or loss on an accrual basis, applying the effective interest rate. The effective rate is discounted to expected future cash flow in accordance with the estimated life of the financial assets. But if the financial assets are impaired, the interest income will be recognized on the impaired amount at the original effective interest rate. While other expenses incurred directly as a result of bringing margin-yielding assets on the statement of financial position are amortized through interest income over the life of the asset. Commission income is generally recognized when the related services are provided or on the execution of a significant act. Fees charged for servicing a loan are recognized as revenue when the service is rendered. Net income of other financial instruments at fair value relates to derivatives held for risk management purposes and includes all realized and unrealized fair value changes and foreign exchange differences.

### **Accounting for Loan Loss Provision under IFRS**

Banks may only provide for credit risks when there is "objective evidence" that impairment occurred as of the date of the statement of financial position. Expected losses as a result of events expected to occur after the date of statement financial of position must not be recognized. IAS 39 provides even a non-exclusive list of "triggering events," which serve as indicators of impairment. Moreover, a general loan loss provision for credit risk that is not specified is not allowed under IAS39 rule. In the case of impairment, the standard requires that loss is measured as the difference between the carrying value of the assets and the present value in order to estimate the future value without the future credit losses that were incurred within the period discounted at the financial assets original effective interest rate (ie, the effective interest rate computed at initial recognition). The requirement of a triggering event means that a loss is only recognized if the probability of default approaches 100%. In this respect, accounting rules under IFRS are even more restrictive than GAAP. The restrictive loss recognition rules under IFRS are expected to discourage banks from adjusting their estimates of expected loss as a tool for smoothing net income. In the absent of this rule; a bank could materially reduce and later increase reported net income by making changes in expected probabilities of default or loss given default of a magnitude that would be difficult for any outside party to disprove or even verify (Benston & Wall; 2005).

In addition to specific impairments, banks are supposed to provide general loan loss provisions for latent risks in the loan portfolio. Therefore, banks are permitted to anticipate and recognize expected future losses in their accounts through general loan loss provisions. Depending on how fast accounting rules allow incorporating changes in the probability of default in financial statements and on which discount rate (e.g., original effective interest rate or current market interest rate) banks use to discount expected cash flows accounting, loan values will reflect with economic value to a larger or lesser extent. The effect on the market valuation of the loan loss allowances and it's discretionary and nondiscretionary components will depend on how the content and the precision of loan loss information provided under IFRS differ from that supplied under local GAAP. If nondiscretionary loan losses were measured at their fair value, the theory would have us believe in value displacement. While in a valuation regression where the coefficient on the loan loss estimate coefficients can be different from -1; however, in practice, estimated factors can be different from -1, due to the following reasons; under the local GAAP and international accounting rules, loan loss allowances are an imperfect measure of economic impairment. For instance, IFRS rules strictly prohibit the recognition of anticipated future credit losses. If consequently omitted impairments correlate with the reported loan loss allowance, the valuation coefficient could exceed-1 (Beaver & Engel, 1996).

Given the difficulty of predicting future credit losses, loan loss allowances are measured with non-opportunistic error, which might be substantial. To the extent that the application of IFRS rules results in a reduction of non-opportunistic error in estimating loan loss allowance, we might expect a coefficient closer to its theoretical displacement value after IFRS adoption.

## **Empirical Review**

Albian (2019) examined the impact of IFRS 9 on the banks' loan loss provision. The study determines the relationship between recognized loan loss provision and the determinant of an incurred loss. The research suggests that there is a significant decrease in the relationship between loan loss provision and the loss model determinant between the post-IFRS and pre-adoption of IFRS. And also, find no changes in the association of LLP and changes in non-performing loans for banks reporting under the U.S. GAAP reporting standards (benchmark), which were not subject to the same regulatory changes during the same period. Ejike (2018) examined the implication of IFRS adoption on loan losses in Nigeria Financial institutions. The research used secondary data, and the data collected was analyzed by using the Z- Test technique to determine the extent to which the banking sector of Nigeria is being affected by the adoption of IFRS on loan loss before and after the adoption of IFRS. The finding of the study suggests that IFRS adoption will not lead to less timely loan losses recognition in Nigerian banks. There is also a significant increase in the revenue of the banks after the adoption of IFRS following the hypothesis test that was carried out, indicating 66% positive response and 34% negative responses from the questioners.

Atoyebi and Simeon (2018) examined the impact of International Financial Reporting Standards (IFRSs) Adoption on Financial Reporting Practice of listed deposit money banks in Nigeria from the period of 2006 to 2016. The study used secondary data extracted from the annual financial statement of Fifteen (15) deposit money banks. OLS pooled regression was employed to show the relationship between dependent and independent variables. The empirical results showed that there is a positive and significant relationship between Loan Loss Provision and earnings management for both pre- and post-IFRS adoption. Also, in the results, Loan loss Provision was found to have a positive and insignificant impact on capital management for both pre and post IFRS adoption. it concludes that there was a sign of accentuated earning management behavior when utilizing Loan Loss Provision in the sampled deposit money banks in Nigeria during the post – IFRS regime. Ozili (2017) investigated whether discretionary 'loan loss provisioning' by Western European banks is driven by income smoothing or credit risk considerations. The study used the ordinary least square regression to examine the relationship between loan loss provision and earnings before tax and loan loss provisions in the post-financial crisis period. The findings of the study revealed that listed banks in Western Europe carry out discretionary provisioning, which is driven by income smoothing incentives in the post-financial crisis period. The study also observed that discretionary provisioning is significantly influenced by credit risk factors, mainly, non-performing loans and loan growth. Overall, the results of the study imply that discretionary provisioning among Western European banks is driven by both income smoothing and credit risk considerations.

Sanyaolu, Iyoha, and Ojeka (2017) examined the effect of adopted International Financial Reporting Standards (IFRS) adoption on the earnings yield (EY) and earning per share (EPS) of quoted banks in Nigeria. The study made use of cross-sectional data obtained for a period of 6 years from 2009 to 2014, while the panel ordinary least method of analysis was used to examine the impact of IFRS adoption on the earnings of all 15 quoted banks in the Nigerian Stock Exchange. The study found a significant and positive relationship between IFRS adoption and the earnings yield of quoted banks in Nigeria. The study also found a substantial and positive relationship between IFRS adoption and EPS of quoted banks in Nigeria. The study concludes that IFRS adoption has improved the decision making capability of the various stakeholders, thus, increasing investor confidence and the inflow of capital in the country through foreign direct investment. Bello, Abubakar, and Adeyemi (2016) investigated the effects of IFRS adoption on earnings management of non-financial quoted companies in Nigeria. They utilized a sample of seventy-five non-financial quoted companies in Nigeria that have consistently published their audited annual financial reports between 2010 and 2014. They used a dummy variable to separate the period of pre and post-adoption period; before January 2012 and the year-end 2014. The data collected were subjected to descriptive analysis, correlation analysis and a panel multiple regression analysis to explore both trends and possible effects of IFRS adoption on general earnings management. Their findings revealed that IFRS adoption in Nigeria does not significantly affect the tendency of Nigerian companies

## *Effect of Loan Loss Provision on Revenue Recognition of Deposit Money Banks (DMBs) in Nigeria*

to manipulate earnings. Explicitly, this is contrary to the general belief that IFRS, as high-quality accounting standards will reduce the possibility of earnings management.

Eneje, Obidike, and Chukwujekwu; (2016) examined the effect of IFRS adoption on the mechanics of loan loss provisioning for Nigerian Banks. In line with the objectives of this study, secondary data were obtained from the deposit money banks' annual reports and accounts covering the period of 2005 to 2015. Descriptive statistics and the ordinary least square multiple regression analytical method was used for the data analysis. It was found that the limitation to recognize only incurred losses under IAS 39 significantly reduces income smoothing and delay recognition of future expected losses. Based on the sampled bank dataset and results, this paper has shown that the post- IFRS has had significant effects on the mechanics of loan loss provisioning compared to the pre-IFRS era in the Nigerian Money Deposit Banks. Yahaya, Kutigi, and Mohammed (2015) investigated how the change in the recognition and measurement of banks' loan loss provision affects earnings management behavior. They investigated the post-adoption of IFRS and value relevance of accounting information of quoted banks in Nigeria. Using the price model and the returned model, their study found that the EPS increased in the post-adoption than in the pre-adoption periods. The study concluded that the restriction to incur losses under IFRS significantly reduced the ability of banks to engage in earnings manipulation. The study recommended that investors should understand the IFRS adoption process to avoid overvaluation of the economy when the financial markets are doing well. Ahmed, Mohammed, and Adisa; (2014) explored the relationship between loan losses Provision and earnings management in Nigerian DMBs. Secondary data were obtained from the eight banks' financial reports for the period of 2006 to 2011; the study employed the robust regression tool for data analysis. The result indicated that there is a positive relationship between the provision for loan losses and earnings management in Nigerian DMBs.

### **Theoretical Review**

#### **Value Maximization Theory**

This work is anchored on Jensen (2001) Value Maximization theory. The fundamental reason of firm's Financial Statement being disclosure in compliance with IFRS is to maximize firm's value at the long run. This theory states that it exists primarily for 2 main reasons. That is, to maximize profit within the short run or maximize shareholder's wealth within the long run; this means that management or drivers of organizations business should take choices, which will enhance shareholders' wealth within the long run. It's imperative to notice that wealth maximization during this context doesn't imply maximizing shareholders' wealth alone; however, extends to maximizing the interest of different money claimants particularly the debt and warrant holders. This theory state that the first objective and purpose of a firm breathing is to enhance shareholder's wealth, that is maximize shareholder's wealth within the long-standing time (Abdul- Baki, Uthman, &Sanni, 2014). It also explains that every activity of the company whether or not charitable or otherwise, is largely to make profit. This theory states that at the long-run there will be maximization of different stakeholders and money claimants like debt and warrant holders(Abdul-Baki, Uthman, &Sanni, 2014) The research work thus noted that the basic reason or essence of a firm's plan being revealing it compliance with IFRS is to maximize mangers' and firm's worth at the long-standing time.

