

ISSN: 2682-6690

# African Journal of Accounting and Financial Research

Volume 1, Issue 1, 2018



Published by:



**African - British Journals**

[www.abjournals.org](http://www.abjournals.org)

[editor@abjournals.org](mailto:editor@abjournals.org)

**Brief Description**

Publication Name: **African Journal of Accounting and Financial Research**

Acronym: **AJAFR**

Starting Year: **2018**

International Standard Serial Number (ISSN): **2682-6690**

Publisher: **African - British Journals**

Publication frequency: **Monthly**

Journal Type: **Open Access**

Mode of Publication: **Online**

**Indexing/Abstracting/Coverage:**

- OCLC WorldCat
- Google Scholar
- Web of Science
- Directory of Open Access Journals (DOAJ)
- Open Academic Journals Index
- Directory of Research Journals Indexing (DRJI)
- Library of Congress, USA

**Focus & Scope**

African Journal of Accounting and Financial Research (AJAFR) is an international peer-reviewed journal published by the African - British Journals. The scopes of the Research Journal include, but not limited to Accounting Theory, Financial Econometrics, Financial Forecasting, Management Accounting, Financial Accounting, Accounting Ethics, Investments, Accounting Information Systems, Research in Banking and Finance, Financial Engineering, Financial Analysis, Corporate Finance, Risk Management, Risk Assessment and other related topics.

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## THE IMPACT OF CAPITAL FLOWS ON FINANCIAL SYSTEM STABILITY IN NIGERIA

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**ABSTRACT:** *The impact of capital flows on the financial system stability of the Nigeria economy was carried out using data from 1987 to 2017. This study attempted to find out the casual relationship between financial system stability variables and capital flows in Nigeria. The impact of financial stability on capital flows prompted the researchers to undertake this study so as to establish a linear relationship between foreign direct investment and other financial stability variables. The theoretical framework of risk was applied and the model specification variables and methodology applied in this study may have been overlooked by previous studies in Nigeria. The study found out that credit to private sector negatively affect foreign direct investment. The coefficient of determination in the study was high indicating that the explanatory variables (financial system stability variables) are captured by the capital flows variable (FDI). The study therefore recommends that the Nigeria government should adjust the model for credit to private sector so as to have a positive relationship with capital flows.*

**KEYWORDS:** Capital Flows, Foreign Direct Investment, Financial System Stability.

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### INTRODUCTION

Opinion differs among experts in economics and finance as to what constitutes capital flows and financial system stability in Nigeria but they all agree that it is an age long issue for which there do not seem to be any consensus in sight. Thus, as noted by Nwankwo (1991), the issue of what constitutes capital flows and financial system stability cannot be over emphasize. Finance analysts has cited by Harley et al (2017) are skeptical in analyzing financial system stability in Nigeria.

Regulators in Nigeria financial system are concerned with the safety of banks operations and the stability of financial markets. Once there is adequate capital for banks through inflows, this reduces the likelihood of failure and increases bank liquidity. Banks on the other hand would prefer to work with less capital - Koch (2004). The complexity of the problem brings to the fore the following questions: what are capital flows? What are its components? What is financial system stability? What are the variables that can be proxy for financial stability? What methodology is appropriate in measuring capital flows on financial system stability? However, the battle between the banks and regulatory authorities is centered after a prolonged period of recession and macro-economic instability. Hitherto, several studies have emphasized the importance of capital inflows and its impact on financial system stability and there is need to review related studies in order to gain more understanding of the subject.

The financial system provides an enabling environment for economic growth and development financial intermediation, capital formation and management of the payments system. With intermediation, savers lend to intermediaries, who in turn lend firms and other fund using units.

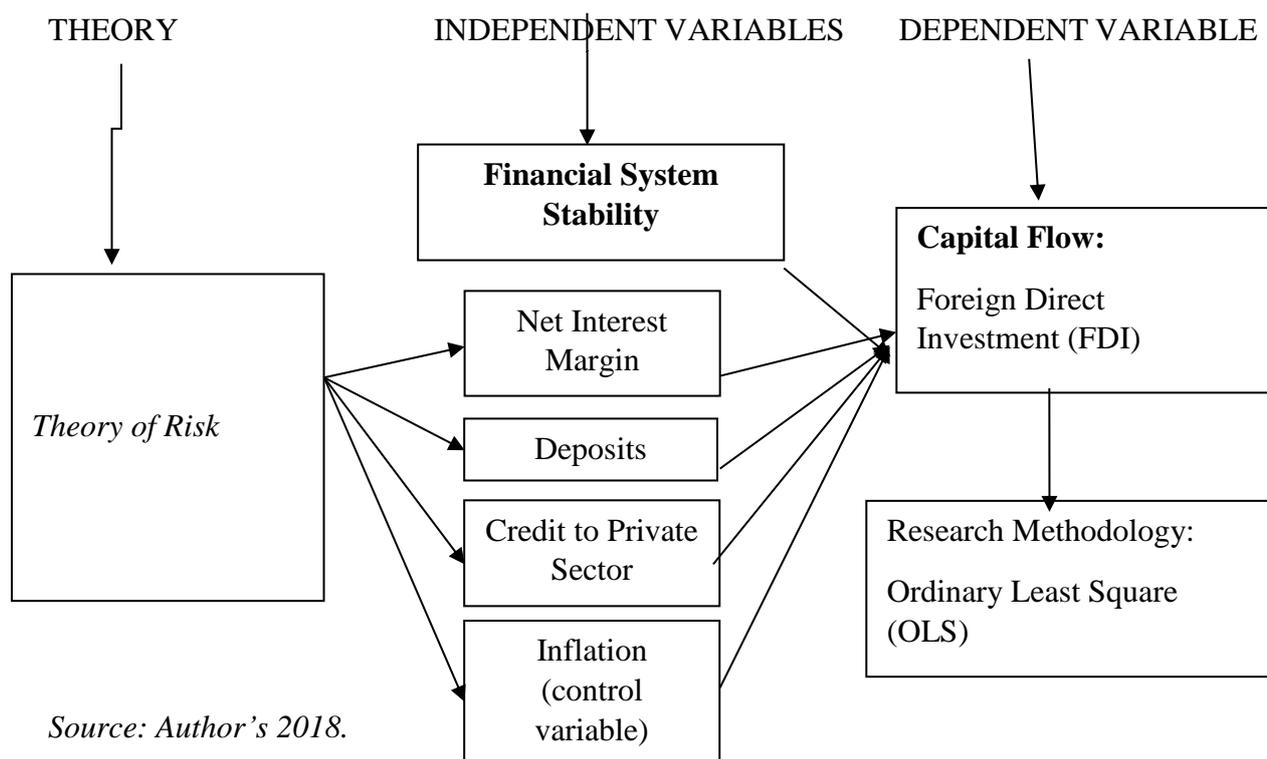
The saver holds claim against the intermediaries, in form of deposits rather than against the firm. These institutions provide a useful service by reducing the cost to individuals, of negotiating transaction providing information achieving information diversification and attaining liquidity. Capital flows are thought of as a mixed blessing for developing and emerging economies. While they bring in much-needed foreign capital to supplement domestic finances to support growth and improve resilience, they also expose the economic and financial systems to external shocks (Kim and Singal 2000). Whether on balance the vulnerability of an economy increases or decreases with capital movements remains an open empirical question despite a large body of literature (Kose et al. 2009). For example, the relationship between capital flows and macroeconomic volatility in emerging economies is ambiguous and may depend on the nature of flows (Hegerty 2011), on the level of financial development of the economy (Kose, Prasad, and Terrones 2003), or country characteristics (Milesi-Ferretti and Tille 2011; and Ahmed and Suardi 2009).

The effect of capital flows on financial stability in emerging markets has gained interest for its potential consequences for macroeconomic stability as recent crises have revealed (Erturk 2005; and Kaminsky). Some believe that financial liberalization in developing economies (domestic deregulation and opening of the capital account) is followed by instability and crises for reasons such as underdeveloped institutions and banking systems, and an increase in competition and risk-taking as the process of liberalization evolves (Daniel and Jones 2007). Others believe that financial openness fosters stronger and more stable financial systems owing to greater access to capital (Kaminsky and Schmukler 2008). Again, the evidence is inconclusive.

The literature on financial flows recognizes that unbundling the composite capital account adds richness to the analysis as flows are heterogeneous in nature and possibly in their impact. For example, portfolio debt and equity inflows are considered volatile because they are driven by speculative considerations. On the other hand, foreign direct investment (FDI) inflows are considered to be stability inducing, compared with portfolio and other investment flows, because they are less prone to fluctuations and reversals in the short term. Conventionally, FDI involves investment in fixed assets in an economy and is driven by long-term considerations. Hence, these flows are associated with continuity over a period of time. Accordingly, studies find evidence that FDI is the least volatile among financial flows in general and, particularly, during episodes of sudden stops in crises in developing and emerging economies (Sula and Willett 2009). But other studies show that FDI flows are as volatile as other flows, and may not always be stabilizing (Fernández-Arias and Hausmann 2000). One reason is that measured FDI does not reflect the “tied down” aspects of investment alone. Instead, it could represent incoming and outgoing flows that circumvent a country's capital controls and are merely substituting more volatile flows. Or they may be flows that pass through a particular country to reduce corporate tax liabilities or are used to obtain other funds holding physical assets as collateral. These aspects make FDI closer to portfolio debt flows that can fluctuate in the short term (Blanchard and Acalin 2016). Hence, countries have to be cautious about expanding their share of these flows without a deeper understanding of their interaction with other flows and the effects on stability (Brukoff and Rother 2007). On the contrary, portfolio and banking flows are thought of as relatively destabilizing, but some country-specific cases find that these foreign investments have had a positive effect on stability when supported by appropriate macroeconomic policies (Pruski and Szpunar 2008). The presence of mixed evidence in the literature, often with differing country experiences, suggests that stability effects of a particular component of capital flow in one country may not be the same for another.

## LITERATURE AND THEORETICAL FRAMEWORK

Christopher et al (2017) shows five key financial indicators to proxy financial stability for sixteen emerging economy. The indicators are i. Deposits: Financial system deposits to gross domestic product (GDP) (%), ii. Domestic Credit: Domestic credit to private sector (% of GDP), iii. Net Interest Margin: Bank net interest margin (NIM) (%), iv. Non-performing Loan: Bank nonperforming loans to gross loans (%), and v. Liquid Assets: Liquid assets to deposits and short-term funding (%). The deposits-to-GDP ratio is traditionally used as a measure of size of the financial system relative to the economy and gives a sense of the extent of financial intermediation, especially through banks. The ratio also serves as an indicator of the availability of access to financial savings in countries where the financial structure is dominated by the banking system (IMF 2005). The ratio of domestic credit to the private sector to GDP is another measure of depth of the financial sector, from the asset side as it measures loans made to the private sector by financial institutions. It is also considered as one of the proxies for the level of financial development of an economy. In financial institutions, the NIM is the difference between interest income and interest expense, expressed as a ratio to the amount of their interest-earning assets. A wide margin typically reflects frictions in intermediation; so that a low value of NIM is considered a proxy for higher efficiency. A nonperforming loan (NPL) is one that is in or close to a default. Measured relative to total gross loans, this ratio shows the quality of banking sector assets and may indicate weak capitalization of the banking sector. The last ratio is the percentage of customer deposits and short-term funding that could be met if suddenly withdrawn. A higher ratio indicates more liquidity and lower vulnerability to a bank run. The Nigeria economic situation provides an interesting study of the issue at Hand Since 2010 after the global financial crisis, the government of Nigeria via the central bank of Nigeria has actively encouraged investment and capital inflows in Nigeria financial system and also ensure that the financial system is big strong and more resilient financial institutions but without much success. The risk in which the Nigeria financial system is face with is difficult to empirical analyze. Against this backdrop, the importance of capital inflows into the Nigeria financial system, economic stability had been negatively affected. The objectives of the study is to empirical find out the impact of capital flows on financial system stability using data from the Nigeria economy and noting variables indicated by Christopher et al (2017).



**Figure 1 Theoretical Modelling of the Study**

## METHODOLOGY

The preoccupation of this study is the impact of capital flows on financial system stability of the Nigeria economy. It applies the Ordinary least square methodology based on the traditional determinants of financial stability distilled from the literature. The idea is to subject the variables to a linear model and test the impacts of financial stability variables on capital flows. We describe the indicators used, data sources, and the estimation technique applied in the empirical investigation of the relationship between capital flows and financial stability. For the time period 1987–2017, a set of financial indicators was used to measure financial system stability, gross capital flows, and a macroeconomic variable as control variable.