#### **Legitimacy Theory**

The legitimacy theory is derived from the broader political economy perspective and has also been used as a further academic theory in accounting literature to explain managements' motivations for particular voluntarily information disclosure. Specifically, this theory has been employed extensively as an explanatory theory by earlier accounting scholars to explain the motives behind voluntary corporate social and environmental disclosures (Cowana & Deegan; 2011). According to Tyler (2006), legitimacy is a perceived commitment to social authorities or to present social arrangements. The concept of "legitimacy" is "loosely referring to socially accepted and expected structures or behaviors" (Mitchell et al., 1997).

In terms of organizational legitimacy, O'Donovan (2002) claimed the following: The status of a corporation's legality may be challenging to establish, given that a corporation's legitimacy is based on social perceptions and values, which can and do change over time. In order to manage legitimacy, corporations need to know how legitimacy can be gained, maintained, or lost. Suchman (1995) distinguishes between three broad types of corporate organizational legitimacy; pragmatic legitimacy, moral legitimacy, and cognitive legitimacy. The first type, pragmatic legitimacy, is based on the self-interested calculations of a company's most immediate stakeholders. The second type, moral legitimacy, is based on judgments about whether the activity is "the right thing to do," rather than whether the activity benefits a company evaluator (stakeholders). A third type, cognitive legitimacy, is based on comprehensibility or 'taken-for-granted', rather than on the stakeholders' self-interest.

Each type of legitimacy utilized an appropriate strategy for gaining, maintaining, and repairing legitimacy. In addition, Suchman (1995) remarks about all three types of organizational corporate legitimacy (pragmatic legitimacy, moral legitimacy, and cognitive legitimacy): All three types involve a generalized perception or assumption that regulatory activities are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions. However, each type of legitimacy rests on a somewhat different behavioral dynamic. This theory suggests that voluntary information disclosures are part of a process of legitimating and used as a device for economic entities to demonstrate that their activities are in consensus with the bounds and norms of their respective society. Besides, according to the legitimacy-based arguments, voluntarily disclosing additional information in corporate annual reports in an effort to alleviate public pressure or legitimate a company's actions. As predicted by legitimacy theory, managers of firms would voluntarily disclose more information of actions if they perceived that the specific actions were expected by the public in which their companies operate (Guthrie et al., 2004). Based upon the theoretical perspectives provided by legitimacy theory, it seems this theory may not provide a comprehensive foundation for an explanation of overall voluntary disclosure practices by financial and non-financial companies; however, it can partially give a reason for managerial motivation to disclose social and environmental information voluntarily.

### **Stakeholder theory**

Edward Freeman's first advanced stakeholder theory in 1984. A stakeholder is a person, group of individuals, or entity that can affect or be affected by the operations of an organization. The responsibility of accountability is not limited to shareholders only but a broad range of bank stakeholders. This proposes corporate accountability to a full range of stakeholders. It is based on companies being so large, and their impact on society being so significant that they cannot just be responsible to their shareholders. Stakeholders should be seen not only as existing but as making legitimate demands upon an organization. The relationship should be seen as a two-way relationship. What stakeholders want from an organization will vary. Some will actively seek to influence what the organization does; others may be concerned with limiting the effects of the organization's activities upon themselves. A range of corporate constituencies – customers, employees, suppliers, creditors, and communities – should have a say in the running of the firm. A stakeholder, according to this point of view, is one who has an interest in the enterprise and is at risk if it fails. An employee who may find it difficult to secure another employment if the enterprise closes; a creditor whose claims will not be met in full if the company enters insolvency; suppliers with close ties to a particular producer; and a community which has come to depend on a significant local employer, are all in a position where they have a stake in the enterprise's sustainability. The corporate enterprise cannot be maintained without the inputs of a series of constituencies; investors, lenders, suppliers, managers, workers, unions and communities.

This research work is underpinned under the value maximization theory because the fundamental reason for the firm's Financial Statement being disclosed is to ensure it compliance with IFRS and to maximize the firm's value in the long run.

**METHODOLOGY**

In examining, the effect of loan loss provision on revenue recognition of listed Deposit Money Banks in Nigeria. The study adapts the cross-sectional model of Atoyebi and Simeon (2018) who examined the impact of International Financial Reporting Standards (IFRS) Adoption on Financial Reporting practice in Nigerian Banking sector.

**Model specification**

The model is specified as follow

$$RR = \alpha_0 + \alpha_1 IS_{it} + \alpha_2 LLP_{it} + \alpha_3 VR_{it} + u_t$$

Where:

RR = Revenue Recognition

IS = Income Smoothing

LLP = Loan Loss Provision

VR = Value Relevance

i = cross-sectional variable from 1,2, 3,.....12

t = time series variable form 1, 2, 3, ..... 4

$\alpha_0, \alpha_1, \alpha_2, \alpha_3$  are parameter estimates corresponding to the explanatory variable and the constant term, is the cross sectional unit effect, while  $u_t$  is the idiosyncratic error term

**Measurement of Variables**

S/N	PROXY	TYPE	MEASUREMENT
1	Revenue Recognition	Dependent	Current Year Revenue-Previous Year Revenue X 100 _____ Previous Year Revenue 1
2	Income Smoothing	Independent	Net income/operation cash flow
3	Loan Loss Provision	Independent	Loan loss/total assets
4	Value Relevance	Independent	average price of equity share

**Source: Authors computation (2020)**

The data employed for the study is mainly secondary data. The data used to represent these variables are annual time series data from the period 2004 to 2018 and was sourced from the audited annual financial reports of the selected banks. The data was collected over a period of 15 years which covers pre-IFRS adoption and post-IFRS adoption, ranging from 2004-2018, excluding 2011 which is the year of adoption. The period from 2004 –2010 form the pre-adoption, while 2012 – 2018 form the post-adoption. In order to achieve the objectives of this study and provide relevant answer to those research question raised; the study shall employ Ordinary Least Square (OLS) method because of its unique properties which makes it the most widely used technique of estimation. The analysis includes pooled ordinary least square estimation fixedeffect estimation.

Greece

**RESULT AND DISCUSSION**

This section presents the empirical analysis and interpretation of impact of loan loss provision on revenue recognitions of money deposit banks in both pre and post IFRS adoption.

**Descriptive Statistics**



**Table 1: Descriptive Statistics of variables**

	<b>RR</b>	<b>IS</b>	<b>LLP</b>	<b>VR</b>	<b>rr</b>	<b>is</b>	<b>Llp</b>	<b>Vr</b>
<b>Mean</b>	40615483	586.3419	2.40E+08	1.23E+08	16.34148	5.785249	18.23260	17.52726
<b>Median</b>	20778348	198.1000	87163067	70376126	16.84942	5.288772	18.28329	18.06936
<b>Maximum</b>	2.10E+08	2374.730	9.63E+08	3.81E+08	19.16387	7.772639	20.68602	19.75903
<b>Minimum</b>	213171.0	113.6800	1110943.	466223.0	12.26985	4.733387	13.92072	13.05242
<b>Std. Dev.</b>	57980743	724.3151	2.77E+08	1.27E+08	1.962327	1.021023	1.979367	2.123953
<b>Skewness</b>	1.835088	1.464013	1.185437	0.757720	- 0.745337	0.952259	- 0.992931	- 1.066799
<b>Kurtosis</b>	5.110824	3.543778	3.232081	2.149582	2.783754	2.291163	3.146717	3.062964
<b>Jarque-Bera</b>	20.16650	9.977663	6.384273	3.397241	2.552478	4.645842	4.460823	5.125729
<b>Probability</b>	0.000042	0.006814	0.041084	0.182936	0.279085	0.097987	0.107484	0.077084
<b>Observations</b>	27	27	27	27	27	27	27	27

**Source: Authors computation using E-Views 10 (2020)**

The first four columns described the pre- IFRS adoption level of the variables while the columns with lowercase label described the variables after IFRS-adoption. It can be seen clearly from the table that the variables in pre-IFRS contain much variations in them while the post- IFRS have little variations; consequently, we shall focus on post IFRS estimates

The expected means and medians for all the variables are positive in sign with loan loss provision (llp) having the highest followed by value relevance (vr), revenue recognition (rr) and income smoothening (is) respectively. It can be shown that rr, llp, and vr were negatively skewed, while only is has positive skewness. The implication of this is that the negatively skewed variables have more falls than rises and vice-versa for the positively skewed variable. The probability values of the Jarque-Bera normality test are statistically insignificant for rr and llp at the conventional level, and this implies that they were normally distributed. However, the probability value of is and vrJarque-Bera test is significant at 10% level. However, this issue of non-normality may not be necessary due to the asymptotic theory or the law of large number.

### **Hausman Test**

The Hausman test is sometimes described as a test for model specification in panel data analysis, the hausman test is employed to choose between fixed effects model or random effects model. Accepting null hypothesis means that the preferred model is random effects while alternative hypothesis means that the preferred model is fixed effects. If the p -value is less than 0.05, reject null hypothesis that the preferred model is fixed effects.