In order to account for the impact of capital flows on financial system stability of the Nigeria economy, the model for the study is hereby specified as follows:

### Model Specification

$$FDI = f(NIM, DEP, CPS, INF) \dots \dots \dots \text{Model}$$

The above model is hereby written in linear form as:

$$FDI = b_0 + b_1NIM + b_2DEP + b_3CPS + b_4INFL + \mu \dots \dots \dots \text{Model}$$

### Analytical Variables

Where:

\* FDI = FOREIGN DIRECT INVESTMENT

This is proxy for capital flows and it is expected that FDI be should be positive

$$f^i(FDI) > 0$$

NIM = NET INTEREST MARGIN

It is expected that increase in interest margin should lead to increase in financial system stability

$$f^i(NIM) > 0$$

DEP = DEPOSIT

It is expected that increase in deposit should lead to increase in the Nigeria financial system stability

$$f^i(DEP) > 0$$

CPS = CREDIT TO PRIVATE SECTOR

$$f^i(CPS) > 0$$

It is expected that an increase in credit to the private sector should lead to increase in the Nigeria financial system stability

INFL = INFLATION RATE

$$f^i(INF) < 0$$

It is expected that high inflation rate will impede the Nigeria financial system stability

**Table 1: Summary of Regression Result**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1530.647	2308.942	0.662921	0.5132
NIM	232.8336	212.9757	1.093240	0.2843
DEP	-8.330007	6.020007	-1.384448	0.1780
CPS	-0.000140	5.580005	-2.513936	0.0185
INF	16440.34	14125.57	1.163871	0.2550
R-squared	0.358936	Mean dependent var	3267.369	
F-statistic	3.639388	Durbin-Watson stat	1.569639	

Source: Eview7.2018

## RESULTS AND DISCUSSIONS

Table 1, shows the relationship between Capital inflow (FDI) and all financial system stability variables mentioned in model. The FDI represent the dependent variable and the independence variables are NIM, DEP, CPS and INF. The regression result shows the relationship between Net Interest Margin (NIM) and FDI. The relationship between NIM and FDI is positive of 232.8336. From the above regression result, we can deduce that the positive regression result means that one percent increase in NIM will lead to an increase in FDI. This positive relationship between NIM and FDI corroborate with the work of Christopher et al (2017) that if net interest margin (NIM) is proxy for financial system stability it will positively affect capital flows (FDI). The relationship between DEP and FDI is negative of 8.33007. This means that one percent increase in DEP will lead to a corresponding fall in FDI. In this result, we can also deduce that there is a negative relationship between CPS and FDI of 0.000140. The result of DEP and CPS does not corroborate with the work of Christopher et al (2017) that Deposit (DEP) and Credit to Private Sector affect capital flows negatively. Based on apriori expectation, INF has negative impact but, in this result, there is a positive relationship between INF and FDI. This means that one percent increase in INF will lead to a corresponding increase in FDI.

In the result, the coefficient of determination is fair. It shows that about 35.89 percent of the total variations in FDI are explained by all the independent variables in the model. The adjusted  $R^2$  also indicates that about 26 percent of the total variations in FDI are explained by the model. The F-statistic is significant at 5 percent critical level. It indicates that the joint variations of the model are significant. However, the Durbin Watson value indicates a presence of positive serial correlation of 1.56. This however, may had contributed to the fair coefficient of determination. In this result. The F statistic of the model is 3.639388 while the probability of F-statistics is 0.017. This implies that a relationship exists in the model.

### Test of Hypothesis Using T-Test Derived from The Regression Model Result.

The t-test value is assumed to be the average weighted and can be used to test hypothesis. We assume that T-tabulated is 5% (0.05).

We reject  $H_0$  if  $T\text{-calculated} > T\text{-tabulated}$ . T-calculated can be obtained from the regression table above.

$$T\text{-calculated} = 1.093240$$

Research Hypothesis

Hypothesis I

$H_0$ : Net interest margin does not significantly affect foreign direct investment in Nigeria

The use of T-test to test hypothesis if the independent variable is statistically significant to the dependent variable. The variable to be tested here is NIM against FDI. The reason for the test is to validate the research objective stated. The T-calculated value is compared with that of 5% confidence interval. Since the T-calculated is 1.093240 which is compared to 0.05 i.e.  $1.093240 > 0.05$  we reject the null hypothesis and accept the alternative hypothesis that net interest margin affect foreign direct investment. Therefore, one of the findings of this study is that financial system stability indicator (interest margin (NIM)) affect capital flows (FDI).

### Hypothesis II

H<sub>0</sub>: Deposits does not significantly affect foreign direct investment in Nigeria

The variable to be tested here is DEP against FDI. The reason for the test is to validate the research objective stated. The T-calculated value is compared with that of 5% confidence interval. Since the T-calculated is -1.384448 which is compared to 0.05 i.e.  $-1.384448 < 0.05$  we reject the alternative hypothesis and accept the null hypothesis that Deposit does not affect foreign direct investment. Therefore, one of the findings of this study is that financial system stability indicator (Deposit (DEP)) does not affect capital flows (FDI).

### Hypothesis III

H<sub>0</sub>: Credit to private sectors does not significantly affect foreign direct investment in Nigeria

The variable to be tested here is CPS against FDI. The reason for the test is to validate the research objective stated. The T-calculated value is compared with that of 5% confidence interval. Since the T-calculated is -2.513936 which is compared to 0.05 i.e.  $-2.513936 < 0.05$  we reject the alternative hypothesis and accept the null hypothesis that Credit to the Private Sector does not affect Foreign Direct Investment. Therefore, one of the findings of this study is that financial system stability indicator (Credit to the Private Sector) does not affect capital flows (FDI).

### Hypothesis IV

H<sub>0</sub>: Inflation does not significantly affect capital adequacy ratio in Nigeria

The variable to be tested here is INF against FDI. The reason for the test is to validate the research objective stated. The T-calculated value is compared with that of 5% confidence interval. Since the T-calculated is 1.163871 which is compared to 0.05 i.e.  $1.163871 > 0.05$  we reject the null hypothesis and accept the alternative hypothesis that Inflation affect foreign direct investment. Therefore, one of the findings of this study is that financial system stability indicator (Inflation (INF)) affect capital flows (FDI).

## CONCLUSIONS

In this study, we set out to empirically investigate the impact of capital flows on financial system stability of the Nigeria economy using data from 1987 to 2017. The study is borne out the need to ascertain the nature of impact of some variables likely to affect capital flows and financial system stability in this period where the Nigeria financial and political system is undergoing reforms. In this study, the capital flows were proxied by foreign direct investment and an appropriate indicator was proxy for financial system stability. The NIM variable was empirically proven to positively affect FDI indicating that financial system stability affects capital flows.

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## **EFFECT OF MERCHANT BANK OPERATION ON ECONOMIC DEVELOPMENT IN NIGERIA**

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**ABSTRACT:** *This study investigates the operation of merchant bank on economic development in Nigeria. The data used in this study were collected from the period of 2010 to 2015. Augmented Dickey Fuller (ADF) and Philip Perron unit root test, ordinary least square and granger causality test have been used. Unit root test confirms the stationary of all variables at first difference. Regression results indicate that deposits, investments, advances, profitability and interest earnings have significant positive impact on economic development in Nigeria. The Granger-Causality test confirms the bidirectional causal relationship of deposits, advances and profitability with economic growth. On the other side we found unidirectional causal relationship of investments and interest earnings with economic growth runs from investments and interest earnings to economic growth. It is recommended that the policy makers should make policies to enhance the banking sector in Nigeria because banking sector is significantly contributing to the economic development in Nigeria.*

**KEYWORDS:** Merchant Bank, Operation, Economic Development, Investment, Nigeria.

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### **INTRODUCTION**

Before the 2005 banking consolidations in Nigeria, there were more than a hundred banking institutions. These banks offered or claimed to offer different services to different client bases. Some were basically merchants making profits from supporting enterprises. Others were deposit holding institutions, while a few ‘less fashionable’ ones were community banks. There were agricultural banks too. But in reality, many of these banks were distinctions without any difference to the the banking public (Adekunle, Salami & Adedipe, 2013). After the 2005 banking consolidations, which resulted in the merger of many of these banks, they simply became ‘jacks of all trade’, managing to master all. There were mega banks into mega businesses. The slogan seemed to be ‘anything the customer wanted’. The merchant banks were gone. To some, this was a most pragmatic approach, but not to the regulator. This didn’t go down well with the Central Bank of Nigeria (“CBN“), as it felt this had led to banking (or better put, financial services) conglomerates who simply didn’t have the capacity to effectively govern such huge structures (Aderibigbe, 2014).

Then came the sweeping reforms in 2008, piloted by then CBN Governor Sanusi Lamido Sanusi. The CBN introduced several measures to halt the near failing (if not, failure) of several banks. One of such measures was abolishing universal banking in Nigeria. Banks could no longer (at least in theory) are ‘masters of all’. The 24 banks that existed at this time were essentially deposit money banks. Their territorial reach was also streamlined in accordance with their capital base.

However, it was recently announced that Kakawa Discount House had applied for a merchant banking license in 2014 and its application was granted in principle sometime in December 2014. This was not the first of such moves. In fact, in 2012 and 2013, Rand Merchant Bank and FSDH (now FSDH Merchant Bank) had obtained licenses from the CBN to transform their existing businesses into merchant banks (Ajayi, 2015).

These moves have now brought back the once non-existent merchant banks into the financial services space in Nigeria. No doubt, merchant banks play a vital role in the financial services sector of many economies the world over. Apart from their broad range of advisory and investment-related services, merchant banks provide much needed corporate finance majorly in form of equity stakes and subordinated facilities for companies and trade finance. They are private equity investors. According to Valentine Craig of the United States Federal Deposit Insurance Corporation “merchant banking is generally understood to mean negotiated private equity investment by financial institutions in the unregistered securities of either privately or publicly held companies (Adewunmi, 2016).

Merchant banks first arose in the Italian states in the middle Ages, when Italian merchant houses (generally small, family-owned, import-export, and commodity-trading businesses) began to use their excess capital to finance foreign trade in return for a share of the profits. This trade generally consisted of lengthy sea voyages. Thus, the investments were very high risk: war, bad weather, and piracy were constant threats, and by their nature the voyages were long-term and illiquid (Benhabib & Spiegel, 2007).

However, these days’ merchant banks tend to focus more on corporate investments, corporate loans, portfolio management, credit syndication, bond financing, and merger and acquisitions advisory to even real estate investment as well as trade finance. The ‘second coming’, as it were, of merchant banks will no doubt open opportunities for increased investments and trade facilitation- roles that have been hitherto left to only commercial banks (Uche, 2012).

In 2010, in exercising its statutory mandates under the *Central Bank of Nigeria Act of 2007(3)* and the *Bank and Other Financial Institution Act (4)* the CBN issued the *Scope, Conditions & Minimum Standards for Merchant Banks Regulations 2010* (the Regulation) to regulate merchant banks and provide for the terms and conditions under which merchant-banking licenses will be issued. Under this Regulation, merchant banks are required to have a minimum paid-up share capital (minimum capital base) of N15 billion and not allowed to accept cash deposits except they are beyond N100 million. They are allowed to engage in foreign exchange services, act as issuing houses, act as underwriters, and provide financial advisory services, asset management services, custodial services and debt factoring services (Uche, 2012)

No doubt the lure of this specialized kind of banking will be attractive to many of the existing issues and discount houses and even commercial banks to vie into or establish new entities to engage in merchant banking. This apparently has the potential of opening new opportunities for them and exposing them to new customers. Of course, on the regulatory side of things, it calls for more attention from the CBN to ensure merchant banks operate within their licences and stay within the required cash reserve and liquidity ratios that would ensure a sustainable and sound merchant banking system. Hence, the main thrust of the study is to investigate the effect of merchant bank operation on economic development.

## Functions of the Merchant Banking Services

These banks have a number of functions and some of the most important among them include:

**Raise funds:** one of the main functions of this banker includes helping the clients' company to raise funds from the markets. The banks help to manage equity offerings and debt. This function further includes underwriting support, pricing and marketing of the issue, stock exchange listing, allotment and refund, offer document registration and so forth.

**Offer advisory services:** these banks also offer advisory services to its clients for a proposed fee.

**Security distribution:** the functions of these banking services also include distribution of different types of securities like fixed deposits, equity shares, mutual fund products, commercial paper and debt instruments.

**Aid in projects:** these banks also provide aid in the projects undertaken by the clients by helping them to visualize the concept of the project. The feasibility of the project is also analyzed by these banks. The clients are also given support to prepare project reports.

**Overall financial reconstruction:** the merchant banking services provide better financial options and solutions to the clients. They help the clients to raise funds through cheaper resources. With the aid of other financial institutions, these banks also help to revive the sick units of the clients' companies.

**Offer advice on management of risks:** another important function performed by these banks includes providing timely advice on risk management. The merchant banker provides advice on different strategies adopted by the clients.

Today the merchant banking services provide a number of other services like loan syndication, credit acceptance, counseling of mergers and acquisitions, management of portfolio and so forth. They also assist companies with short term liquidity funds. In a nutshell, these banking services are indispensable as they support individuals and corporate to expand their business ventures

## LITERATURE REVIEW

Fadare (2004) empirically identifies the effect of banking sector reforms on economic growth in Nigeria by using the data 1999 -2009. Variables used for the study are interest rate margins, parallel market premiums, total banking sector credit to the private sector, inflation rate, inflation rate lagged by one year, size of banking sector capital and cash reserve ratios. Results indicate that the relationship between economic growth and other exogenous variables of interest rate margins, parallel market premiums, total banking sector credit to the private sector, inflation rate and cash reserve ratio show the negative and insignificant. Hence it is suggested that criteria which encourage banking sectors to give more capital or start huge amount of lending to the individuals by minimize cash reserve ratios which is not supposed to be motivated factors for economic growth if the borrowing capacity that due to these criteria it will not surpass to the growth of private sector in the form of longer-term finances. To find

out the solution of this problem, the financial policies should consider to reform and enforce the borrowing in small industries with proper regulatory policies and against secure type of collaterals and confirmation of guaranteed repayment of finances given to them.

Al-Laham (2009) studied the Development of Electronic Money and Its Impact on the Central Bank Role and Monetary Policy. This paper depends on analytical method at determining the impact of the development of electronic money in the different areas. Data variables such as monetary supply, exchange rates, the money multiplier and velocity of money are considered. Results shows that e-money, as a network good, could become an important form of currency in the future. Such a development would influence the effectiveness and implementation of monetary policy. If an increased use of e-money substantially limits demand for central bank reserves, it would require changes in the operational target of the central bank and a closer coordination of monetary and fiscal policies.

Koivu (2002) investigated the relationship between financial sector and economic growth by using empirical methods, data variables INT = Difference between lending and deposit interest rates as percentage points. CREDIT = Ratio of bank credit to private sector to GDP. RI = Reform index. INF= Annual consumer price index as percentages. GDP growth = Real GDP growth rate. Fixed-effects panel model techniques have been used. Khatib (2007) examined the relationship between commercial banking performance and economic growth in Qatar. By using the variables of bank profit, GDP, foreign interest rates, government revenues, government expenditures and banks equity by using the regression analysis model and (OLS) techniques have been used. By using Data for the period from 1996 to 1997. Further more stability tests for structural stability and granger causality experiments in which granger causality tests also use to analysis on all variables and other variables are suppose insignificant at acceptable. Hence the results find out that predictions through variables and model are highly effective and responsible for economic growth. The study suggests that the commercial banks are playing a large role in economic growth because of the profit-making organizations. In addition, among all the variables on GDP and banks equities were significant and with the positive signs, in the model equation found to be stable. Thus, the financial advisors should be analysis through associations according to monetary policies and the financial factors and economic variables, the author further suggest that the model also support to check the relation through financial factors and other countries economic growth of that country.