**Table 2: Hausman Test Table**

Null hypothesis	Chi-square stat	Probability
Difference in estimate of fixed effect and random is not systematic	10.15	0.0030

**Source: Authors computation using E-view 10 (2020)**

Result of Hausman test reported chi-square value of 10.15 alongside probability values of 0.0030, This implies that here is enough evidence to reject the null hypothesis with differences in estimates of fixed effect and random is not systematic in favour of the alternative hypothesis that difference in estimate of fixed effect and random is systematic. It thus stands that error component model (random effect) estimator is not appropriate because the random effects are probably correlated with one or more regressors. Thus, the most consistent and efficient estimation for the study is the fixed effect cross-sectional specific estimation presented in table 1 above.

### **PRE IFRS ESTIMATION**

Dependent Variable: LOG(RR)

Method: Panel Least Squares

Date: 03/24/20 Time: 16:55

Sample: 2004 2018

Periods included: 15

Cross-sections included: 12

Total panel (balanced) observations: 180

White diagonal standard errors & covariance (no d.f. correction)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.439842	1.834589	-0.784831	0.4406
LOG(IS)	-0.146513	0.166707	-0.878867	0.3886
LOG(LLP)	-0.839447	0.312757	-2.684022	0.0133
LOG(VR)	-0.092907	0.314429	-0.295478	0.7703
R-squared	0.835748	Mean dependent var		16.34148
Adjusted R-squared	0.814324	S.D. dependent var		1.962327
S.E. of regression	0.845571	Akaike info criterion		2.638343
Sum squared resid	16.44476	Schwarz criterion		2.830319
Log likelihood	-31.61764	Hannan-Quinn criter.		2.695428
F-statistic	39.00950	Durbin-Watson stat		1.050993
Prob(F-statistic)	0.000000			

### **Regression Output**

#### **POST IFRS ESTIMATION**

Dependent Variable: LOG(RR)

Method: Panel Least Squares

Date: 03/24/20 Time: 16:55

Sample: 2004 2018

Periods included: 15

Cross-sections included: 12

*Effect of Loan Loss Provision on Revenue Recognition of Deposit Money Banks (DMBs) in Nigeria*

Total panel (balanced) observations: 180

White diagonal standard errors & covariance (no d.f. correction)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.934646	2.126495	-0.439524	0.6648
LOG(IS)	-0.125790	0.255889	-0.491578	0.6281
LOG(LLP)	0.673408	0.179912	3.742977	0.0012
LOG(VR)	0.326684	0.159693	2.045695	0.0535

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.925452	Mean dependent var	16.34148
Adjusted R-squared	0.907703	S.D. dependent var	1.962327
S.E. of regression	0.596165	Akaike info criterion	1.996531
Sum squared resid	7.463660	Schwarz criterion	2.284494
Log likelihood	-20.95316	Hannan-Quinn criter.	2.082157
F-statistic	52.13957	Durbin-Watson stat	2.359944
Prob(F-statistic)	0.000000		

Redundant Fixed Effects Tests

Equation: EQ01

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	12.634759	(2,21)	0.0002
Cross-section Chi-square	21.328946	2	0.0000

**Summary of Regression Output**

**Table 3**

Variable	Pre-IFRS		Post-IFRS	
	Coefficient	Prob.	Coefficient	Prob.
C	-1.439842	0.4406	-0.934646	0.6648
IS	-0.146513	0.3886	-0.125790	0.6281
LLP	-0.839447	0.0133**	0.673408	0.0012***
VR	-0.092907	0.7703	0.326684	0.0535*
$R^2$	0.84		0.93	
$\hat{R}^2$	0.81		0.91	
F-stat.	39.0	0.000***	52.1	0.000***

Source: Authors computation using E-view 10

(\*) (\*\*) (\*\*\*) denotes significance at 10%, 5% and 1% level

The table above presents the regression estimation output based on the Fixed-Effect estimators for the pre-IFRS and the post-IFRS performance. It can be seen clearly under the pre-IFRS adoption that income

## *Effect of Loan Loss Provision on Revenue Recognition of Deposit Money Banks (DMBs) in Nigeria*

smoothing (IS), Loan Loss Provision (**LLP**) and Value Relevance (VR) impacted negatively on **revenue recognition because of their negative coefficients**; however, only the effect of **LLP** is found to be statistically significant because of its low probability level of 0.0133 while other variables are not significant because of their high probability value above 1%, 5% and 10% respectively. The estimates reveal that if IS, LLP and VR fall by one percent, the average value of RR will decrease by 0.14%, 0.83% and 0.09% respectively. The value of adjusted R<sup>2</sup> for pre-IFRS adoption shows that about 81% of variation in RR is explained by IS, LLP, and VR, and the probability value of the F-stat is highly significant in accepting the hypothesis that all the regressors jointly differs from zero.

On the other hand, post-IFRS adoption estimates show that LLP and VR impacted positively on RR, while IS impacted negatively on RR respectively. However, only the effect of LLP and VR are found to be statistically significant because of their low probability value of 0.0012 and 0.0535 respectively. The estimates reveal that if LLP and VR rise by one percent, the average value of RR goes up by 0.67% and 0.32% respectively. The value of adjusted R<sup>2</sup> for the Fixed-Effect regression shows that about 91% of variation in RR is explained by IS, LLP, and VR, and the probability value of the F-stat (0.000) is highly significant in accepting the hypothesis that all the regressors jointly differs from zero. Therefore, all the variables are jointly significant

### **CONCLUSION AND RECOMMENDATION**

This paper examines the effect of loan loss provision on revenue recognition of money deposit banks in Nigeria in pre and post IFRS adoption. The empirical results showed that loan loss provision has negative and significant effect on revenue recognition in pre-IFRS adoption while it has positive and significant impact on revenue recognition in post-IFRS adoption. This result indicates that the adoption of international financial reporting standard has had significant effects on the mechanics of loan loss provisioning in Nigerian Money Deposit Bank. Based on the findings and conclusion above, the following recommendations are made; the management of Deposit money bank in Nigeria should congruence the loan loss provision because it has significant effect on revenue recognition which inevitable effect of profitability and sustainability of the bank. Management should be mindful and concise of income smoothing because it has a significant impact on the revenue recognition. Finally, management should strictly comply with the standard requirement of revenue recognition (IAS 18, Replaced with IFRS 15)

### **References**

- Abdul-Baki Z., Uthman, A. B., & Sanni, M. (2014). Financial ratio as performance of IFRS and Nigerian GAAP. *Accounting and Management Information System*, 1(1), 1-10
- Adeadebayo, A. S. (2018). *IFRS Relief for finance ,corporate and business reporting*. Nigeria: University Press
- Adekayo, O. (2011). *Similarities and differences, IFRS and Nigeria GAAP*. Lagos: Pricewater House Coopers International limited.
- Ahmed, A., Mohammed, A. Y., & Adisa A. O. (2014). Loan Loss Provision and Earnings Management in Nigerian Deposit Money Banks. *Mediterranean Journal of Social Sciences*, 5 (17), 250-251.
- Albian, A. (2019). The impact of IFRS 9 on banks' loan loss provisioning. *IOSR Journal of Business and Management*, 18(6), 45-52.
- Anandarajan, A. E., Hasan, I. E., & Lozano-Vivas, A. O. (2003). The role of loan loss provisions in earnings management, capital management and signaling: The Spanish experience, *Advances in International Accounting*, 16(1), 45-65.
- Anandarajan, A. E., Hasan, I. O., & McCarthy, C. J. (2007). Use of loan loss provisions for capital, earnings management and signaling by Australian banks. *Accounting & Finance*, 47 (3), 357-379.
- Anandrajana, A., Hassan, I., & McCarthy, C. (2005). The use of loan loss provision for capital management and signalling by Australian banks. *Finland Discussion Papers*, Paper 22: (2005).

*Effect of Loan Loss Provision on Revenue Recognition of Deposit Money Banks (DMBs) in Nigeria*

- Angklomkiew, S., George, J. & Packer, F. (2009). Issues and developments in loan loss provisioning: The of Asia. *BIS Quarterly Review, December*, 69 – 83.
- Atoyebi, T. A & Simon, A.J. (2018). The Impact of International Financial Reporting Standards (IFRSs) Adoption on Financial Reporting Practice in the Nigerian Banking Sector. *Journal of Accounting, Finance and Auditing Studies*, 4(3), 170-197.
- Bello, A., Abubakar, S., & Tesleem A. (2016). IFRS Adoption and Earnings Management in Nigerian Non-Financial Quoted Companies. *International Conference on Accounting Studies*, 1(1), 15-18.
- Ejike, S.I. (2018). The implication of IFRS adoption on loan losses in Nigeria Financial institutions *European Journal of Accounting, Finance and Investment*, 4 (12), 4-12.
- Ellen, G. & Song, I.W. (2014). *Supervisory Roles in Loan Loss Provisioning in Countries Implementing IFRS*. Washington: International Monetary Fund
- Eneje, B., Obidike, C. & Chukwujekwu, P. (2016). The Effect of IFRS Adoption on the Mechanics of Loan Loss Provisioning for Nigerian Banks. *IOSR Journal of Business and Management*, 18(6), 45-52.
- Ironkwe, U. I. & Oglekwu, M. (2016). International Financial Reporting Standards (IFRSs) and Corporate Performance of Listed Companies in Nigeria. *IIARD International Journal of Banking and Finance Research*, (2)3, 1-13.
- Jensen, M. C. & Meckling W. H. (1976). *Can the corporation survive?* New York: Centre for Research in Government Policy and Business, University of Rochester
- KPMG (2017). *Loan impairment modeling according to IAS 39 by using Basel II parameters*. Romania: KPMG Publications.
- Leventis, S., Dimitropoulos, P. E., & Anandarajan, A. (2011). Loan loss provisions, earnings management and capital management under IFRS: The case of EU commercial banks. *Journal of Financial Services Research*, 4(1), 103-122.
- Ozili P. K & Thankom A.G. (2018). Income Smoothing among European systemic and nonsystem banks. *The British Accounting Review*, 50(5), 539-558
- Sanyaolu, O. A., Iyoha, F. O., & Ojeka, S. A. (2017). International Financial Reporting Standards Adoption and Earnings of Quoted Banks in Nigeria. *International Journal of Economics and Financial Issues*, 7(1), 279-284
- Suchman, M. (1995) Management legitimacy: Strategic and Institution Approach. *The Academy of Management*, 20(1), 571-611
- Trabelsi, N. S., Hamza, S. E., & Chila, H. (2013). The effects of IFRS on earnings quality in European stock markets: evidence from France. *Interdisciplinary Journal of Research in Business*, 2(12), 35-47.
- Ugbede O., Mohammed, L. & Ahmad, K. (2014). International Financial Reporting Standards and the quality of banks financial statement information: evidence from an emerging market- Nigeria. *European Journal of Business and Social Sciences*, 3(8), 243 – 255.
- Umoren, A. O., & Enang, E. R. (2015), IFRS adoption and value relevance of financial statements of Nigerian banks. *International Journal of Finance and Accounting*, 4(1), 1-7
- Yahaya, O. A., Kutigi, U. M., & Mohammed, A. (2015). International financial reporting standards and earnings management behavior of listed deposit money banks in Nigeria. *European Journal of Business and Management*, 7(18), 7-11.