Yazdani (2011) studied the role and performance of private banks on the economic growth of Iran by using the variables economic growth, profitability, cash, and investment the analysis has been proposed through various questions by conducting two main hypotheses and five minor hypotheses for his study the part of financial sectors with relation to private banks and what is the impact occurs on economic growth of the Islamic republic of Iran. Further the study is conducted for test and find out the significance of hypotheses, by using the statistical secondary data was selected from among private banks which include Eghtesad Novin, Parsian, Karafarin, Saman, Pasargad, and Sarmayeh. In the theoretical background the study defines the bank system performance and also financial development competitiveness' indices have been used. For analysis of the secondary data statistical software SPSS has been used. The method used for analysis the data is inferential statistics indices also including Spearman correlation test, Pierson correlation test, David Watson test, independent t test, variance analysis F and linear regression chart. Hence the find and results obtained through analysis

shows that all variables check in the research hypotheses are exist with the definite impact on the economic growth of Iran.

Samolyk (1992) empirically investigated the relation in the bank performance and economic growth at the state level. In their study they develop a review for regional credit that explain, one of the reasons which is data cost effects the banking sectors and can also influences economic performance by development ability to funds local investments. Further the model supports that government banking sectors facing problems of economic criteria where by not well financially sound, and same that no evidence needs to link in the sector which is financial established. The data has been used to find relation of this credit analysis model for the period of 1983 to 1990 the data consists of regional level and find the output of such channels which particularly, local focus on government banking sectors, further the results explain the real individual income growth in the country in consideration with NPL's which is out of the average share.

## METHODOLOGY

To find the long run relationship between the variables we have used multiple regression analysis. In this research, the study focused on secondary type of data, all data is collected from the different official publications of respected banks. In this study we have used six variables namely, gross domestic product, deposits, investments, advances, profitability and interest earning. In this study we have used the data of two banks from the period of 2010 to 2015. After selection of the above variables we can describe the economic growth function of Nigeria in the following way:

$$GDP = f (DEP, INV, ADV, PRF, INE)$$

Where GDP is the gross domestic product, f represents the function of and DEP, INV, ADV, PRF, INE represent respectively, deposits, investments, advances, profitability and interest earning. After specifying the trade balance function in linear form with an addition of error term, we can write in following way:

$$GDP = \alpha DEP + \beta_1 INV + \beta_2 ADV + \beta_3 PRF + \beta_4 INE + U_t$$

## RESULT ANALYSIS

**Table 1: Descriptive Statistics**

	<b>GDP</b>	<b>DEP</b>	<b>INV</b>	<b>ADV</b>	<b>PRF</b>	<b>INE</b>
<b>Mean</b>	3182.309	283.548	137.872	312.871	59.309	38.059
<b>Maximum</b>	6004.405	1325.790	746.330	1987.002	338.354	83.802
<b>Minimum</b>	1346.376	27.529	20.948	13.341	0.347	9.900
<b>Std. Dev.</b>	1347.689	439.590	180.724	338.235	99.797	21.846
<b>Observations</b>	12	12	12	12	12	12

Source: Author Computation, 2018.

The table 1 represents the descriptive statistics of the model. In the above table GDP is a dependent variable and DEP, INV, ADV, PRF and INE are independent variables. The sample size comprises of 12 observations from the period of 2010 to 2015 of two banks. The minimum and maximum value of GDP (1346.376) & (6004.405) respectively, whereas the mean value is (3182.309) and standard deviation is (1347.689). The minimum and maximum value of DEP (27.259) & (1325.790) respectively, whereas the mean value is (283.548) and standard deviation is (439.590). DEP having minimum value (9.90), maximum value (83.80), mean value (38.059) and standard deviation (21.846). INV having minimum value (20.948), maximum value (746.330), mean value (137.872) and standard deviation (180.724). ADV having minimum value (13.341), maximum value (1987.002), mean value (312.871) and standard deviation (338.235). PRF having minimum value (20.948), maximum value (746.330), mean value (137.872) and standard deviation (180.724). INE having minimum value (9.90), maximum value (83.80), mean value (38.059) and standard deviation (21.846).

Study in the mentioned subject of econometrics indicates that various macroeconomics variables data are found non-stationary. The finding was drawn from regression (integrated in different order) proceeds non-sense or spurious regression. Thus, it is essential to analysis the stationary of the data before drawn the long run association among the variables.

**Table: 2 Stationary Test Results**

Variables	Augmented Dickey Fuller test				Philip Perron test			
	Level		First Difference Level		First Difference			
	Inter.	Trend & Inter.	Inter.	Trend & Inter.	Inter.	Trend & Inter.	Inter.	Trend & Inter.
<b>GDP (Gross Domestic Production)</b>	1.48	-1.36	-4.00	-4.36	1.98	0.32	-4.97	-5.11
<b>DEP (Deposit)</b>	0.96	-1.83	3.37	-3.39	2.46	-1.34	-6.19	-8.12
<b>INV (Investment)</b>	-2.55	-2.40	-3.95	-4.34	-2.34	-2.38	-3.92	-4.34
<b>ADV (Advances)</b>	2.43	-0.03	-3.95	-5.21	-1.35	-0.27	-3.95	-5.21
<b>PRF (Profitability)</b>	0.16	-0.46	-4.13	-4.46	-0.07	-0.61	-4.13	-4.39
<b>INE (Interest Earning)</b>	-0.73	-2.88	-4.44	-4.35	-0.90	-2.60	-4.48	-4.33

Source: Author Computation, 2018.

Table 2 highlighted the finding of Augmented Dickey Fuller (ADF) test and Philip Perron unit root test. The result show that the non-stationary in all variables at level. Here equation is used to check stationary in the data first with intercept and then with trend and intercept. Here null hypothesis means non-stationary in the data and alternative hypothesis means stationary in the data. All the given variables are non-stationary at level. Analyzing the stationary in the data at level consequently checking stationary at first difference the result indicates that all the variables are stationary at first difference. All the variables are checked at the lag length of one. All the given variables are integrated at order one.

**Table 3: Results of OLS**

Variables	Coefficient	t-Statistic	Probability	VIF
<b>C</b>	0.775	9.815	0.000	
<b>DEP</b>	0.410	1.991	0.049	6.798
<b>INV</b>	0.536	3.007	0.003	4.615
<b>ADV</b>	1.067	4.955	0.000	7.451
<b>PRF</b>	-0.099	-0.923	0.036	1.844
<b>INE</b>	0.018	0.226	0.002	1.061
<b>R-squared</b>	0.887			
<b>Durbin Watson</b>	1.906			
<b>F Statistic. (Probability)</b>	72.742 (0.000)			

Source: Author Computation, 2018.

In the above table GDP is a dependent variable and DEP, INV, ADV, PRF and INE are independent variables. Table 4.2 gives us the value of R square, which represents the correlation between the observed values and predicted values of the dependent variable. R-Square is called the coefficient of determination and it gives the adequacy of the model. Here the value of R-Square is 0.887 that means the independent variable in the model can predict 89% of the variance in dependent variable. The p-value is given by 0.000 which is less than 0.05, which shows the significance of our model. The values of Durbin-Watson statistics for dependent variables in our case is very near to 2.00, this indicates that there is no autocorrelation exists in our study and the regression models assume that the error deviations are uncorrelated. The Beta value shows the relationship between the variables in the model, if the value of coefficient is positive it means that independent variables have positive relation with dependent variable i.e. increase in dependent variable is caused by

increase in independent variable and if the value of coefficient is negative than independent variables are having negative relation with the dependent variable i.e. decrease in dependent variable is caused by increase in dependent variable. The values of coefficients beta and constant are used to construct the regression model, the model is shown below:

$$\text{GDP} = 0.775 + 0.410 (\text{DEP}) + 0.536 (\text{INV}) + 1.067 (\text{ADV}) - 0.099 (\text{PRF}) + 0.018 (\text{INE})$$

Beta coefficient shows the tendency of an independent variable to respond against dependent Variables. Therefore, greater value of beta indicates the larger impact on dependent variable and vice versa. Deposits (0.410), Investments (0.536), advances (1.067) profitability (0.099) and interest earnings (0.018) all are having positive and significant impact on the economic growth because the p-value is less than 0. if DEP, INV, ADV, PRF and INE are increase then the GDP will also increase.

In table 3 column label P-value shows that all variables P-values are  $<0.05$ ; i.e., deposits (DEP) has (0.049), investments (INV) has (0.003), advances (ADV) has (0.000), profitability (PRF) has (0.036) and interest earnings (INE) has (0.002) therefore all variables are significant. VIF is the test of multicollinearity among the variables (Excessively high correlation among the independent variables). The rule of thumb describe that  $\text{VIF} > 10.0$  indicates multicollinearity problem among the variables, since the table 4.3 shows that no variable have VIF value  $> 10.0$  so therefore multicollinearity does not exist in this model. Durbin-Watson test is use to test autocorrelation among the data (error term). In Durbin-Watson test, null hypothesis indicate that autocorrelation does not exist in error term and alternative hypothesis depicts that autocorrelation exist in error term. Since regression model has assumption of uncorrelated error term therefore it must be fulfilled to run regression analysis. In Table 4.3 indicate value of Durbin Watson as 1.906 which shows that autocorrelation does not exist in error term. Regression model Overall significance has identified by F-value. It is actually the explained variance divided by unexplained variance (mean error). In table 4.3 F-stat shows the value (72.742) and it's (0. Probability 000).

**Table 4: Results for Causality**

Null Hypothesis:	F-Statistic	Probability
DEP does not Granger Cause GDP	4.563	0.010
GDP does not Granger Cause DEP	2.389	0.089
INV does not Granger Cause GDP	5.245	0.030
GDP does not Granger Cause INV	0.234	0.633
ADV does not Granger Cause GDP	2.987	0.069
GDP does not Granger Cause ADV	7.524	0.003
PRF does not Granger Cause GDP	6.600	0.016

GDP does not Granger Cause PRF	7.360	0.003
INE does not Granger Cause GDP	6.177	0.007
GDP does not Granger Cause INE	0.158	0.855

Source: Author Computation, 2018.

The Granger Causality approach to the problem of whether 'x' causes 'y' is to see how much of the current 'y' can be explained by past values of 'y' and then to see whether adding lagged values of 'x' can improve the explanation. 'Y' is said to Granger-Caused by 'x' if 'x' helps in the prediction of 'y' or equivalently, if the coefficients on the lagged x's are statistically significant. After applying the causality test, the study found the bidirectional causal relationship of deposits, advances and profitability with economic growth. On the other side, the study found unidirectional causal relationship of investments and interest earnings with economic growth runs from investments and interest earnings to economic growth. The study found unidirectional causal relationship of investments and interest earnings with economic growth runs from investments and interest earnings to economic growth.

## CONCLUSION AND RECOMMENDATIONS

This study investigates the contributions of merchant bank operation on economic development in Nigeria. The data used in this study were collected from the period of 2010 to 2015 of 2 banks. Augmented Dickey Fuller (ADF) and Philip Perron unit root test, ordinary least square and granger causality test have been used. Unit root test confirms the stationary of all variables at first difference. Regression results indicate that deposits, investments, advances, profitability and interest earnings have significant positive impact on economic growth of Nigeria. The Granger-Causality test confirms the bidirectional causal relationship of deposits, advances and profitability with economic growth. On the other side, the study found unidirectional causal relationship of investments and interest earnings with economic growth runs from investments and interest earnings to economic growth. It is recommended that the policy makers should make policies to enhance the banking sector in Nigeria because banking sector is significantly contributing in the economic growth of Nigeria.

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## **DEVELOPMENTS IN ACCOUNTING EDUCATION AND RESEARCH: THE ENVIRONMENTAL ACCOUNTING - AN INSIGHT**

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**ABSTRACT:** *The growing concern of civil society and the general public regarding companies' environmental impacts creates a demand for measuring, monitoring, and screening, comparing and benchmarking the environmental performance of companies. Various approaches to this effect are used by companies; these approaches could be unambiguously regarded as a factor which, in the present conditions, influences prosperity of the company. The paper examined the overall concept of Environmental Accounting and as well identifies the specific companies' approach to it. The study used the exploratory research designed to explain and highlight the importance of the concept of environmental accounting and the various approaches adopted by companies to recognize it. Secondary sources of data were employed; and very recent important literatures on environmental accounting were used to achieve the objective of the study. The research concluded that, Environmental accounting is an important tool for understanding the values and roles played by the natural environment in the economy. It recommended that pragmatic efforts should be taken by individual firms and companies, civil societies and organizations, regulatory bodies, policy makers and professional accounting bodies to ensure that environmental accounting is properly introduced, recognized and included in final accounting and financial statements needed by users of such information, which will go a long way in addressing the resources shortages needed to address the enormous problems and costs imposed by pollution and resources degradation.*

**KEYWORDS:** Accounting Education, Environmental Accounting,

### **INTRODUCTIONS**

The field of accounting in recent has made significant impact on social, economic and political development in our environment. Of these developments, areas of cost recognitions, recording and interpretation has impacted greatly on the decision-making process of the operation of business and appreciation of the value of the surrounding environmental factors. Environment is a rich heritage handed over to us by previous generations. The present civilization has involved us in varied activities. Many of these activities generated waste with potential constituents (Bassey, Effiok & Eton, 2013). The ultimate disposal of the waste lead to environmental pollution in many parts of the world, the magnitude of pollution of the environment has already reached an alarming level (Pramanil, 2007). This has therefore put organizations under increased pressure to not only reduce the costs impact of this pollution, but also to minimize the environmental impacts on their operations. Unfortunately, a substantial impact on the environment has left many parts of the world with an enormous economic, social, and environmental legacy. This pressure on organisations is coming from a broad group of stakeholders, including regulatory bodies, employees, customers, investors, non-government organization and finance provider (Abiola & Ashamu, 2011)



Organisations by this are to recognise the costs of these pollutions as well as all other costs associated. The process of forcing the organisations to recognize environmental and costs is known as internalizing externalities (Amokaye, 2012). Amokaye further asserts that, cost internalization will only be achieved if there is governmental regulation that forces such polluters to internalize. This as a result has put pressure on organisations to institutes laws and regulations promulgated to promote sustainable development and ensure effective and efficient enforcement and compliance systems. This pressure has generated the need to account for environment. Accounting for environment helps in accurate assessment of costs and benefits of environmental preservation measures of companies (Schaltegger & Burritt, 2000). It provides a common framework for companies to identify and account for past, present and future environmental costs to support managerial decision-making, control and public disclosure (KPMG, 2005). This study considers the Nigerian perspective and examines the concept of Environmental Accounting and as well identifies the various approaches of environmental accounting by companies. On the overall, the concept was first considered to set the ball rolling for educational discourse.

## **CONCEPTUAL CLARIFICATION**

### **Accounting Education**

Accounting field involves the impartation of knowledge in accounting principles and standards to individuals. It could also take the form of contributing to a body of an established knowledge or procedure (Okolie and Amos, 2014). It is thus out to inform, review a set of process and inculcate in the trainee, a high standard of professional education as demanded by his calling (Ibironke, 2003).

Inanga, (2000), Wintoki, (1997), Ogbomo, (1997), as cited in Okolie and Amos, (2014), summarises the following as objectives of accounting education: to ensure that Nigerian accountants are of comparable standard with their counterparts across the world; to guarantee that each qualified accountant is well trained, acquires sufficient skills required of a professional accountant and that the skills are demonstrated in his operations; to maintain and sustain the dignity and respect of the Nigerian accountancy profession; to ensure that each accountant can justify the standard of the certificate awarded; to produce enough manpower to man accounting jobs; to produce professionals with sound training to meet the shortage in the country of competent accountants; to establish and enhance the profession as it relates to the application and developments of accounting disciplines, to develop and upgrade the professional skills, and competence of members; to enable them participate actively in an environment that is business oriented and complex and to catch up with technological advancement in the areas of accounting and financial management, possibly through financial display of statistical information that has relevance to the society. These objectives are achieved through ensuring that accounting data are identified are appropriately recognised, measured and recorded and interpreted to users.

### **Environmental Accounting**

Environmental protection has become a key issue all over the world these days. Several factors and forces are responsible for destruction of environment. Of these, growing hazardous industrialization is a major culprit. The issue of environmental responsibility and



the sustainable industrial development has given birth to environmental accounting and reporting.

Studies have shown that environmental accounting is relatively a recent entrant in the domain of accounting. It is a process of identification, measurement and communication of information in the environmentally responsible performance of an entity to permit economic decision. In the other words, Environmental accounting forms that part of accounting that deals with environmental concerns.

The concept of environmental accounting has given room for authors to variously define it. This study examines the following views as relates to the meaning of environmental accounting. Uwuigbe (2011) defined environmental accounting as an inclusive field of accounting that provides reports for both internal uses, generating environmental information to help make management decisions on pricing, controlling overhead and capital budgeting, and external use; disclosing environmental information of interest to the public and to the financial community. Steele & Powell (2002) sees environmental accounting as that aspect of accounting which has to do with the identification, allocation and analysis, of material streams and their related money flows by using environmental accounting systems to provide insight in environmental impacts and associated financial effects. Leontief (1970) viewed that, it is an accounting system that can be used to support the National income accounting, Financial accounting, and or internal business managerial accounting. Environmental or green accounting involves measuring the environmental performance of an organization, including government bodies and manufacturers in economic terms. It is a type of cost benefit analysis system, which relates to the monetary assessment of environmental costs associated with the development and operational activities and the economic benefits of good environmental management (United Nations, 2000). Peskin (1989) in his own part viewed environmental accounting as a tool that can be used to determine less tangible and external costs for projects and activities, such as bio-diversity, human health and aesthetic values. It is also aimed at broader issues such as implementing sustainable business practice to conserve natural resources for future generations.

In addition to the above definitions, the International Federation of Accountants (1998) defined environmental accounting as the management of environmental and economic performance through the development and implementation of appropriate environment related accounting systems and practices. While this may include reporting and auditing in some companies, environmental accounting typically involves life cycle costing, full-cost accounting, benefits assessment, and strategic planning for environmental management.

A more distinctive definition was provided by the United Nations Expert Working Group (2000) on environmental accounting, which highlighted both the physical and monetary sides of environmental accounting. This definition was developed by international consensus of the group members, representing 30 nations. According to them, Environmental accounting involves the identification, collection, analysis and the use of two types of information for decision-making: i) Physical information on the use, flow of energy, water and materials (including wastes) and

ii) Monetary information on environment-related costs, earnings and savings.



## **Objectives of Environmental Accounting**

Environmental Accounting is required to fulfill a lot of demands from different stakeholders. However, for academic reasons, the following basic objectives can be identified on the logical ground (Alok, Nikhil & Bhagaban, 2011):

1. To aid in discharging organization's accountability and increase its environmental transparency;
2. To determine the concept of environment and the company's relationship with the society in general and the environmental pressure group in particular. This helps an organization seeking to strategically manage a new and emerging issue with its Stakeholders;
3. To make companies to be environmentally friendly. By upholding friendly image, companies may be successful in attracting fund from 'green' individuals and groups;
4. To encourage consumers to purchase the environmentally friendly products, i.e., green products. Companies, thus producing green products may take competitive marketing advantage by disclosing the same;
5. To encourage companies to show commitments towards introduction and change and thus appear to be responsive to new factors;
6. Green reporting may be used to combat potentially negative public opinions;
7. By cultivating the enlighten approach of environmental accounting, companies can increase their image of being enlightened to the outside world and this, can be regarded as enlightened companies.

## **Scope/Area of discipline of Environmental Accounting**

The scope or areas of discipline as identified by Daferighe (2010) are as follows: (i) National Environmental Accounting, (ii) Global Environmental Accounting and (iii) Corporate Environmental Accounting.

### **National Environmental Accounting**

National Environmental Accounting is an accounting approach that deals with economics on a national level. It is a macroeconomic measure that looks at the use of natural resources and the impacts of national policies on the environment. (US EPA, 1996; Jasch, 2006)

Referred to as green accounting or integrated economic and environmental accounting is a modification of the System of National Accounts to incorporate the use of depletion of natural resources. The System of National Accounts (SNA) is the set of accounts which national governments compile routinely to track the activity of their economies. SNA data are used to determine Gross Domestic Product (GDP), Gross National Product (GDP) etc. These indicators are used for policy analysis and economic monitoring purposes. The economic accounts are calculated across countries using a standard format developed by the United Nations Statistical Division (UNSTAT) for easy of comparison. However, there have been calls for reform of SNA as they do not include the full economic value of environmental



resources or the role they play in productive activity. Daferighe (2010) indeed identified some of these missing elements as follows:

**Environmental Expenditures:** Expenditures to protect the environment from harm, or to mitigate that harm, cannot be identified from the data in the accounts. Such expenditures include costs incurred to prevent environmental harm such as pollution control equipment purchased by factories. They also include the costs of remedying that harm; medical expenses or replacement of property destroyed in landslides caused by deforestation. These expenditures are already included in the income accounts along with all other intermediate or final consumption. However, they cannot be disaggregated to highlight the costs incurred to prevent or mitigate environmental degradation.

**Consumption of Natural Capital.** The SNA treats the gradual depletion of physical capital machine and other equipment as depletion rather than income, in accordance with conventional business accounting principles. However, the depletion of natural capital forests, in particular is accounted for as income. Thus, the accounts of a country which harvests trees very quickly will show quite high income for a few years, but nothing will show the destruction of a productive asset, in the forest. Those of us with interest in the environmental accounting are of the view that the depletion of natural capital should be accounted for in the same way as other productive assets. Integration of sustainability and ecosystem valuation into economic growth has increasingly focused on 'greening' the national income accounts. Sustainable development serves as the stated objective of many development initiatives, most recently the Millennium Development Goals (MDG), but ecosystems are still deteriorating worldwide, and with them, the capacity to support human wellbeing. One of the primary motivations for environmental accounting efforts was the concern that rapid economic growth in some countries was achieved through liquidation of natural capital a temporary strategy that creates no basis for sustained advances in wealth and human wellbeing.

### **Global Environmental Accounting**

Global Environmental Accounting is an accounting methodology that deals with energetic, ecology and economics at a global scale. The earth is the system of interest with the input, sequestration and dissipation of solar energy, which constitutes the energy budget (Odum, 1996; Tennenbaum, 1988).

The SNA is a complex system which follows a number of widely-accepted accounting conventions. These conventions ensure logical consistency across the different components of the accounts, guaranteeing that a given type of entry has the same meaning in all contexts and in all countries. This standardization is essential for the accounts to be a reliable source of comparable data about the economies of many different countries.

Unfortunately, this standardization has made it difficult to change the SNA in order to introduce a quite different issue like the goods and services provided by the environment. The difficulty arises primarily because most environmental goods and services are not traded in conventional markets; thus, it is hard both to define discrete products and to put a monetary value on them. Some of the most important debates concern the following issues:

**Physical Verse Monetary Accounts:** Physical accounts only include information about natural characteristic of the environment and its use; the size of forests or mineral reserves,



the quality of water or air, the depth of topsoil etc. In contrast, monetary accounts place an economic value on those characteristics or their use, so as to understand the role they play in the economy. Given the difficulty of estimating the monetary value of certain aspects of the environment, some individuals and countries advocate development of only physical accounts (Daferighe, 2010).

**Integrated Accounts Verse Satellite Accounts:** Integrated accounts change the calculation of GDP, GNP and other key national indicators. Satellite accounts are linked to the SNA, but do not change either the calculation of key indicators or the central framework of the accounts. The advantage of satellite accounts is that they allow the accountants to violate some of the conventions of the SNA in ways quite useful for environmental data, without threatening the consistency of the information in the conventional accounts. However, because they do not change GDP or GNP, they do not correct the distortions inherent in those indicators.

**Inclusion of Maintenance Costs:** Maintenance costs are the expenditures that a country would have to make in order for its use of the environment to be sustainable. Some experts on environmental accounting believe that these should be deducted from the accounts to arrive at a correct level of 'green' economic activity. Others argue that estimation of such costs is highly subjective and subtracting them from indicators like GDP is misleading.

**Valuation of Non-Marketed Environmental Services:** Most approaches to environmental accounting do not include this item because the valuation required is difficult and subjective. However, it is of interest to environmentalists in many countries, so its inclusion still warrants strong consideration. The way these issues are resolved determines how environmental accounts are used to support policy making. Moreover, if the international community can come to consensus; irrespective of the methods they choose; their agreement on one set of standard accounting principles will encourage many hesitant governments to move into this relative new arena.

### **Corporate Environmental Accounting**

In contrast to national environmental accounting, corporate environmental accounting focuses on the cost structure and environmental performance of a company (Odum, 1996). Corporate environmental accounting can be further sub divided into Environmental Management Accounting and Environmental Financial Accounting.

**Environmental Management Accounting:** Xiaomei (2004) defines Environmental Management Accounting (EMA) as the identification, collection, estimation, analysis, internal reporting, and use of materials and information relating to energy flow and environmental and other costs for both conventional and environmental decision making within an organization.

On their part, Bartolomeo, Bennett, Bouma, Heykamp, James and Wolters, (2000) define EMA as the generation, analysis and use of financial and related nonfinancial information, to support management within a company or business. Environmental management accounting integrates corporate environmental and business policies, and thereby provides guidance on building a sustainable business. It analyses environmentally relates to financial costs and benefits, contributing to recognition of the high and increasing levels of capital and operating expenses, for pollution control equipment and environmental taxes.



Also, possible environmental initiatives, such as incentive-based regulation, are incorporated in analysis and reporting (Fryxell & Vryza, 1999). Companies in making internal business strategy decisions use environmental management accounting. The information gathering in the process according to Tennenbaum (1988) may be physical information on the use, flows and fates of energy, water and materials including waste or monetary information on environmental related costs, earning and savings. The main problems of EMA relate to the specification of environmental accounting information, the allocation of environmental costs, legislation issues and the lack of environmental accounting standards.

**Environmental Financial Accounting:** Environmental Financial Accounting is used to provide information needed by external stakeholders on a company financial status. This type of accounting allows companies to prepare financial reports for investors, lenders and other interested parties but focuses on environmental financial and non-financial data, such as, that given in environmental reports.

### **Needs for Environmental Accounting**

Environmental accounts are critical for managers and policy makers at all level of governance. At the macroeconomic level, the Ministry of Finance needs to know whether the development strategy is laying the basis for long-term economic growth or not. A country like Nigeria which is dependent mainly on petroleum can only be economically sustainable if revenue from petroleum exploration is transformed into alternative assets. With environmental accounts, Nigeria can monitor this process, providing a sound basis for policy interventions consistent with sustainable development at each stage. Environmental accounts provide the basis for answering questions such as: How much resources rent are being generated, and would different policies increase rent? How much resources rent is recovered through taxes and non-tax instrument? How much of the received rent is invested in other assets, providing the basis for sustainable long-term growth?

In Nigeria, the stated objective of the adopted Poverty Reduction Strategy Programme (PRSP) is to promote sustainable economic growth and poverty reduction. However, PRSP uses GDP as a primary macroeconomic indicator in their monitoring framework; consequently, policy makers receive information about only half of the objective, short-term economic growth, but not sustainability of that growth. The long-term cost of environmental degradation; for example, soil erosion, which is enormous undermine any short-term gains in GDP.