## **Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria**

**ORBUNDE, Bemshima, Ph.D**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: orbundebemshima@yahoo.com, Phone No: +234 8065318098

**ARUMONA, Jonah, Ph.D**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: jonaharumona@yahoo.com, Phone No: +234 7034684686

**YASHIM, Caleb**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: karlfancy@gmail.com, Phone No: +234 7035303440

**GOFWAN, Hassan**

Department of Accounting,  
Bingham University,  
Karu, Nasarawa State

E – Mail: hgofwan@gmail.com, Phone No: +234 7067248890

### **Abstract**

*It is reasonable to have reforms, polices, procedures and tools that unifies all bank accounts belonging to Ministries, Departments and Agencies (MDAs) in a single unit for the effective management of government finances. The study examines the impact of ICT tool on the performance of financial management in public sector in Nigeria. This paper sought to review the impact of Information Communication Technology Tool which is the Treasury Single Account (TSA) in Nigeria. It was found out that despite the numerous benefits of TSA such as curbing multiple government bank accounts, abuse of government funds, limiting financial leakages among others. its challenges such as inconsistencies of rimitta collection of revenue, issues of hackers, lack of infrastructures to monitor the financial report of collecting consultants and so on. The researchers employ Ordinary Least Square (Simple Regression Analysis) for analysing the data collected through the instrumentality of Eviews, version 10. The R-square value is 0.91; it means that the model has successfully predicted the variables. This implies that 91% changes in the Recurrent Non-debt Budget are explained by the changes in Revenue Generated after the introduction of TSA. The value of 88% of the Adjusted R-squared indicates that there is strong relationship between the Revenue Generated after the introduction of TSA and the Recurrent Non-debt Budget; while 12% Adjusted R-squared indicates a low revenue leakages in the Nigerian Federal Polytechnics. Finally, the P-value is 0.011309, is less than 0.05. We therefore, reject the null hypothesis and conclude that Revenue generated through Treasury Single Account (TSA) has a significant impact on the Nigerian economic growth through Budget Implementation (BI). The study recommends that government must try to put idle cash into proper application into meaningful people oriented projects. The commercial banks must be creative in generating means of finance to stay in operation. The national assembly must endeavor to pass a bill to solidify TSA.*

**Keywords:** Treasury Single Account, Financial Leakage, Reform, Government, ICT Tools

### **INTRODUCTION**

Many African countries struggle when it comes to reforming public financial institutions and management. Studies indicate that institutional systems and processes that deal with various aspects of public sector finances are weak and non-transparent. Often they are incapable of drawing adequate budgets, monitoring public expenditures, using public funds and investments efficiently, and providing reliable data for micro/macroeconomic modelling. Basman

## *Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria*

(2013) posit that when an investigation identifies problem areas and weaknesses, implementing reforms becomes a problem. The necessary adjustment processes are complex and often deal with interrelated issues to solve this problem, and it is therefore important to adopt a new financial management system. Cendon (2016) posit Public Sector Financial management as a whole demand for overhaul or reform that can form network and centralized system. Nigeria, like many other developing countries, employed fragmented systems in handling government receipts and payments. Aminatu (2017) stressed that according to International Monetary Fund (IMF) and (CBN), the need for the establishment of a unified structure or a single account would reduce borrowing costs, extend credit and improve government's fiscal policy among other benefits. The introduction of the Treasury Single Account (TSA) policy therefore was vital in reducing the proliferation of bank accounts operated by Ministries, Departments and Agencies (MDAs) towards promoting financial accountability among governmental organs. Babajide (2016), pointed out that the compliance with the policy in Nigeria created challenges for majority of the MDAs. Commercial banks in Nigeria remitted over 2 trillion Naira worth of idle and active governments deposits with full implementation of this policy in 2016. Meanwhile, the bankers' committee of the country has declared their support for the policy. Through Remita, the integrated electronic payments and collections platform developed by a company called System Specs, the TSA initiative has enabled the Federal Government of Nigeria to take full control of over 3 trillion Naira (\$15 billion) of its cash assets as at the end of the first quarter of 2016, (OAGF, 2016).

Youngsun (2009) opined that financial management is concerned with the ethical conduct with which public institutions carry themselves while handling public finances. Following the implementation of the TSA by the Government of Nigeria, this study seeks to answer the question; does electronic transaction processing play a role in enhancing financial performance in the public institutions that is capable of reducing or eradicating financial leakages? According to Cendon (2016), there is broad agreement that a fully functioning TSA can improve governance by providing real time financial information that financial managers and Administrators can use to administer programs effectively, formulate budgets, and manage resources. Sound TSA system, fixed with the adoption of centralized treasury operations, can not only help governments gain effective control over their finances, but also enhance transparency and accountability, reducing political discretion, curtail multiple bank accounts and acting as a deterrent to corruption and fraud. Daniel (2015) exclaim Worries by the high rate at which resource-rich African countries lose huge revenues through leakages, illegal transfers of profits and money laundering abroad. Report on Illicit Financial Flows from Africa, particularly from the public sector domain compiled by an African Union (AU) panel led by former South African President Thabo Mbeki, saying that Africa loses an estimated \$60 billion (about N10.08 trillion) annually through such transfers. This revenue leakage was due to lack of control measures such as single treasure account. The report was presented in April at a summit in Addis Ababa, Ethiopia. The report has stirred massive concerns in Nigeria, which is said to account for over \$40.9billion (about N6.87trillion), or 68 per cent of the total figure. Cumulatively, Nigeria also topped the list of ten African countries with highest incidence of illicit financial transfers between 1970 and 2008, from 2010 to date is doubled with resounding impunity recording about \$217.7billion (about N36.57trillion), or 30.5% of the total in the continent. The issue of accountability and probity by top government officials has always been a source of serious concern in Nigeria.

Robin (2008), postulate that recent government, in Nigeria has continued to roll out figures of unaccounted revenues. These include N3.8 trillion allegedly withheld by the Nigerian National Petroleum Corporation (NNPC) out of the N8.1 trillion the country earned from crude oil sales between 2012 and 2015. Others are N109.7 billion royalty from oil companies, allegedly not remitted by the Department of Petroleum Resources (DPR); unaccounted N183 billion by the Niger Delta Development Commission (NDDC) and other \$13 billion dividends from the Nigeria Liquefied Natural Gas (NLNG). Also on the seeming endless list are unapproved withdrawals of \$2.1 billion from the Excess Crude Account (ECA); \$1 billion allegedly withdrawn from public treasury for Jonathan's campaign and an alleged \$6 billion stolen by a former minister, among others. These financial leakages in the public sector domain is said to be worrisome. (Eme, Emmanuel Chukwurah & Daniel 2015). With this worries, the current government is poised to find a lasting solution to this damming menace through application of Information technology Tool (ICTT) assisted mechanisms. Enofe (2017), Stressed on the trends of human centric systems which are more common and popular but are now slowly and gradually diminishing from public and private corporate establishments. The most versatile and efficient technique which is the basic approach is computer centric modus

## *Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria*

operandi, embraced by the modern day institutional practices. This is to promote management thinking used by governments to transform and modernize their public sector in order to enhance the efficiency, effectiveness, integrity and accountability of public service delivery.

This research seminar statement of the problem constitutes the search for solutions to reducing financial leakage that the present administration is poised to achieve and to also see if revenue generated through TSA have efficient impact on economic growth through budget implementation in Nigeria. Some of the tools suggested to be utilized are full implementation of the Information Communication Technology Tool (ICTT) such as TSA. The question therefore that is pertinent is, will these measures or ICT tool effectively curb financial leakages? Financial leakage refers to illegal diversion of public funds. African Union (2008) quoted N6.87 trillions government financial leakages from Nigeria. The leakage is perpetrated by corruption on a daily basis in Nigeria public sector majorly. Today, the present government is poised to forestall or reduce the menace by introducing financial management reforms stated above and full trial of officers found to be involved in financial leakage activities. The researcher intends to find out if the ICT mechanisms will positively impact or restrain financial leakages in the public sector in Nigeria. This Seminar study sought to establish the impact of Information Communication Technology Tools in the public sector financial management in Nigeria with emphasis on the Federal Polytechnics. The researcher hopes that reforms introduced in the Nigeria public sector financial management to enhance transparency, efficiency and accountability and to combat financial leakages would be the best to the nation. The following objectives will be brought to limelight and to examine the impact of ICT Tool on the performance of financial management in Nigeria public sector that would lead to the growth of Nigerian BI. Again, to determine at what extend the use of TSA streamline government revenue and eliminate financial leakages in the Public sector financial management. Assess the impact of TSA in stamping out Multiple Bank Accounts in which public sector revenue streams in Nigeria. Thus, this paper constitutes its statement of hypothesis as follows.

Ho: Revenue generated through Treasury Single Account (TSA) has no significant impact on the Nigerian economic growth through Budget Implementation (BI).

### **LITERATURE REVIEW**

#### **Conceptual Framework**

##### **Concept of Financial Leakage**

Leakage occurs when income is taken out through taxes, savings and imports. In retail, leakage refers to consumers who spend money outside of the local market. Revenue Leakage has been a universal phenomenon, it is considered as illegal diversion of revenue or income. Financial Dictionary (2014), considers financial leakage as process of removing money from the economy. Savings or taxes are leaked out of an economy. Leakage occurs when money leaves an economy. Dong (2018) posits that leakage refers to unauthorized or unanticipated dissemination of information. Leakage matters because it represents revenue lost. It can have many forms; interest rates are just one way for money to leak out of an economy. Dada (2014) broadly describes it in form of corruption, and suggests financial leakage as: (i) dishonest or illegal behaviour, especially of people in authority; (ii) the act or effect of making somebody change from moral to immoral standards of behaviour. This definition linked financial leakage with two important variables: authority and morality according to Afiangbe (2017). Financial leakage affects almost all parts of society as cited in Shabbir and Anwar (2007) has identified financial leakage as the single greatest obstacle to economic and social development. It undermines development by distorting the rule of law and weakening the institutional foundation on which economic growth depends. Financial leakage is not peculiar to developing nations alone or Nigeria.

##### **Concept of Treasury Single Account (TSA)**

In 2011, the Federal Government (under President Goodluck Jonathan) mandated the commencement of the TSA initiative in Nigeria. A pilot commenced in 2012 on TSA payments (outbound transactions only)



## *Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria*

with just over 100 Ministries Departments and Agencies (MDAs). This was later extended to additional MDAs. Onyekpere (2015) defines Treasury Single Account as a unified structure of government bank accounts enabling consolidation and optimal utilization of government cash resources. It 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. This presidential directive would end the previous public accounting situation of several fragmented accounts for government revenues, incomes and receipts, which in the recent past has meant the loss or leakages of legitimate income for the federation account.

The Treasury Single Account is a process and tool for effective management of government's finances, banking and cash position (Eme, Okechukwu, Innocent, Chukwurah, & Daniel, 2015). In accordance with the name (TSA), it pools and unifies all government accounts through a single treasury account. The advantages and benefits of the TSA are legion. The consolidation into a TSA paves way for the timely capture and payment of all due revenues into government coffers without the intermediation of multiple banking arrangements. This prevents revenue leakages in terms of revenue loss and mismanagement by operators of all revenue-generating agencies. Chukwu (2015) define Treasury Single Account (TSA) as a network of subsidiary account linked to a main account such that, transactions are effected in the subsidiary accounts but closing balances on these subsidiary accounts are transferred to the main account, at the end of each business day. As a result, Ministries, Departments and Agencies (MDAs) maintain their individual accounts with the commercial banks, but daily funding of their disbursements are made from the central or main account, which is resident with the Central Bank, just as their closing balances at the end of day are transferred to the main account. The TSA is principally a cash management tool for efficient management of the cash position. Prior to the implementation of the TSA, government was incurring finance cost on debit balances in some MDA's accounts while it was earning close to nothing on the credit balances of other MDAs. With the TSA, the net balances on all the MDA accounts now reside with the Central Bank; hence, the government avoid incurring interest costs when it has positive net position (Eme, 2015).

### **Electronic Payments (E-payment)**

Electronic payment (E-payment) is an electronic payment that is non-cash payment and that it doesn't involve a paper check. Methods of electronic payments include credit cards, debit cards and the Automated Clearing House (ACH) network. Bouaka (2002) sees it as a one-time customer-to-vendor payment which is commonly used when it involves shop online at an e-commerce site, such as Amazon. Dada (2014) posits E-cash is a form of an electronic payment system, where a certain amount of money is stored on a client's device and made accessible for online transactions. Electronic payment has come a long way in Nigeria, but still struggles to compete with the Nigerians love for cash. Nigerians love their cash so much that most transactions in the country are done with cash. Cash remains the preferred medium for payment in the country. Poor awareness of e-payment solutions, ignorance, poor banking culture, lack of trust, illiteracy and the love for the status quo have been fingered as responsible for the high volume of cash transactions in Nigeria.

### **Concept of Public Financial Management**

Financial management made reference to set of administrative function in an organization which are related with arrangement of cash and credit so that organization may have the means to carry out its objective as satisfactorily as possible. Amos (2012) sees Public Sector finance as a field of economics concerned with paying for collective or governmental activities, and with the administration and design of those activities. The field is often divided into questions of what the government or collective organizations should do or are doing, and questions of how to pay for those activities. Management in business and human activity, in simple terms means the act of getting people together to accomplish desired goals. Management comprises planning, organizing, resourcing, leading or directing, and controlling an organization (a group of one or more people or entities) or effort for the purpose of accomplishing a goal. Resourcing encompasses the deployment and manipulation of human resources, financial resources, technological resources, and natural resources.

### **Concept of Performance**

According to David, (2012) Performance is the ultimate result of all the efforts of a company or an organization. These efforts are to do good things, good way quickly, at the right time, at the lowest cost to produce good results that meet the needs and expectations of customers and or clients, their satisfaction and achieve the goals set by the organization. Since the measure of performance within the framework of this research concerns the activities of public sector financial management, the researcher believes that there is need to consider performance from the perspective of effective and efficient public sector financial performance and the perceived performance. Waziri (2010) states that the real or effective performance might not correspond to the perceived performance filled with financial leakage or corruption, the effective, efficient and real financial management performance that involve the utilization of ICT tools involving E-payment Systems, and TSA (Waziri, 2010). Mathias (2014) posits that Public financial management (PFM) is a central element of a functioning administration, underlying all government activities. It encompasses the mechanisms through which public resources are collected, allocated, spent and accounted for. As such, PSFM processes comprise the whole budget cycle, public procurement, audit practices and revenue collection. Sound, transparent and accountable public financial management is a key pillar of governance reform and of vital importance to provide public Sector services of good quality to citizens, as well as to create and maintain fair and sustainable economic and social conditions in a country. According to Waziri (2010), Public finance is said to be the role of the government in the economy. It is the branch of economics that assesses the government revenue and government expenditure of the public authorities and the adjustment of one or the other to achieve desirable effects and avoid undesirable ones. The purview of public finance is considered to be threefold: governmental effects on (i) efficient allocation of resources, (ii) distribution of income, and (iii) macroeconomic stabilization.

### **Empirical Literature**

Amos Ganyam (2018) his study examined the effect of Treasury Single Account (TSA) on financial accountability, corruption and financial discipline in the Nigerian public sector. Using survey research design, data were obtained from questionnaire issued to 95 senior and management staff from 5 MDAs in Benue State, Nigeria. The data were analysed using the ANOVA test at 5% level of significance. The study found that TSA significantly promotes accountability of public funds in Nigeria, reduces the level of corruption in the Nigerian public sector and enhances financial discipline in the Nigerian public sector. The study concluded that TSA has a significant and positive effect on the accountability of public funds, reduction in the level of corruption and enhancing financial discipline. The study recommended that the federal government must demonstrate the political will to ensure the sustainability of TSA policy and also tenaciously pursue its implementation by states and local governments in the country. The study is however limited to primary source of data collection, but this study looks at the secondary data from Federal Polytechnics in Nigeria. Saheed (2017) conducted a study on effect of Federal Government of Nigeria (FGN) Deposit Withdrawals into the Treasury Single Account (TSA) on Deposit Money Banks' liquidity performance in Nigeria. Secondary data were obtained from Central Bank of Nigeria (CBN) Statistical Bulletin covering pre and post implementation years (2012 to 2017). The dependent variable was represented by Deposit Money banks' liquidity ratio while the independent variable was represented by Federal Government Deposits at the Deposit Money Banks. The study used correlational research design to determine the effect of TSA on Deposit Money Banks' liquidity in the country. Also, the study employed Feasible Generalized Least Square (FGLS) technique of data analysis. It was then found that Federal Government Deposit (FGD) had a positive and significant effect on the Deposit Money Banks' liquidity position in the Pre-TSA Era whereas Federal Government Deposit (FGD) had a negative and significant effect on the Deposit Money Banks' liquidity performance in the Post-TSA Era. It was therefore recommended that the Nigerian Government should consider the hybrid TSA model as a way of boosting the Deposit Money Banks (dmbs) liquidity position. It was then suggested that further researchers could widen the scope by including factors such as BI, Exchange Rate, Inflation Rate excluded in this study.

Ndubuaku, Ohaegbu and Nina (2017) embark on study on the Impact of Treasury Single Account on the Performance of the Banking Sector in Nigeria. This research study sought to determine the impact of TSA on Credit to the Private Sector, Deposit mobilization and Loans and Advances respectively. Secondary

## *Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria*

and time series data were obtained from the CBN statistical bulletin 2015. The data were analysed using regression and correlation analysis. The results from the research analysis confirmed that the TSA had a significant impact on Credit to the Private Sector, Deposit Mobilization and Loans and Advances also recommends that the government of the day is advised to implement TSA to its fullest maximum to make best use of its potentials of reducing corruption. Opeyemi (2017) in his study on effect of TSA on the liquidity of banks in Nigeria, asserts that the existence of numerous corrupt practices in the Nigerian Public Accounting System has led to the inauguration of Treasury Single Account (TSA). This paper assesses the impact of TSA implementation on the liquidity base of banks in Nigeria. Fifteen (15) listed banks were used as sample size for this study. Data was obtained by the use of annual reports and it was examined using Descriptive statistics and Paired sample t-test. The results obtained confirmed that the implementation of Treasury Single Account impacted negatively on the liquidity base of banks in Nigeria. Also, there is significant difference in the Profit after Tax (PAT) of Banks in Nigeria before and after Treasury Single Account (TSA) Adoption. It was recommended that if the policy is executed it will lead to the prompt payment of all income going into the nation's purse without the intermediation of multiple banking arrangements.