Environmental accounts provide macroeconomic indicators of sustainability, such as changes in Total Wealth or Adjusted Net Savings, which are complementary to GDP. The Ministry of Finance often makes budgetary allocations based on information from national accounts that underestimates the true contribution to the economy from the environment and natural resource sectors, resulting in misguided government policies and poor investment decisions.

Environmental Agency, UK (2006) states several reasons why business may consider adopting environmental accounting as part of their accounting system. These include:

- (i) Possible significant reduction or elimination of environmental costs.
- (ii) Environmental costs and benefits may be over looked or hidden in overhead accounts.



- (iii) Possible revenue generation may offset environmental costs (e.g. transfer of pollution allowances).
- (iv) Improved environmental performance which may have a positive impact on human health and business success.
- (v) May result in more accurate costing or pricing of products and more environmentally desired processes.
- (vi) Possible competitive advantages as customers may prefer environmentally friendly products and services.
- (vii) Can support the development and running of an overall environmental management system, which may be required by regulation for some types of businesses.

US EPA (1995) highlights seven benefits from adopting environmental accounting by a company as follows:

- (i) Provides better estimates of the true cost to the firm of producing a product. This improves pricing and hence profitability.
- (ii) Allocates costs to the appropriate product, process, system or facility and thus reveals costs to the responsible managers.
- (iii) Assists managers in targeting cost reduction, improving environmental quality and in reinforcing quality principles.
- (iv) Motivates staff to search for creative ways to reduce environmental costs;
- (v) Encourages changes in processes to reduce waste, reduce resources use, recycle waste or identify markets for waste;
- (vi) Increase employee awareness of occupational health and safety issues; and
- (vii) Increases the likelihood of the company having a competitive advantage and greater customer acceptance of the firm's product or service.

### **Environmental Costs**

According to Marsh and Grossa (1996), the real and intangible costs associated with air and water pollution and land ecosystem degradation and destruction, is borne by the society. Environmental costs, as described by Graff, Ferskin, White & Bodroell, (1998), are impacts incurred by society, an organization or individual resulting from entities that affect environmental quality.

Environmental costs are generally defined narrowly. Environmental costs are those costs incurred in compliance with, or prevention of breach of, environmental law regulation and company policy. However, White, Becker and Savage (1993) categorize environmental costs into two major dimensions.



**Private Costs:** These refer to those costs that directly impact on an organization. These they classified as Conventional costs, potentially Hidden costs; Contingent costs; and Image and Relationship costs.

**Societal Costs:** These are cost to individuals, society and the environment for which the organization is not legally accountable. Societal costs also referred to externalities or external costs include environmental degradation for which organizations are not legally liable and also have adverse impacts on human beings, their property, and their welfare that cannot be compensated for through the legal system. They include damage caused to a river because of polluted wastewater discharges or to ecosystems from solid waste disposal or to asthmatics because of air pollutant emissions. Valuing these societal costs is both difficult and controversial.

In relation to environmental degradation, environmental cost could be said to include cost of preventing degradation, cost of bringing the environment to its former state, cost of making persons prevent degradation or cost of making them bring depleted environment to normal state or a combination of the above. Therefore, accounting for environmental costs needs an integrative approach which examines the interrelationship between accounting; the environment and management information; decision making and accountability.

### **Identification of Environmental Costs**

When an environmental accounting system is implemented, two main processes are executed; (1) the identification of the environmental costs, which represents the environmental part of the process; and (2) the allocation of the detected costs, which requires accounting and bookkeeping knowledge, both activities are the main functions performed by environmental managerial accounting (EMA). To be able to measure environmental issues, environmental costs must be uncovered and recognized. But it must be stressed that there is no universally accepted definition or a generally accepted standard of “environmental costs”. Therefore, how a company defines an environmental cost depends on the company and its specific purposes and how the information will be used (Bouma, 1998). The United Nations Division for Sustainable Development has identified the lack a standard definition of environmental costs as a main problem of identifying environmental cost (UN CSD 2001). Consequently, recognizing and uncovering environmental costs is one of the most important processes in environmental accounting.

### **Types of environmental costs**

In fact, environmental costs include the cost of environmental measures and environmental losses where:

- Environmental measures are “steps taken by an entity or on its behalf by others to prevent, abate or remedy damage to the environment or to deal with the conservation of renewable and non-renewable resources” (CICA 1993).
- Environmental losses are “costs that have been incurred by an entity with respect to the environment for which there is no return or benefit, for example, fines or penalties for non-compliance with environmental regulations, damages paid to others for environmental damage done, or assets of the entity that have to be written off because their costs cannot be recovered due to environmental concerns” (CICA 1993).



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## Techniques to Identify Environmental Costs

Environmental accounting, as expressed throughout this work, is a tool to record, organize and present environmental cost information, but Steele and Powell (2002) gave the following outline as other tools to identify environmental costs within a company:

1. To examine existing facilities an EMS (Environmental Management System) can be used.
2. To examine proposed facilities an environmental impact assessment (EIA) is generally used.
3. Cumulative impact assessment is a technique used to examine impacts over larger spatial area (e.g. region).
4. Strategic environmental assessment is a technique used to examine impacts of strategies, plans, policies or programmes.
5. Life cycle assessment (LCA) or cycle inventory analysis can be used for many of the above. Life cycle assessment involves reviewing a process, both upstream and downstream, to evaluate issues in product design, product sourcing, product use, and product disposal, to reduce environmental costs and impacts (Adams 2002). The basic idea of life cycle costing is to consider the costs caused over the whole life cycle of a product (Schaltegger, Muller & Hendrickson, 1996).
6. To the determination of social costs, externalities, contingent costs and environmental costs, environmental economic valuation techniques can be used. (Steele & Powell, 2002; ACCA. 2001).

## Company Approach to Environmental Accounting

Jasch (2006) has identified two (2) basic Approaches for companies in adopting environmental accounting. These includes: Physical and Monetary Approach

**Physical Approach:** According to Jasch, this approach was suggested by the United Nations where a complete guide to be prepared indicating the available resources within a country classified according to its state and uses (for instance, agriculture, desert land etc). In order to assess cost correctly, an organization must collect not only monetary data, but also non-monetary data on materials use, personnel hours, and other cost drivers. Environmental management accounting places particular emphasis on the material related cost drivers, because (a) material purchase costs are a major cost driver in many organizations (Strobel, 2001) and (b) the use of energy, water, and materials, as well as the generation of waste and emissions, is directly related to many of the environmental impacts of organizations.

Depending on this approach the environmental operations are presented in a physical term, the current balance of the resource and the additions and deductions from that resource. No monetary value is assigned according to this approach. The physical approach is very important to get physical information about the resources which enables company to prepare the environmental statistics which is considered the first step in the Monetary Approach.



**Monetary Approach:** The monetary approach emerged due to the fact that the physical approach does not fulfill the requirements of the Environmental Accounting. The Monetary approach addresses the environmental aspects of corporate activities expressed in the monetary units; it generates monetary information for both the internal management and the external stakeholders, it uses such payment as fines for breaking environmental laws and investment in capital projects that improve the environment (Marinova, Annandale & Philmore, 2006).

Companies also adopt the monetary approach to environmental accounting for management concern. The monetary approach to environmental management accounting contributes to strategic and operational planning, acts as a control and accountability device and provides the main systematic source of information for decisions about how to achieve desired corporate goals (Schaltegger & Burritt, 2000). Bierma, Waterstraat and Ostrosky (2000) address the issue of life-cycle costing with a particular emphasis on the supply and use of chemicals. They note that there are substantial environmental related costs associated with this, e.g. wastage in process and cost disposal. However, those costs are often hidden by poor material tracking data and inaccurate overhead allocations, and/or are not allocated to the budgets of those responsible for causing them. One means of reducing costs is to replace a conventional hands-off supplier-customers relationship.

Although the monetary approach is difficult, despite the difficulties, it gained a lot of interest as such data will enable to know the profit and loss associated with environmental operations and to get an environmentally adjusted economic indicator (Hamid, 2002).

## METHODOLOGY

The main objective of this work is to bring into light the concept of Environmental accounting which is a new entrant in the accounting literature. The study adopts the exploratory research designed to explain and highlight the importance of the concept of environmental accounting and the various approaches adopted by companies to recognize it as a recent entrant into the accounting profession and education. The researchers used secondary sources of data on very recent important literatures on environmental accounting to achieve the objective of the study.

## CONCLUSIONS

The objective of the paper is to bring to the knowledge of the general public, the business world and fellow accountants in academics and in professional practices, that accounting profession, education and literatures, has gone beyond the traditional teaching of theories, concepts, principles and techniques needed to prepare and present financial statement, to show and facilitate the taken of informed decisions that lead to effective and efficient performance and reasonable profitability in various firms, companies, businesses and organizations, but has gone behavioural, environmental and other fields of human endeavor, all aimed at improving and providing solution to the endless problems and challenges facing the human race in this modern era. In view of the various highlights in the sections and subsections of this study, it was therefore concluded that; Environmental accounting is an



important tool for understanding the roles played by the natural environment in the economy. Environmental accounting provide data which highlight both the contribution of natural resources to economic well-being and the costs imposed by pollution or resource degradation. Environment is a precious gift of the nature, it therefore means that in everything that surrounds us, environmental matter is an essential factor that needed to be considered for the survival of human beings, hence environmental accounting should be embrace by all.

## RECOMMENDATIONS

The study recommends that pragmatic efforts should be taken by individual firms and companies, civil societies and organizations, regulatory bodies, policy makers and professional accounting bodies to ensure that environmental accounting is properly introduced, recognized and included in final accounting and financial statements needed by users of such information. This if done, will go a long way in addressing the resources shortages needed to address the enormous problems and costs imposed by pollution and resources degradation and as well appreciate the value in identifying, recognizing, measuring and recording environmental cost.

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## IMPACT OF REVENUE FISCAL DECENTRALIZATION ON CONSUMPTION COST IN NIGERIA

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**ABSTRACT:** *The paper considers the impact of revenue fiscal decentralization on cost of living in Nigeria using annual time series data that covered a period from 1981-2017. The specific objective is to determine the influence revenue allocations to federal, state, local governments and Niger Delta States derivation have on consumption cost. Ordinary Least Squares (OLS) method was employed to perform the multi-regression analysis with the aid of SPSS version 20. The findings revealed that revenue allocation to the federal government (FAFG) exerts significant negative influence on consumer price index (CPI i.e. proxy for consumption cost). On the contrast, revenue allocations to state (FASG), local governments (FALG) and derivation allowance to the Niger Delta States (DRVN) have significant positive impact on CPI. The study confirms the theory of fiscal decentralization and recommends that more revenue should be allocated to state and local governments, since they are in a better position than the federal government to attend to the needs of the citizenry through delivery of public goods and services at little or no cost.*

**KEYWORDS:** Revenue, Fiscal Decentralization, Consumption Cost, Consumer Price Index, Nigeria

### INTRODUCTION

Fiscal decentralization system is a term that is used to refer to fiscal federalism. In other words, fiscal federalism implies a decentralized fiscal system (Nnamocha, 2002). Fiscal decentralization which is also referred to as devolution of fiscal power from the national (central or federal) government to subnational (lower level) governments, is believed to be part of a reform package to enhance public sector efficiency, attract healthy competition among states and local governments in the area of public service delivery to boost economic growth (Bahl & Linn, 1992; Bird & Wallich 1993).

A thorough review of fiscal federalism practiced in some countries in the world revealed apparent existence of vertical fiscal imbalance in some nations. For instance, in Australia, the state taxing powers are limited while the expenditure responsibilities are enormous. The states and territories have the responsibility of providing health care services, education and other infrastructures while the federal government has the larger revenue sources but transfers funds in form of grants to address the vertical fiscal imbalance (Morris, 2017).

Brazil is another country with vertical fiscal imbalance. Following the pronouncement of Brazil Constitution in 1988, the federal government was given more taxing powers than the municipals. The municipals were left with taxes on services and real estate properties. The tax on service is regressive as people with different income level pay the same tax, while that



of real estate is limited especially in small and poor cities where real estate properties are few in number (Constantino, 2016). Thus, municipals struggle to cope with spending responsibilities.

Argentina is one of the countries with the largest vertical fiscal imbalance due to the mismatch between spending responsibilities and taxing powers (Ter-Minassia, 1997). In Argentina, there is regional inequalities (Sawers, 1996; Porto, 2004), uneven fiscal imbalance followed by over dependence on federal allocations (Ardanaz, Leiras & Tommasi, 2012). All major taxes are assigned to national government; thus, governors and politicians have to lobby around party bosses in order to attract sufficient revenue allocation to their provinces. Revenue allocation in Argentina does not have any justifiable economic bases (Tommasi, Saiegh and Samgiomett. 2001).

There are also countries that practice fiscal federalism that are enviable. The leading examples of a true federalism are the United States of America and India whose major part of their constitution is based on the principles of federalism (Infinite Knowledge, 2016). Germany is also inclusive in this instance. Germany practices a fiscal federalism whereby states revenue and expenditure responsibilities are higher than that of the federal government (Watts & Hobson, 2000; Hepp & Hagen, 2008).

Fiscal federal practice differs among nations in the world. In Nigeria, fiscal decentralization is practiced through revenue allocation to all levels of government which also includes derivation allowance given to the Niger Delta States to compensate them for the caused by oil exploration in their territory. There are also taxing powers for federal, states and local governments as contained in second schedule part 11 of 1999 constitution of federal republic of Nigeria. Second schedule Part 1 of 1999 constitution contains the expenditure responsibilities for the three levels of government in the country. The revenue allocation from the federation account to the three tiers of the government in Nigeria is to encourage adequate provision of public goods and services across states in the federation at no cost or its barest minimum cost. Hence, provision of electricity, transport facilities, health services and education are meant to be adequate and at a low cost following the fiscal decentralization objectives.