Agha, (2017) embark on a crucial contemporary financial management research involving single treasury account TSA and corruption investigation. He examined financial management reforms in Nigeria public sector. A survey research design was adopted in the study and a sample of ninety (90) respondents which consist of 40 staff from federal Ministries, Departments and Agencies (MDAs), 30 from Edo state MDAs and 20 from local government MDAs. The study employed ordinary least square (OLS), using SPSS in analysing the bio-data and Eview8 in analysing the research questions as the statistical tool. The study found that Treasury Single Account (TSA) had a negative relationship with Corruption but positive level of significance. The study recommends that the government of the day is advised to implement TSA to its fullest maximum to make best use of its potential of reducing corruption. Festus (2019) in his research on The implementation of Treasury Single Account (TSA) in Nigeria ushered in some drastic changes such that Central Bank of Nigeria (CBN) takes over the custodian of public fund and Deposit Money Banks (DMBs) serve as collecting agent throughout the federation. This seems to be affecting the liquidity state of DMBs. A bank with high liquidity problem might not be able to withstand negative shocks and contribute to the stability of the financial system. An in-depth analysis of the impact of TSA on the profitability of Money Deposit banks will not only clarify the disaggregated findings reported by previous studies, but also provide suggestions on how DMBs could improve their liquidity state. Based on incremental and stakeholders' theory, this research examines the impact of Treasury Single Account (TSA) on the Profitability of Deposit Money Banks (DMBs) in Nigeria. Out of all the listed Deposit Money Banks (DMBs) in Nigeria, purposive sampling technique was used to select all the 6 Systematically Important Banks (SIB) and data were collected on four indicators of profitability of banks such as Earning per Share (EPS), Profit after Tax (PAT), Return on Equity (ROE) and Return on Assets for the period of 6 years divided into Pre-TSA (2012-2014) and Post-TSA (2015-2017). It was discovered that through the analysis carried out via paired sampled t-test that TSA exerts a positive insignificant impact on all the indicators of profitability covered by this study except Profit after Tax (PAT) that has a negative insignificant impact. Finally, it was recommended that managers of DMBs should work out modalities that will foster the embracement of the core values of the banking system to collect depositors' funds, keep them safe and engage in intermediation to create wealth and jobs for the economy. Consequently, overdependence on government fund for operational activities should be discouraged

### **Theoretical Framework**

#### **Meta Theory Model**

Ruchala and Mauldin (1999), argue that previously Information Technology (IT) was used in accounting systems merely to process transactions that would reciprocate the old order (manual processes). Meta theory is the formation of technical orientations, cognitive as well as the holistic models in the discovery of Accounting Information System. The theory has consequently been useful in tackling the current limitations in IT that are

## *Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria*

inevitable and highlighted in former studies such as the inability to acknowledge the responsibility to which Information Technology is being applied, the failure to consider the suitable nature of a false process, incapability to account for scientific design in the real field of study and failure to direct the procedure for selecting the required decisions and handling all the transactions equally.

### **Public Finance Management Theory**

This theory assumes that all aspects of financial resources - mobilization and expenditure should be well managed in government for the benefits of the citizenry. It comprises resource mobilization, prioritization of programs, budgetary procedures, efficient management of resources and applying control to guide against threats. Treasury Single Account (TSA) primarily is to avoid misapplication of public funds.

### **Agency Theory**

The broad agency theory perspective led reformers to emphasize the totality of the relationship between principals and agents and, therefore, to move beyond the previous attempts at reform that had focused on particular management improvements. Instead, the translation of these concepts into practical policy design emerged in a set of principle that were applied in a reasonable, uniform way across the government (Boston & Pallot, 1997). A government's public management reform strategy is clearly broad and diverse. It does not draw upon any single theory of how to improve organizational performance in the public sector (other than the meta -theory that central government can improve services by issuing management prescriptions to local agencies). Walsh, (1995) argues that the public (as principals), on whose behalf politicians and bureaucrats (as agents) are supposed to govern, is unable to hold the latter accountable because of insufficient information (information asymmetry), the incompleteness of the contracts of employment, and the problems of monitoring behaviour (Walsh, 1995; Lane, 1995). The public sector under performs because state officials pursue their own narrow self-interests rather than the public interest.

### **Modern Monetary Theory**

This theory `deals with how sovereign government should act, operate, especially in terms of the management of finance and the impact of her action on the economy. Udo and Esara (2016) are of the view that the government should aggregate all government revenue into one single account. This theory advocates for the concurrent existence of the Treasury Single Account (TSA) and the Central Bank of Nigeria such that the Central Bank of Nigeria, being the apex bank is allowed to be in charges and in control of the TSA. According to Éric and Wray (2013) Modern Monetary Theory labels any transactions between the government sector and the non-government sector as a vertical transaction. The government sector is considered to include the treasury and the central bank, whereas the non-government sector includes private individuals and firms (including the private banking system) and the external sector – that is, foreign buyers and sellers.

### **Resource Curse Theory**

The clamour for public sector financial management reforms are encouraged by the argument presented under the “resource curse theory”. Studies and life experiences had shown that resource producing countries like Nigeria are faced with challenges of resource and revenue management of which the populace are daily struggling and clamouring for government to do more. People realized that the effectiveness and efficiency of government financial control is not felt on the life of people and their economy. The resource curse theory put light to the understanding of the great danger that lay ahead of resource producing countries like Nigeria. Scott; Ball & Dale, (1997), emphasize that the revenue funds are derived from depleting an exhaustible asset and can, in some occasions, be generated without the scrutiny of taxpayers, donors, and lenders, resource revenues may pose important intergenerational, political, economy, civil unrest and governance challenges. Other curses are abandonment of other sources of revenue like tourism, agriculture, taxation, and so on. Resource curse theory explains a complex phenomenon through which an abundance of resource revenues can translate into stagnation, waste, corruption and conflict.

## *Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria*

This research aligns to the theory of “resource curse”. Studies and life experiences had shown that resource producing countries like Nigeria are faced with challenges of resource and revenue management of which the populace are daily struggling and clamouring for government to do more. People realized that the effectiveness and efficiency of government financial control is not felt on the life of the citizens and their economy. Resource curse theory explains a complex phenomenon through which an abundance of resource revenues can translate into stagnation, waste, corruption, financial leakages and conflict. Due to this clamouring, government are now putting more effort to make meaningful financial management reforms through the application of ICT tool such as TSA to curb financial leakage that would boost the budget implementation (BI) in Nigeria.

### **METHODOLOGY**

The research design used for this study is ex-post-facto research design. The study examines the impact of ICT tool on the performance of financial management in public sector in Nigeria. The researcher employs Ordinary Least Square (Simple Regression Analysis) for analysing the data collected via the help of Eviews, version 10. The dependent variable in the model is defined in terms of Budget Implementation (BI). However, the independent variable is defined as the revenue generated through the use of TSA.

#### **Model Specification.**

The research employs simple regression analysis. The general form of this econometric model is as follows:

$$BI = \beta_0 + \beta_1 RVTSA + e$$

Where:

BI = Budget Implementation

$\beta_0$  = Intercept (constant term)

$\beta_1 RVTSA$  = Revenue generated through TSA

e = Error term.

Capital and Recurrent Budget Appropriation serves as proxy for Budget Implementation (dependent variable) and Revenue generated through TSA and proxy for ICT Tool stands for moderating (M) variable.