### **Study Objectives**

The major objective of the study is to determine the impact of revenue fiscal decentralization on cost of living in Nigeria. Therefore, the study specifically seeks to:

1. Examine the impact of revenue allocation to the federal government (FAFG) on consumer price index (CPI).
2. Investigate the effect of revenue allocation to the state government (FASG) on CPI.
3. Assess the influence of revenue allocation to the local government (FALG) on CPI.
4. Establish the impact of derivation allowance to the Niger Delta States (DRVN) on CPI.

### **Statement of Hypotheses**

Ho<sub>1</sub>: FAFG does have significant impact on CPI.

Ho<sub>2</sub>: FASG does significantly influence CPI.

Ho<sub>3</sub>: FALG does not exert significant influence on CPI.

Ho<sub>4</sub>: DRVN does not have significant effect on CPI.



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## LITERATURE REVIEW

The review of literature is divided into three stages which includes: conceptual review, theoretical review and empirical review.

### Conceptual Review

#### The Concept of Federalism

Federalism is the notion that different regions or states of a country should be able to govern themselves, to some extent. These regions are all governed overall by a central government known as the 'Federal Government'. In a clearer term, federalism is the splitting up of a nation into several states or federations (Light House, 2016). Federalism is a system of government which means dividing a nation into various zones. These zones are usually referred to as states. Federal system of government is where a country is divided up into several different regions, each of which to a certain extent is able to govern itself. Under a federal system of government, each of the self-governing units is accountable to a central authority. By so doing, the whole country is unified under a common constitution or other legal systems, despite being separated out into separate regions. (Infinite Knowledge, 2016). The distinguishing feature of federalism is that legal sovereignty is shared between the federal government and the constituent states (Hague & Harrop, 2001). This implies that a federal constitution provides an avenue whereby different tiers of the government is charged with specific functions. Friedrisch (1937) described federalism as a union of group who are united by one common or more objectives, but retaining their distinctive group beings for other purposes. Perhaps, this is why federal system of government is seen as one that emanates from the desire of the peoples to form a union without necessarily losing their identities. The popular saying of "unity in diversity" is a true reflection of what federalism is all about (Ikeji, 2011). Considering this concept, it is possible to believe that federalism is at the inter group level while association is at inter-personal level. It unites without destroying the personalities or regions that are uniting and is meant to strengthen them in their mutual relations (Nkwede, Nwali, & Orga, 2017). Federalism is a system in which the power to govern is shared between national and state governments creating what is usually referred to as a federation (Akindele & Olaopa, 2002). Federalism has been viewed by Rivlin (1991) as a multilevel government structure, rather than within a level structure of government, for the performance of government functions and service delivery to the people. Each level of government can be viewed as an institution with definite functions to carry out. Federalism is the existence of more than one level of government in one country, each having different expenditure responsibilities and revenue powers (Anam-Ndu, 2007; Nwosu, 2010). According to Sagay (2006), federalism also connotes an arrangement whereby powers within a multi-national country are shared between a federal government and component units in such a way that each unit, including the central authority subsists as a government discretely and autonomously. True federalism therefore should stimulate a faster economic development, unites persons, activate intelligent negotiation and aggravate strong competition in revenue generation (Sam, Eme, & Eme, 2012). From the definitions so far, it is obvious that Federalism is the division of government spending responsibilities and distribution of revenue between the central government and the governments at the lower level.



## **Fiscal Federalism**

Fiscal federalism is concerned with understanding which functions and instruments are best centralized and which are best placed in the sphere of decentralized levels of government (Oates, 1999). Fiscal federalism is referred to as the framework for the assignment of functions and appropriate fiscal instruments to the different levels of government for carrying out these functions (Mbanefo & Egwakhide, 2000). According to Ozo-Eson (2005), fiscal federalism is the division of public sector function and finance among different tiers of government. From Akindele's (2002) point of view, economics stresses that the division has to be undertaken with the need to focus on the necessity for improving the performance of the public sector and the provision of their services by ensuring a parity between responsibilities and fiscal instrument. Akpan (2011) defined fiscal federalism as a set of guiding principles and concepts that aid the designing of financial relations between the national and sub-national levels of government. According to Orji and Jaja (2007), fiscal federalism is the recognition of tax raising powers and expenditure responsibilities between levels of the government. Primarily, fiscal federalism emphasizes on how revenues are raised and allocated to different levels of government for development (Dagwom, 2013). Anyafo (1996) further explained that fiscal federalism is a system of taxation and public expenditure in which revenue-raising powers and control over spending are vested in various levels of government within a nation, ranging from the national government to the smallest unit of local government. It is concerned with the division of public sector functions and finances among different tiers of government (Okolie & Ochei, 2014). It is also seen as an arrangement that involves intergovernmental fiscal relations mostly in contemporary federations (Arowolo, 2011).

## **The Principles of Fiscal Federalism**

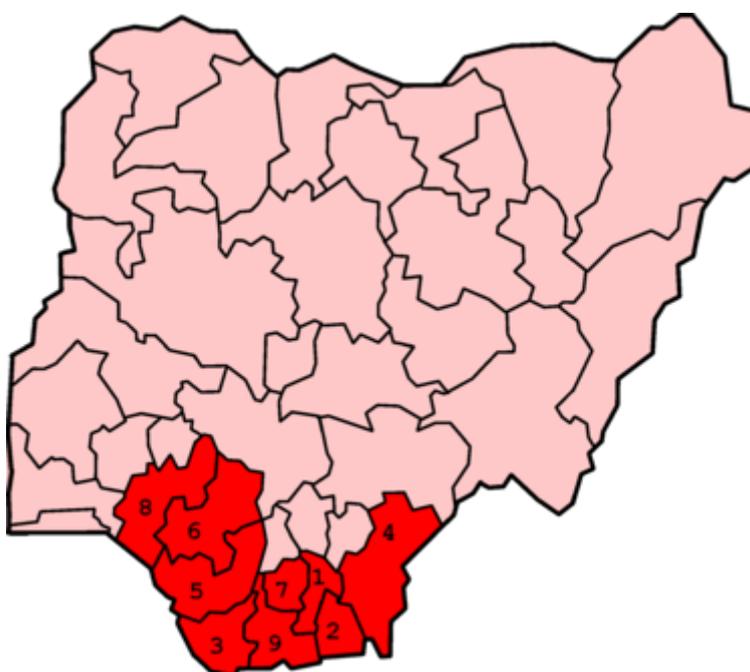
The following principles of fiscal federalism have been highlighted by Ikeji (2011) and Kalu (2011).

- Principle of fiscal equalization and access. Every state should have the authority to develop their sources of revenue within their own territory. To ensure a minimum level of public goods and services, some degree of equalization is necessary. This is the consequence of dissimilarity in resource endowment.
- Principle of efficiency and economy. This principle connotes that proficiency must be applied in the distribution of resources. In addition, each government level should maximize its internal revenue earning at a lowest tax effort. The administrative cost should be minimal and there should be absence of frauds and evasion in financial matters.
- Uniformity. The financial system should be such that every government in the system should make available sufficient public service without resorting to higher rates of taxation than other states.
- Accountability and independence principle. The principle of accountability suggests that every level of government should be responsible to their respective legislature. The independence principle implies that respective tiers of government should not only be autonomous in their resources but such resources should be enough to enable them perform their functions independently.

- Adequacy and elasticity. The principle of adequacy means that the resources of the government should be adequate so that each government discharges its obligation while elasticity means the expansion of resources in response to rapidly growing needs and responsibilities of the government concerned.
- The principle of centralized redistribution. This principle states that the reallocation function of fiscal policy through progressive taxation and expenditure programmes should be centralized at the federal level.
- The derivation principle. The component units of a system should be able to control some of its own resources as they desire.
- The principle of diversity. The federal system must have been capable of accommodating a large variety of diversities. Hence, the fiscal system must make room for diversity and differences to supply national, regional and local public goods.
- Minimum provision of essential goods and services. This confirms that fiscal federalism guarantees all citizens, regardless of where they live, the minimum provision of certain basic public goods and services.

### Derivation Allowance to the Niger Delta States

The Niger Delta is the delta of the Niger River sitting directly on the Gulf of Guinea on the Atlantic Ocean in Nigeria (Hogan, 2013). Below is the map of Nigeria numerically showing states typically considered as Niger Delta States: 1. Abia 2. Akwa Ibom 3. Bayelsa 4. Cross River 5. Delta 6. Edo 7. Imo 8. Ondo 9. Rivers.



**Figure 2.1: Map of Nigeria highlighting Niger Delta States and location**

*Source: Wikipedia (2017).*



Derivation principle denotes that the amount of allocations states should receive from the central pool must commensurate with their percentage contribution to the pool (Abubakar, 1986; Ashwe, 1986; Okunroumu, 1999). The idea behind this principle is that the inhabitants of the area where a particular revenue is being generated must have suffered one form of economic and environmental loss or the other as a result of pollution and other health hazards. Such people deserve compensation as a way of enabling them benefit from the revenue from their area (Abubakar, 1986). This was the argument and practice as far back as the 1950s when revenues from cocoa (in the West) and groundnut (in the North) were contributing so much to the economy of Nigeria (Akinola & Adesopo, 2011). The derivation principle, however, suffered a bastardization, thus leading to a sharp decline from 100 percent in 1953 to 50 percent in 1960, 45 percent in 1975, 1.5 percent in 1982, 1.0 percent in 1990, 3.0 percent in 1992 and the current 13 percent as fixed by section 162(2) of the 1999 Constitution (Anyanwu, 1997; Rapu, 2006; Sagay, 2006).

### **Revenue Fiscal Decentralization**

In the Nigerian context, revenue fiscal decentralization is synonymous with revenue allocation. Therefore, revenue allocation has been referred to as the criteria, process and method of sharing a federation's financial resources among the various tiers of government in the federation in such a peaceful way that guarantees development, progress and enhances unity (NRMAFC, 1992). Onu (1994) defined revenue allocation as the mechanism for the sharing of the country's financial resources among the different tiers of government in the federation, with the overall objective of enhancing economic growth and development, minimizing inter-governmental friction and promoting national unity.

It important to note that revenue allocation to the three tiers of the government is majorly for economic development, which is also known as fiscal federalism (Ekpo, 2004). Economic growth theories maintain that revenue allocation is meant to enhance economic development (Domar, 1946; Harrod, 1939; Romer, 1994; Solow, 1956; Swan, 1956) the revenue allocated to the Nigerian federating units is to carry out their various constitutional expenditure responsibilities that enhance economic development in the country (Dagwom, 2013).

### **Consumer Price Index**

Consumer price index (CPI) measures the price level of all goods and services that are bought by consumers within the economy while GDP deflator measures the price level of all goods and services that are produced within the economy (Quickonomics, 2017). Consumer price index is a measure of changes in the purchasing power of a currency and the rate of inflation. The CPI expresses the current prices of a basket of goods and services in terms of the prices during the same period in a previous year, to show effect of inflation on purchasing power (Business Dictionary, 2017). CPI has been described as a comprehensive measure applied to estimate the price changes of goods and services representing consumption expenditure in an economy (TET, 2017). In Nigeria, CPI measures changes in the prices paid by consumers for a basket of goods and services (Trading Economics, 2017). Those goods and services are broken into eight major groups: food and beverages, housing, apparel, transportation, medical care, recreation, education and communication, other goods and services (Investopedia, 2017).



## Theoretical Review

Theoretically, this study is anchored on Fiscal Decentralization Theory (FDT) initially buttressed by Oates in 1972, and later promoted by numerous scholars. Fiscal decentralization also referred to as devolution of fiscal power from the national (central or federal) government to subnational (lower level) governments, is believed to be part of a reform package to enhance public sector efficiency, attract healthy competition among states and local governments in the area of public service delivery to boost economic growth (Bahl & Linn, 1992; Bird & Wallich 1993). It is a system where government structure allows responsibilities, functions and resources to be shared between the higher and the lower government levels. The major aim of decentralizing revenue generation and expenditure responsibilities is to improve the efficiency of the public sector, cut the budget deficit and promote economic growth (Bird, 1993; Bird & Wallich, 1993; Bahl & Linn, 1992; Gramlich, 1993 and Oates, 1993). The argument is that decentralization will increase economic efficiency because local governments are better positioned than the central government to deliver public services that match local preferences and needs which will lead to faster economic development of a country both in the short and long run (Oates, 1972).

## Empirical Review

Bodman, Campbell, Heaton, and Hodge (2009) studies the impact of fiscal decentralization on the economy of Australia both at the aggregate and state levels. The focus was not only on economic growth but attention was also drawn on important macroeconomic variables that could influence growth. The lack of co-operation between Australia's Federal and State governments over critical issues, such as health, education and infrastructures was the problem of the study. The states grumbled for insufficient fund to cope with spending responsibilities while the federal government blamed them for being wasteful. The study sought to understand the level of fiscal decentralization and the influence the government structure has on the Australian economy using ordinary least squares regressions, cross sectional analysis and panel estimation techniques. The dependent variables used were the gross state product (GSP) per capita, per capita GDP and inflation. The independent variables were the expenditure and revenue shares. Time series data were collected for all the variables from 1972 to 2005. At the aggregate level, using the expenditure shares, decentralization was discovered to reduce medium term economic growth, there was adverse budget balance and increase in public sector size. Price stability and short-term economic growth were not statistically and significantly affected by decentralization. Revenue decentralization was found to increase medium term economic growth, improve budget balance and price stability, but there was no relationship with the size of the public sector. At the state level, decentralization did not have significant impact on income distribution but weak negative effect was found on economic growth. The study suggested a better and working relationship between the states and the federal in order to improve the economy of Australia.

Faridi (2011) carried out another study on the contribution of fiscal decentralization to economic growth in Pakistan. The study was conducted in Pakistan and in the year 2011. It made use of autoregressive model and covered the period of 1972 to 2009. The ordinary least squares estimation was employed for analysis. As at the time of the study, other factors to measure economic growth in Pakistan were not substantial except fiscal decentralization indicators of revenue and expenditure functions. The dependent variable was the Gross Domestic Product while the independent variables used were the revenues and expenditures of



the government. All variables were expressed in million rupees. The data sources include, Pakistan Economic Survey (various issues), hand book of statistics on Pakistan economy (2005) and fifty years of Pakistan Statistics. The result of the study indicated that both revenue and expenditures of government as measure of fiscal decentralization had positive association with economic growth. The paper also found a positive and significant impact of fiscal decentralization on economic growth. Based on the empirical result, the study suggested that provincial and local level governments should be given more autonomy and authority in fiscal matters in Pakistan.

Yulindra (2012) examined the effect of fiscal decentralization on Local economic growth of Sumatera Barat Province in Indonesia. The problem and importance of devolution of fiscal power from higher level government to the lower level government needed to be evaluated through a research that could establish the effect of fiscal decentralization on economic growth of specific regions in Indonesia. The paper adopted a descriptive research design using Pooled Ordinary Least Squares Method, fixed effect and random effect methods. The study made use of a sample of 15 local regions which consisted of 9 regencies and 6 cities in province of Sumatera Bara. The secondary data which spanned from 2001 to 2010 comprised data on Gross Regional Domestic Product (GRDP), Local government revenues and expenditures, population, employment and education for each city and regency were collected from BPS Statistics Indonesia. However, the data on local government revenues and expenditures at district level are obtained from the Ministry of Finance. The dependent variable was GRDP per capita while controlling variables were the population, employment and education. The results obtained from the analysis indicated a positive relationship between fiscal decentralization and local economic growth in Sumatera Barat. Other determinants of economic growth also showed significant positive influence on local economic growth. The study therefore, provided evidence that fiscal decentralization could enhance economic growth in the local government areas in Indonesia.

Aisyah (2012) examined the impact of fiscal decentralization on economic growth in 19 Provinces covering 180 districts in Indonesia. The focus of the work was to test the effect of decentralization under Law No. 22/1999 and Law No. 25/1999 on economic growth on Municipalities/Regencies in Indonesia after three years of implementation. The problem of local finances triggered the quest for resources management supported by the law and implemented in 2001. The study made use of local government expenditure and general allocation fund which was based on working population and population with higher education as proxy for fiscal decentralization. While the dependent variable is the Regional Gross Domestic Product (RGDP) growth rate. RGDP data were obtained from the book published by BPS Statistics Indonesia, while the local government revenue and expenditure at district level were collected from the Ministry of Finance, Indonesia. The study observed the effect of fiscal decentralization on economic growth both from revenue and expenditure sides. The ratio of revenue allocation to RGDP and the ratio of local expenditure to RGDP were used as proxy for fiscal decentralization. The result of the study revealed that the relationship between fiscal decentralization from both local government expenditure and general allocation fund had a positive effect after three years of implementing the laws though the impact was not very significant and robust.

Baskaran and Hessami (2012) investigated the effect of fiscal decentralization on budgetary stability. The empirical study covered 23 OECD countries. It employed descriptive research design and statistics to establish the consequences of decentralization for budgetary stability



during and in the immediate aftermath of reform periods. The analysis depended on the time series data collected from OECD website for the 23 countries which covered the period of 1975 to 2007. The economic control variables used for the study were per capita GDP growth, inflation rate, gross financial liabilities, population growth, unemployment rate, the ideology of the central government, and the degree of party fractionalization. The analysis summarized the model into two dummy variables. The first was used to depict the state of a country during reform and the second one was used to reflect the effect of decentralization after reform. In the dummy model, the dependent variable was the primary deficit to GDP ratio while decentralization and centralization (during and after reform) served as the independent variables. Ordinary least squares technique was used for the analysis. The analysis established the average deficit to GDP ratio for periods in which countries reform their public sector toward more centralization and decentralization. The result revealed that tax (revenue) decentralization was harmful for budgetary stability both during and in the immediate aftermath of a reform. The expenditure decentralization was found to be harmful also, though the effect was less robust. Tax and expenditure centralization reforms had neutral effect on the primary deficit to GDP ratio. The results suggested that decentralization should be handled with caution and that countries with fiscal challenges should avoid it for better economic performance.

Gemmell, Kneller and Sanz (2013) investigated the effect of spending and revenue fiscal decentralization indicators on economic growth of 23 Organization for Economic Co-operation and Development (OECD) Countries using a panel data from 1972 to 2005. The data which were collected from the National Accounts of OECD Countries Volume IV and IMF Government Finance Statistics Year book represented data on GDP growth for GDP growth (dependent variable), while the independent variables were the investment rate, employment growth and government revenue to GDP. The failure of most centralized governments in developing, led to this study in favour of the widespread debates that fiscal decentralization improves economic performance of a country. The study employed Pooled Mean Group (PMG) estimating equation which allows for varied short-run effects across countries but uniform long-run effects. The result of the study revealed that spending decentralization has lower economic growth while the revenue decentralization resulted in a higher growth. The study recommended that OECD Countries should consider minimizing their spending functions but to ensure that local industries that could improve economic performance are adequately financed.

Oti and Odey (2016) evaluated Nigeria's revenue profile and development mesh. The study thoroughly investigated the extent to which the federally collected revenue, oil revenue, non-oil revenue, federation account and federal government retained revenue affect the Nigerian economy. Time series data gathered covered the period of 1980 – 2014. The statistical tools used for the econometric investigation were Augmented Dickey Fuller (ADF) test, granger causality test, Johansen test and error correction model (ECM). The result showed that total federally collected revenue contributed 0.0009% to the economic growth, oil revenue 0.003%, non-oil revenue 7.6%, federation account 5.59% and federal government retained revenue 0.016%. The Johansen co-integration test confirmed that a long run dynamic equilibrium relationship exists between economic development and various revenue sources and the granger causality result shows that the various revenue sources granger caused economic development in Nigeria. The study suggested among all that non-oil sectors should be encouraged to avoid over reliance on oil revenue for economic development.



Ama and Omodero (2017) studied the Relational analysis of the effect of federation accounts and federal government retained revenue on the Nigerian economic growth. The periods covered were from 1981 – 2015. The study specifically examined the extent to which the federation account and federal government retained revenue affect the economic growth using gross domestic product, education and health services as proxies for dependent variables (economic growth). The statistical tools used for the analysis were multiple regression and t-test to ascertain both collective and individual performance of the variables. The p-value of all the variables tested collectively and individually were  $0.000 < 0.5\%$  level of significance. The null hypothesis which suggested that federation account and federal government retained revenue do not affect economic growth in Nigeria was rejected. The implication is that economic development in Nigeria which also includes the provision of goods and services such as education and health largely depends on the federal government retained revenue and revenue allocations from the federation account. This present study is focusing on revenue fiscal decentralization in Nigeria

## METHODOLOGY

The study made use of ex-post facto and descriptive research designs. Ex-post facto implies after event, thus, the reason for its adoption is the historical nature of the research data which were all in existence as at the time of this study. The descriptive research design allows numerical collection the data and to statistically evaluate them to arrive at the results which could serve as an empirical evidence in this field of study. All data on Consumer Price Index (dependent variable) were obtained from the International Monetary Fund, International Financial Statistics and data files while data on Derivation allowance to the Niger Delta States were collected from World Bank website, then data on revenue allocation to the federal, state and local governments were gathered from CBN Statistical Bulletin, 2017 edition. All data obtained from various sources were logged to achieve uniformity of data values and to keep them at the same base for easy analysis. The study made use of Augmented Dickey Fuller Unit root testing to establish stationarity of data to avoid spurious regression result. Ordinary Least Squares (OLS) method was used to perform the multi-regression analysis with the aid of SPSS version 20.

The model adopted for the study is specified below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu_i$$

Where:

Y = CPI (Consumer Price Index)

X = Determinant of economic development

X<sub>1</sub> = FAFG (Federal Government share of revenue allocation)

X<sub>2</sub> = FASG (State Government share of revenue allocation)

X<sub>3</sub> = FALG (Local Government share of revenue allocation)

X<sub>4</sub> = DRVN (Derivation allowance to the Niger Delta States)

$\beta$  = Determines the relationship between the independent variable X



And the dependent or Gradient/slope of the regression measuring  
The amount of the change in Y associated with a unit change in X.  
 $\mu_i$  = normally distributed error term.

## DATA ANALYSIS AND INTERPRETATION OF RESULT

**Table 4.1: MODEL SUMMARY**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.964 <sup>a</sup>	.929	.920	.240717481	.912

a. Predictors: (Constant), LOGDRVN, LOGFALG, LOGFAFG, LOGFASG

b. Dependent Variable: LOGCPI

Source: Author's Computation, 2018.

From table 4.1, there is existence of strong relationship between the predictor variables and the dependent variable. That is, the R value of 96.4% signifies a strong association between the variables (dependent and explanatory). The R-Square value of 92.9 indicates the extent to which the explanatory variables explains the variations in the dependent variable. Thus, it is only 7.1% that could be attributed to other factors not captured in the model. The Durbin-Watson is approximately 1 which suggests no cause for concern (Field, 2009).

**Table 4.2: ANOVA**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	24.374	4	6.094	105.160	.000 <sup>b</sup>
Residual	1.854	32	.058		
Total	26.228	36			

a. Dependent Variable: LOGCPI

b. Predictors: (Constant), LOGDRVN, LOGFALG, LOGFAFG, LOGFASG

Source: Author's Computation, 2018.

Table 4.2 shows the value of F-Statistics which 105.160 with a p-value of  $0.000 < 0.05$ . This implies that the model is a good fit and statistically significant. The explanatory variables jointly impact positively and significantly on cost of living in Nigeria.



## Test of Hypotheses

**Table 4.3: COEFFICIENTS**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.452	.322		4.503	.000
LOGFAFG	-1.325	.501	-2.637	-2.645	.013
LOGFASG	1.398	.517	2.698	2.704	.011
LOGFALG	.110	.011	.699	9.820	.000
LOGDRVN	.083	.030	.248	2.731	.010

a. Dependent Variable: LOGCPI

Source: Author's Computation, 2018.

The study earlier hypothesized that FAFG, FASG, FALG and DRVN do not have significant impact on CPI. The set of variables have been tested as depicted on table 4.3, the results revealed that FAFG have significant negative impact on CPI while FASG, FALG and DRVN have significant positive impact on CPI. Thus, Ho1 is accepted while Ho2, Ho3 and Ho4 are rejected. The results of this study are in line with the findings of (Faridi, 2011; Aisyah, 2012; Gammell *et al.*, 2013) but appears to be in contrast with the findings of (Bodman *et al.*, 2009; Baskaran & Hessami, 2012).

## CONCLUSION AND RECOMMENDATION

The empirical evidence of this study shows that revenue allocation to the federal government in Nigeria does not influence the cost of living in the country positively. Thus, the result of the study agrees with the concept and theory of fiscal decentralization which was championed by Oates 1972 and promulgated by other scholars like (Bird, 1993; Bird & Wallich, 1993; Bahl & Linn, 1992; Gramlich, 1993; Oates, 1993). This is why Oates (1972) advocates the need for revenue fiscal decentralization because the governments at the lower level are better positioned to provide public goods and services to the citizenry at little or no cost. Therefore, the study recommends a policy that allows more revenue powers and allocation to the state and local governments who are closer to the people and understand their needs and how to meet them. Revenue sharing in Nigeria should more local friendly than federal, this mechanism will help to reduce cost of living in Nigeria.

## Acknowledgement

This paper is part of PhD Dissertation of the Author. The author wishes to appreciate the Institute of Chartered Accountants of Nigeria for the research grant that helped to conclude this work. I thank the Supervisory team J.U.B. Azubike (Asst. Prof) and M.C. Ekwe (Asst. Prof) for their continuous encouragement that helped in completing the entire research work. The author expresses sincere gratitude to Prof. John Uzoma Ihendinihu of Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria and Prof. Kabiru Isa Dandago of



Bayero University, Kano-Nigeria for their immense contributions and high-level professional expertise applied in the review of the entire Dissertation.

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## FINANCIAL MANAGEMENT AND REPORTING SYSTEM OF TRADE UNIONS OF TERTIARY INSTITUTIONS IN NASARAWA STATE

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**ABSTRACT:** *Financial management and reporting form the basis by which the performance of any organization is assessed with the trade unions inclusive. This paper takes a look at the financial management and reporting of trade unions of tertiary institutions in Nasarawa State. The paper focused on how financial records are prepared, presented and how finances are managed by the leaders of such unions. Primary data collected through questionnaire were used. It was discovered that the trade unions financial reports contribute to the growth and development of union members' demands. The paper suggests that Trade unions have to be prudent and exhibit cost effectiveness in dealing with their members' funds.*

**KEYWORDS:** Reporting System, Trade Unions, Financial Management, Tertiary Institutions, Nigeria

### INTRODUCTION

According to Oxford Advanced Learners Dictionary, Finance generally refers to money available to a person, organization or a country. It is otherwise the management of money.

According to Olowe, (2009), a trade union may be:

- (a) A company union that represents interests of only one company and may not have any connection with other unions. Also called house union, a company union is often a bogus one and generally illegal.
- (b) A general union that represents workers from several companies in the same industry. Also called industrial union;
- (c) A craft union that represents skilled workers in a particular field such as the ASUP

The principal objectives of a labour union include:

- (1) Negotiate wages and working condition/terms,
- (2) Regulate relations between workers (its members) and the employer,
- (3) Take collective action to enforce the terms of collective bargaining,
- (4) Raise new demands on behalf of its members, and
- (5) Help settle their grievances



The main function of Trade Union is to provide value for money services. Value for money replaces the term cost-effectiveness by bringing in element of quality in service. The value for money services has three components – efficiency, effectiveness and economy.

The Trade Unions at various levels in both public and private sectors have to generate financial resources (money) and provide certain goods and services, which are genuinely collective services and utilities for the well-being of their members.