Apriori Expectation

It is expected *that*  $\beta_1 > 0$

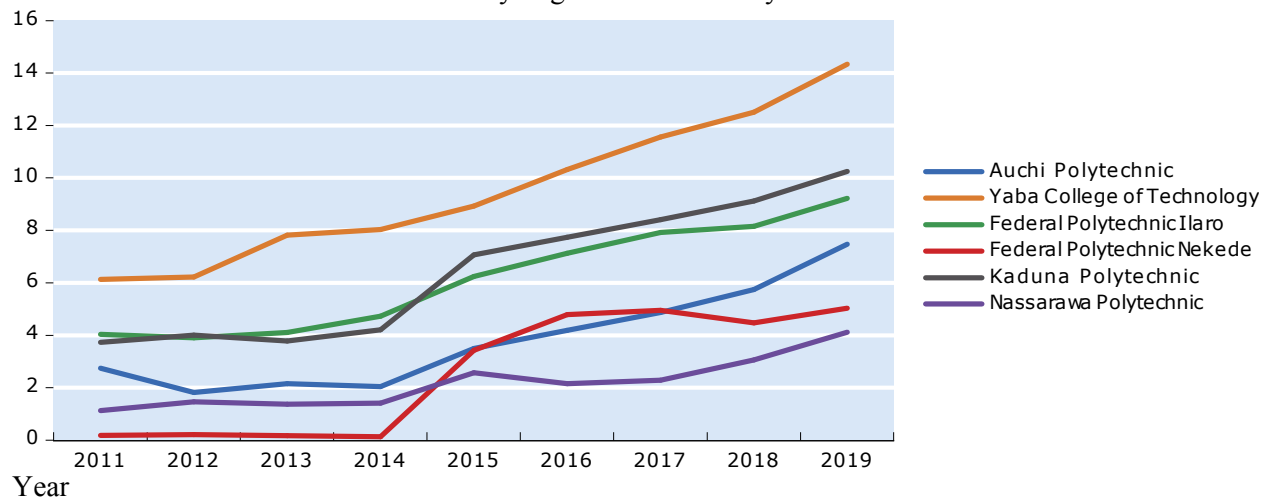
#### **Design and Analysis Technique**

This study strictly used secondary data and time series taking the scope between 2011 to 2019. The nature of this secondary data is financial and a Pre and Post Research design. A pre-test post-test otherwise called "difference in mean" design is an experiment where measurements are taken both before and after a treatment. The design suggests that the researcher is able to assess the impacts of some type of treatment on a group. The rationale for this design is because the study will compare the past revenues generated by the Nigerian Federal Polytechnics before the introduction of TSA and budget implementation before the introduction of TSA (that is from 2011 to 2014), and past revenues generated by the Nigerian Federal Polytechnics after the introduction of TSA and budget implementation after the introduction of TSA (i.e from 2015 to 2019), so as to ascertain the impact TSA has on the growth and improvement on the institution's capital and recurrent budget appropriation between this pre and post periods. The population of this study consists of all the Accredited Federal Polytechnics in Nigeria from 2011 to 2019. The study population is 21 Federal Polytechnics in Nigeria. These periods are considered long enough for the variables to form a pattern in combination with economic activities of the institutions. The judgmental sampling technique was utilized in this study to determine the sample size. The sample size for this study is six (6) Accredited Federal Polytechnics in Nigeria. The Polytechnics are among the best ten Federal Polytechnics in Nigeria. They include Auchi Polytechnic, Yaba College of Technology, Federal Polytechnic Ilaro, Federal Polytechnic Nekede, Kaduna Polytechnic and Nassarawa Polytechnic.

### **RESULT AND DISCUSSION**

**Graphical Representation**

Time Series Plot of Revenue Generated by Nigerian Federal Polytechnics



**Figure 1:** Time Series Plot of Revenue Generated by Nigerian Federal Polytechnics before and after the introduction of TSA

The above graph shows that in 2011 before the introduction of TSA, Yaba College of Technology generated the highest revenue of ₦6.13b while Federal Polytechnic, Nekede generated the lowest revenue of ₦0.18b. Besides, at the inception of the introduction of TSA in 2015, Yaba College of Technology also generated the highest revenue of ₦8.93b while Nasarawa Polytechnic generated the lowest revenue of ₦2.57b. Similarly, in 2019, Yaba College of Technology also generated the highest revenue of ₦14.33b while Nasarawa Polytechnic generated the lowest revenue of ₦4.12b. This implies that among the Nigerian Federal Polytechnics, Yaba College of Technology, Lagos effectively and efficiently generated revenue internally before and after the introduction of TSA.

**Inferential Statistics**

**Test of Hypotheses**

The result of tests of hypothesis is presented in this section

**Decision Rule**

The hypothesis is tested using Least Square of the Regression model. The significance of the variables tested in the model is assessed by comparing the p-value against the level of significance (0.05). The  $H_0$  is rejected if the p-value is less than the level of significant and we thus conclude that the variable under consideration is significant. Otherwise we accept the null hypothesis and conclude that the independent variable under consideration does not have significant effect on the dependent variable.

$H_0$ : Revenue generated through Treasury Single Account (TSA) has no significant impact on the Nigerian economic growth through Budget Implementation (BI).

Dependent Variable: Recurrent Non-debt Budget

Method: Least Squares

Date: 06/16/20 Time: 08:37

Sample: 2011 2014

Included observations: 4

*Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.649496	8.871418	-0.524098	0.6525
Revenue_Generated before_the_introduction_of_TSA	2.121700	0.477923	4.439422	0.0572
R-squared	0.907870	Mean dependent var		34.65500
Adjusted R-squared	0.861805	S.D. dependent var		3.030649
S.E. of regression	1.126631	Akaike info criterion		3.383193
Sum squared resid	2.538594	Schwarz criterion		3.076340
Log likelihood	-4.766386	Hannan-Quinn criter.		2.709827
F-statistic	19.70847	Durbin-Watson stat		2.584499
Prob(F-statistic)	0.057178			

**Source:** Compilation of the author, base on the analysis results using Eviews.

The R-square value is 0.91; it means that the model has successfully predicted the variables. This implies that 91% changes in the Recurrent Non-debt Budget are explained by the changes in Revenue Generated before the introduction of TSA. The value of 86% of the Adjusted R-squared value indicates that there is a high revenue leakage in the Nigerian Federal Polytechnics and a 14% weak relationship between the Recurrent Non-debt Budget and the Revenue Generated before the introduction of TSA. Finally, the P-value is 0.057178, greater than 0.05. We therefore, accept the null hypothesis and conclude that the revenue generated before the introduction of TSA has no any significant impact on the Nigerian economic growth through Budget Implementation.

Dependent Variable: Recurrent Non-debt Budget  
 Method: Least Squares  
 Date: 06/16/20 Time: 08:46  
 Sample: 2015 2019  
 Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-10.72466	11.46413	-0.935497	0.4185
Revenue_Generated after_the_introduction_of_TSA	1.571587	0.281161	5.589630	0.0113
R-squared	0.912393	Mean dependent var		52.58200
Adjusted R-squared	0.883191	S.D. dependent var		11.61933
S.E. of regression	3.971177	Akaike info criterion		5.885176
Sum squared resid	47.31074	Schwarz criterion		5.728952
Log likelihood	-12.71294	Hannan-Quinn criter.		5.465884
F-statistic	31.24396	Durbin-Watson stat		1.499800
Prob(F-statistic)	0.011309			

**Source:** Compilation of the author, base on the analysis results using Eviews

The R-square value is 0.91; it means that the model has successfully predicted the variables. This implies that 91% changes in the Recurrent Non-debt Budget are explained by the changes in Revenue Generated after the introduction of TSA. The value of 88% of the Adjusted R-squared indicates that there is strong relationship between the Revenue Generated after the introduction of TSA and the Recurrent Non-debt Budget; while 12% Adjusted R-squared indicates low revenue leakages in the Nigerian Federal Polytechnics. Finally, the P-value is 0.011309, is less than 0.05. We therefore, reject the null hypothesis

## *Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria*

and conclude that Revenue generated through Treasury Single Account (TSA) has a significant impact on the Nigerian economic growth through Budget Implementation (BI).

### **Discussion of Findings**

The results showed a negative and insignificant relationship between the revenue generated internally by the Nigerian Federal Polytechnics before the introduction of TSA and the Nigerian economic growth through Budget Implementation. The results indicated that there was a high revenue leakage in the Nigerian Federal Polytechnics. This implies that Nigerian Federal Polytechnics have been experiencing an alarming rate of frauds and financial crimes for some years; and those frauds and financial crimes affect the institutions negatively. Besides, the results showed a positive and also a statistically significant relationship existing between the revenue generated internally by the Nigerian Federal Polytechnics after the introduction of TSA and the Nigerian economic growth through Budget Implementation. This implies that with the advents of TSA, a lot of financial leakages and loopholes have reduced; and efforts have been made to reduce the rate of fraudulent activities and embezzlement in Nigerian institutions. Therefore, the application of TSA should highly be recommended in every Nigerian public sector in order to improve the economy. These findings corroborate the findings of Amos (2018) in the research titled effect of Treasury Single Account (TSA) on financial accountability, corruption and financial discipline in the Nigerian public sector. Findings from their study revealed that TSA significantly promotes accountability of public funds in Nigeria reduces the level of corruption in the Nigerian public sector and enhances financial discipline in the Nigerian public sector. The study concluded that TSA has a significant and positive effect on the accountability of public funds, reduction in the level of corruption and enhancing financial discipline. Similarly, these findings are also consistent with Ndubaku, Ohaegbu, and Nina (2017) who embarked on study -Impact of Treasury Single Account on the Performance of the Banking Sector in Nigeria. This research study sought to determine the impact of TSA on Credit to the Private Sector, Deposit mobilization and Loans and Advances respectively. The results from the research analysis confirmed that the TSA had a significant impact on Credit to the Private Sector, Deposit Mobilization and Loans and Advances also recommends that the government of the day is advised to implement TSA to its fullest maximum to make best use of its potentials of reducing corruption.

However, findings of this study are inconsistent with Saheed (2017) which examined effect of Federal Government of Nigeria (FGN) Deposit Withdrawals into the Treasury Single Account (TSA) on Deposit Money Banks' liquidity performance in Nigeria. The study found that Federal Government Deposit (FGD) had a positive and significant effect on the Deposit Money Banks' liquidity position in the Pre-TSA Era whereas Federal Government Deposit (FGD) had a negative and significant effect on the Deposit Money Banks' liquidity performance in the Post-TSA Era. Besides, the findings disagree with Festus (2019) in his research on the implementation of Treasury Single Account (TSA) in Nigeria ushered in some drastic changes such that Central Bank of Nigeria (CBN) takes over the custodian of public fund and Deposit Money Banks (DMBs) serve as collecting agent throughout the federation. This seems to be affecting the liquidity state of DMBs. A bank with high liquidity problem might not be able to withstand negative shocks and contribute to the stability of the financial system. An in-depth analysis of the impact of TSA on the profitability of Money Deposit banks will not only clarify the disaggregated findings reported by previous studies, but also provide suggestions on how DMBs could improve their liquidity state. It was discovered that through the analysis carried out via paired sampled t-test that TSA exerts a positive insignificant impact on all the indicators of profitability covered by this study except Profit after Tax (PAT) that has a negative insignificant impact.

### **CONCLUSION AND RECOMMENDATION**

Treasury Single Account (TSA) aims at ensuring accountability and proper control of government revenue, enhance transparency and avoid misapplication of public funds as well as curtail financial leakages. Adoption of Treasury Single Account is helping to ensure proper cash management by eliminating idle funds usually left with different commercial banks and in a way to enhance reconciliation of revenue collection and payment. The different TSA account types analyses above explained the need that the financial reform is worthwhile in Nigeria public sector financial management especially in



## *Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria*

Nigerian educational sector. Given the foregoing, the following recommendations are germane:

- i. The Nigerian government should promote efficient management of domestic borrowing at minimal cost; allow optimal investment of idle cash; block loopholes in revenue management; establish an efficient disbursement of the collected Government funds.
- ii. The implementation of the TSA, no doubt presents an opportunity for banks to creative means of raising money, there are fears that the concentration of government funds in the TSA may affect the liquidity of some banks leading to their collapse and an increase in unemployment.
- iii. Government should endeavor to play the game with the rule and all sense of purpose by ensuring that the funding of projects by the Government and the sale of treasury bills and bonds as may be approved from time to time are done through commercial banks to enable the commercial banks raise funds and stay operational.
- iv. Government is expected to sponsor a bill on TSA to the National Assembly. This, if done will open up the financial activities of the Government in the budgetary process and its implementation. And Government should not be selective in punishing any of those charged with the governance of MDAs that violates the dictate of the TSA.

### **References**

- Ayuba, B. & Aliyu, I. A. (2014). The role of information communication technology in combating corrupt business activities in Nigeria. *Journal of Business and Management*, 16(7), 7-14.
- Akinmutimi, T. (2015). Revenue leakages-stakeholders demand tax justice and fiscal Discipline. *Journal of Arts and Scientific Research* ;Vo 1.22, No1. pp. 1-143.
- Amos, D. (2012). *The Impact of new Technologies in Public Financial Management and Performance*. Nancy – USA: Nancy University, France press le.
- Abiodun, F. Imakin, S. (2017). Effect of Integrated Personal Payroll Information System on employee welfare, Federal Ministries In Nigeria: *Australian Journal of Arts and Scientific Research* ;Vo 1.22, No1. pp. 1-143.
- Aminatu, M. (2017). Impact of Integrated Financial Management System on Economic Development. *Journal of Ghana M. A. Graduate School of International Studies, Korea University 121 edition vol.7, No.10 ISSN: 1856 – 7877*.
- Basman, O. Aldalayeen, W. Rath'n, M. Ahmad, & Saleh, A.(2013). Information technology and its impacts on the financial performance, an applied study in industrial companies *journal of european scientific studies. 3 edition vol.9, no.10 ISSN: 1857 – 7881*.
- Bouaka N. David A. & Thiery O. (2002) *Contribution to the understanding of explanatory factors for a decision-maker problem within the framework of economic intelligence*, SCI'2002, Orlando: USA, 14-18 press le.
- Central Bank of Nigeria (2016). *Guidelines for the operation of Treasury Single Account by Federal governments, Nigeria*: CBN Bulletin. Retrieved on 3<sup>rd</sup> Jan. 2016: <http://www.rtu.cbn.edu.tsa%312..//cbnbulleting.ng>.
- Cuenco, B.A. (2013). Government Integrated Financial Management Information System(GIFMIS). Retrieved on 8th. 2013:<http://www.gifmis.rtu.edu.ph/info.edu.ng>.
- Dada, S.O. (2014). Forensic accounting technique a means of successful eradication of corruption in Nigeria. *Kuwait chapter of Arabian Journal of Business and Management review*,4(1), 176-186.
- Dong, B. (2011). *The causes and consequences of corruption*. A thesis presented to the school of Economics and Finance. Queens land University of Technology: queens press inc.
- Eme, O. I. Chukwurak, D. C. & Iheanacho, E. (2015). Treasury Single Account policy in Nigeria: *Arabian Journal of Business and Management Review*,5(4), 20-39
- Enoe, O. L. Chukwumeka, D. & Iheanacho, E. (2015). Addressing revenue financial leakages in Nigeria: *Arabian Journal of Business and management review*,5(4),19.
- ECA, African Union (2014), *Economic Report on Africa*. Retrieve Dec.2019: <http://www.neiti.org/ng/files>.

## *Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria*

- HART Group (2009), Report of the Nigeria Extractive Industries Transparency Initiative: Retrieve de.2019: [www.neiti.or.ng](http://www.neiti.or.ng)
- Hariharan, D. Youngsun, K. (2009). Integrated Financial Management Information Systems: *Journal of Management Science*, 33(2), 675-789.
- Howard H. (2015) *Business Finance and Financial Management*. Retrieved 2015-11-04 [www.wikipedia/UpFina](http://www.wikipedia/UpFina).
- Idris, H. Adaja, J. & Audu, J. S.(2015). Integrated personnel payroll and information System panacea for ghost workers syndrome in Nigerian public service: *International Journal of Public Administration and Management Research (IJPAMR)*, 2(5), 55-64
- Iheduru, N. G. & Amaefule, L. I. (2014). Electronic accounting system A tool for Checkmating corruption in the Nigeria public sector and a panacea for the nation's poor economic development status. *Sky journal of business administration and management*,2(4),19-28.
- Ijeoma, N. B. & Oghoghohemeh, T. (2014). Adoption of integrated computing and international public sector accounting standards in Nigeria: Expectations, benefits and challenges: *Journal of Investment and Financial Management Research (IJPAMR)*, 2(5), 55-64.
- Jean, B. Harelimana D. (2017) *Impact of Integrated Financial Management Information System on Performance of Public Institutions in Rwanda*: Enterprise Risk Management ISSN 1937-7916 ,2017, Vol. 3, No. 1
- Langseth, P. (1999). An effective tool to reduce corruption. A paper presented in Vienna on global programme against corruption conference. Retrieve 2019: [www.google.aca.org](http://www.google.aca.org).
- Lucas, M.(2014), Drainpipes in federal revenue agencies, March 03, Pp17-18. IPPIS Department , Integrated Payroll and Personnel Information System. Retrieved Dec. 2019: <https://ippis.gov.ng>
- Musa, A. & Dauda, G. (2011), *Natural Resources Governance and EITI Implementation In Nigeria*, London: Lightning Source Ltd.
- Mohammed, U. (2013). Corruption in Nigeria: A challenge to sustainable development in the fourth republic. *European scientific Journal*,9(4), 120-137
- Mathias, M. (2014) Public Financial Management –Anti-corruptionb Help Desk; Transparency International. Retrieve Dec. 2019 [www.google.org.com](http://www.google.org.com).
- McShane, K. & Nilsson, J. (2010). Determinant of corruption: A study of Zambian Ministries. Minor field study, No 206, USA.
- Myers, S. & Nicholas S. (1984). Corporate Financing and Investment Decisions: *Journal of Financial Economics* 13 edition, 187-221.
- Nagalinagm, N. Mangala, F. & Kumudine, D. (2015).The development of public sector accounting and financial reporting. *International Journal of Governmental Financial Management*, 15(2), 70-88
- Oxford Dictionary (3<sup>rd</sup>ed.). (2005). Oxford, NY: Oxford University Press.
- OAGF. (2015). Office of the Accountant General of the Federation: Federal Treasury Circular issued on 19<sup>th</sup> March, 2015.
- Odoyo, F. S. Adero, P. & Chumba, S. (2014). Integrated Financial Management Information System and Its Effect on Cash Management in Eldoret West District Treasury, Kenya. *International Journal of Business and Social Science*, 5(8), 31-37.
- Syed Mohsin (2015) Impact of Information Communication on Effective Financial Management. *International Journal of Governmental Financial Management*, 15(2), 70-88
- Westcot, H. (2016). Corporate Risk management Information; Asymmetry. *Journal of Business Finance & Accounting* 40(1), 239-279.
- Enofe, A. O. Afiangbe, S. E. & Agha, D. I. (2017) Financial Management Reforms and Corruption In Nigeria Public Sector: *International Journal Of Advanced Academic Research Vol. 3, Issue 7, University of Benin, Nigeria*.
- Robin-Brown, E. (2008). *Integrated financial management information system: A practical guide* United States Agency for International Development (USAID)
- Shabbir, G. & Anwar, M. (2007). Determinants of corruption in developing countries. The Pakistan development review,46 (4), 751-764.
- Swall, P. Publi K. (2007). *The Successive Use of Information and Communication Technologies at Work*. Unpublished research project, University of Texas. doi:10.1111/j.1468-2885.2007.00308.

*Impact of Information Communication Technology Tool (ICTT) on Public Financial Management in Nigeria*

Tolu, L. & Ogunro, K. V. (2012). Combating corruption in Nigeria. *International Journal of academic research in Economics and Management sciences*, 1(4), 1-7

The Guardian Editorial (2014), FG moves to block revenue leakage, gives MDAs Deadline on TSA. Retrieved Dec. 2019: [www.google.aca/tsa.ng.com](http://www.google.aca/tsa.ng.com).

Ugolor, D. (2009), "*The Extractive Industries Transparency Initiative*". Retrieve Jan. 2020: [www.eed.de/files/doc/07-06\\_ugolor\\_eiti-nigeria.pdf](http://www.eed.de/files/doc/07-06_ugolor_eiti-nigeria.pdf).

Waziri, F, C. (2010). Corruption and governance challenges in Nigeria. Cleen foundation monograph series working paper No. 7.

Ziad, A (2015). Jordanian public sector. The European Proceedings of Social & Behavioural Sciences eISSN: 2357-1330. Retrived [www.FutureAcademy.org.uk](http://www.FutureAcademy.org.uk).