Financial resources are limited and therefore must be voted or allocated for operations, programs or projects, that have bearing on the lives of members. The financial resources have to be used for that purpose wholly and timely. This is the essence of management through statutes and regulations. The management of the financial resources is also entrusted to elected officials on behalf of the members; hence there is also need for probity and accountability. The strategies and management techniques put in place must allow for enforceability, uniformity of practices and compliance.

### **Statement of the Problem**

Trade unions are formed for the welfare of its members. Resources are contributed towards achieving this goal. Like any other organization, management (officials) of the union is expected to render account of their stewardship periodically according to the laws. In Nigeria most, union officials are reluctant or may not render account until they are requested to do so. However, when unions present financial reports, they contain very scarce information that will lead to meaningful decision that will enhance effective management of the scarce resources (finances) for effective administration.

It is for this reason that this research work is undertaken to look at how effective trade unions manage their finances and their reporting system with the aim of making recommendations that will ensure better financial reporting system and management of the union's resources for better accountability.

### **Aims and Objectives of the Study**

This study was undertaken to assess the financial management and reporting system. It specifically looked at how effective is the financial management and reporting system of Trade unions of tertiary institutions in Nasarawa State.

- a. It also seeks to find out if trade unions comply with the laid down rules of financial reporting.
- b. It was also to make recommendations on how best to manage finances of trade unions and also suggest the best reporting system that will help the unions.

### **Scope of the Study**

The research looked at how union finances are managed and how they present their financial reports. It is focused on how money is raised to cover their spending and obligations, their financial decisions and how they comply with the expectations of rule of standard making bodies.



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## Research Questions

1. How does the union manage their finances?
2. Are union financial resources being properly managed?
3. Does union present proper financial records?
4. Is the financial reporting system of the union effective?

## LITERATURE REVIEW

### Field of Finance

Finance as an academic discipline, is made up of five specialized fields (Hampton 1992). These include:

- i. Public finance
- ii. Securities and investment analysis
- iii. International finance
- iv. Institutional finance
- v. Financial management

This paper focuses only on the financial management and reporting system in the Trade Union.

### Routine Finance Functions;

These are functions that do not require specialized skills of finance but involve a lot of paper work and time to execute (Kurfi, 2003)

### Trade union leaders are to perform the following finance functions:

- i. Supervision of cash receipt and payment and safeguarding of cash balances
- ii. Custody and safeguarding of securities, insurance policies and other valuable papers
- iii. Taking care of mechanical details of new outside financing
- iv. Record keeping and reporting.

### What is Financial Management?

Financial management has been defined as that managerial activity which is concerned with planning and controlling of a firm's financial resources (Pandey, 1999). It is a field of management that concerns with the acquisition, financing and management of an organization's assets with the overall goal(s) in mind. Financial management deals with



general institution and procedures involved in the acquisition and disbursement of funds either in an organization or in government.

Thus, according to Umoh (1997), the essence of financial management is the effective and efficient administration of an organization's financial resources to achieve the stated goals of the organization, whether such goals are couched in maximum profitability, shareholders wealth maximization or market share dominance or in value for money services.

### **Methods of Financial Management**

In the words of Olagunju (2012), there are basically two method of financial management by trade unions. These are:

- a. Centralized management; In this method, the branches are expected to pay their total revenue to the national secretariat of their unions from which they receive allowances or rebate for their own administrative up keep.
- b. Decentralized management: Here the branches after collection of revenue retain the constitutional proportion of their revenue for the running of their affairs and remit the remainder to the national secretariat.

### **Meaning of Financial Reporting**

According to Nwagboso (2010), "Financial Reporting is the process of preparing and distributing financial information to users of such information in various forms. The most common format of financial reporting is the financial statement. Financial statements are prepared in accordance with rigorously applied standards defined by professional bodies developed according to the legal and professional framework of a specific locale".

One of the objectives of financial reporting indeed is, whether it is financial reporting, integrated reporting, or reporting on long term fiscal sustainability – is to enhance accountability and transparency.

Trade union financial reporting is the process whereby trade unions report their financial position and activities to their entire members. These reports are the standard that members and other stakeholders use to judge their unions efficiency, effectiveness, and over-all financial condition.

Financial reporting in trade union can be seen as a summary of the Union's performance, or capacity, in raising, handling, and using members' money. Another way of expressing the role of financial reporting is to say it goes hand in hand with accountability. Accountability is often considered one of the cornerstones of good leadership. Officials are given authority and responsibility and it is the task of the officials to clearly convey actions taken and whether these actions fall within the prescriptions of law and members wishes. Assessing performance or accounting with respect to raising, handling, and using members' money is a complex issue. The criteria are many, diverse, and sometimes conflicting.

In financial reporting there is a recognized rule or standards making body that can cover selected aspects of financial accountability. In general, however, there may be more than one rule making body. For instance, there can be governmental and private rule making bodies. This paper shall concentrate trade union rules and standards.

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According to ATSWA (2009), the major accounts of trade union organizations consist of the following:

- (i) Receipts and payment account (cash book)
- (ii) Income and expenditure account (Statement of Operations) and
- (iii) Balance sheet (Statement of Financial Position)

**i. Receipts and Payments Account (cash book)**

This is a statement of cash actually received and paid during a given period. Receipts being debited and payments credited. It is, in effect, a summary of the cashbook, and therefore shows the opening and closing balances of cash in hand, and receipts and payments of any kind and on any account made during the period.

**ii. Income and Expenditure Account (Statement of Operations)**

Income and expenditure account are the equivalent of the profit and loss account of a non-trading concern. It contains only revenue items, being debited with all expenditure, and credited with all income of a period, whether or not it has actually been paid or received within that period. The final balance of an income and expenditure account represents the excess of income over expenditure or the excess of expenditure over income, as the case may be, for the period. This balance is similar to the net profit or loss of a trading concern.

**iii. Balance Sheet (Statement of Financial Position)**

The Balance sheet is the statement that shows the position of assets and liabilities at a particular time. Among the items in the balance sheet are the following;

Assets:

- Investment
- Fixed assets e.g furniture, plant, equipment, motor vehicles, buildings etc.
- Cash balances
- Debtors

Liabilities:

- Accumulated fund
- Other funds like building fund. Education fund etc

**iv. Trading Account**

It is not uncommon for clubs to engage in other income generating activities like business centers to raise additional revenue for the effective running of the union. These other activities are done with the sole aim of making profit. For instance, the aim of a local trade union is not to make profit but the union may operate a business alongside its

activities with the object of making profit. The profit will not be distributed among the members but rather used for the purpose of the union.

If a club has a business centers, a separate trading and profit and loss account will be prepared for its trading activities. The net profit from the bar activities is then included as income in the income and expenditure account. Any loss on the bar activities will be shown in the expenditure side of the income and expenditure account.

#### **v. Accumulated Fund**

This represents the opening capital of a not-for profit making organization. It has the same meaning ascribed to the capital accounts of a sole trader and partnership and is calculated as the difference between total assets and liabilities. It is usually common to see most trade unions organizations keeping accounts on single entry basis. For this reason, the procedure for preparing the accumulated fund of a trade union organization is the same as that of statement of affairs as obtained under incomplete records and single entry.

Other books to be kept by trade union are:

- Receipt books:
- Payment vouchers
- Assets registered: (this is rarely found to be maintain by the trade unions)
- Minutes books
- Bank statement
- Returns from branches
- General ledgers etc.

#### **Financial Statements Required**

Trade Union required the presentation of the following complete components of financial statements at the end of each financial year not less than 12 months period:

- i. Balance sheet (Statement of financial position);
- ii. Income and expenditure Account (Statement of Operations);
- iii. Cash flow statement; and
- iv. Accounting policies and notes to the financial statements

It is therefore expected that unions present all these financial reports to its members at the end of each year.

This paper focuses more on the collectivity of financial decisions by trade Union in particular.

- How the union raise money to cover spending and obligations
- The current and future financial health of the jurisdiction and the sub-entities of the Unions



- How their decisions comply with the expectations of rules or standard making bodies?

Another important issue is that historically, the focus of trade union financial reporting is on how well the trade unions usually do in carrying out legally authorized functions and that of their various sub entities (Zonal and Local chapters). The branches are expected to render periodic returns to the centre while it is the obligation of the national union to carry out annual audit of the both the national and the branch accounts of the union.

The trade union Act requires the National Executives Council or the Central Working committee of any trade union to ensure that the treasurer's account is audited annually by the duly appointed external auditor or approved by the Registrar of Trade Union

The annual financial returns of the trade union are jointly prepared by the union's treasurer and external auditor. Also, it is the responsibility of the external auditor to authenticate the account presented.

### **Benefits of Financial Reporting**

Technically, one of the major goals of financial reports is to assess financial success, conditions, and compliance of the trade unions and other sub entities (Zonal and Local chapters). With such information, the following benefits can be derived;

- a. Financial reporting help people make better decisions about their entire members. These decisions may relate to the election of officials, votes on new projects, and even the decision to pursue on their struggles for their entitlements or not.
- b. Financial reporting may provide information so that decisions/resolutions taken can make the Union better off.
- c. Financial reporting assesses the degree to which the trade unions administration, particularly the aspect of financial management, is in compliance with the budget. Because of the importance of the annual budget in accountability, trade unions presently make a clear distinction between current or annual items and long-term items in their financial reports, with emphasis on current items. Given trade unions heavy reliance on legality, financial reporting focus considerably on whether money was raised, handled, and spent according to legal and due authorizations. The word compliance in this case becomes very significant.

Financial reports are intended to improve decision making. These decisions can be economic such as a good return on investment or political such as how to vote on credible candidates into union's key offices or issue capacity to resist undue influences of employers.

### **METHODOLOGY**

The research is a historical research. The researchers looked at how records are presented and how finances are managed in the past with a view to come up with opinion whether these are done in the best way or there is way better to do it.



### Population of the Study

The study focused on all registered trade unions in Nasarawa State.

### Sample Size and Sampling Technique

The researchers selected five unions (ASUP, NASU, SSANIP, COESU, and ASUCA) from three tertiary institutions in Nasarawa State and administer questionnaires randomly to thirty (30) members of each of the unions.

### Data Collection

For the purpose of this research work, primary data were used. The data were obtained through the administration of structured questionnaire which was administered by the researchers to union leaders as well as other members.

### Data Presentation and Analysis

The data obtained are tabulated showing percentages of the responses question by question. The data are then interpreted.

Research question 1: What are the bases of Trade union financial management and reporting?

**Table 1: To determine the Bases of accounting in Trade Union**

Option	No. of respondents	Percentage
Cash Basis	60	40%
Accrual Basis	40	27%
Modified Accrual Basis	50	33%
Total	150	100%

*Source: Field Survey 2017*

The above table shows that 60 responses representing 40% are of the opinion that the trade union uses cash basis of accounting. 40 responses representing 27% affirmed that it is accrual basis, while 50 of the respondents representing 33% submit that it is modified accrual basis of accounting that is in use by trade unions.

Question 2: Is the financial management and reporting system of the union guided by regulations?

**Table 2: The regulations guiding the financial management and reporting system of the Trade union**

Option	No. of respondents	Percentage
Yes	120	80%
No	30	20%
Total	150	100%

*Source: Field Survey 2017*



Based on the above, it can be seen that 120 representing 80% agreed that there are regulations guiding the financial management and reporting system of the Trade union. 30 representing 20% responded contrary. This shows that trade union financial management and reporting system is guided by regulations

Question 3: How do you rate the management of union's resources?

**Table 3: The level of the management of union resources**

Option	No. of respondents	Percentage
Very effective	40	27%
Effective	70	47%
Ineffective	40	26%
Total	150	100%

Source: Field Survey 2017

In the table above 40 responses representing 27% rated the trade union resources management to very effective. 70 responses representing 47% rated it very effective, while 40 of the respondents representing 26% rated it as ineffective.

Question 4: Is the union financial reporting system transparent and accountable?

**Table 4: To determine transparency and accountability of union financial management and reporting.**

Option	No. of respondents	Percentage
Yes	75	50%
No	75	50%
Neutral	0	0
Total	150	100%

Source: Field Survey 2017

From the table above, 75 respondents representing 50% agreed that there is transparency and accountability of union financial management and reporting. 75 respondents representing 50% disagreed, while none expresses neutral opinion.

Question 5: Do you think there is attainment of the benchmark of union financial management and reporting?

**Table 5: To determine if the trade unions attain the benchmark of financial management and reporting.**

Option	No. of respondents	Percentage
Yes	66	44%
No	72	48%
Neutral	12	8%
Total	150	100%

Source: Field Survey 2017



In the table above, 66 respondents representing 44% agreed that there is transparency and accountability of union financial management and reporting. 72 respondents representing 48% disagreed, while 12 respondents representing 44% were neutral. This means the trade unions are yet to attain the benchmark of union financial management and reporting

Question 6: Are these reports always presented to members

**Table 6: Whether trade unions presents their financial reports as at when due.**

Option	No. of respondents	Percentage
Yes	125	83%
No	19	13%
Neutral	6	4%
Total	150	100%

*Source: Field Survey 2017*

Based on the table above, it can be seen that 125 respondents representing 83% agreed that the trade unions present their financial reports always. 19 respondents representing 13% disagreed, while 6 respondents representing 4% are not sure. This means trade unions present their financial reports always to their members. The researchers also obtained the union's annual financial statements which proved that they prepare and presents their financial reports yearly.

Question 7: In what ways do you think these reports really contribute to the growth and development of the unions?

**Table 7: To determine the contribution of financial reports to the growth and development of the unions.**

Option	No. of respondents	Percentage
Help union members have confidence on their leaders	75	50%
Safeguard union dues	25	17%
Checkmate union expenditures	50	33%
Total	150	100%

*Source: Field Survey 2017*

The table above shows that 75 respondents representing 50% believed that the trade unions' financial reports make members of the unions to have confidence on their leaders, 25 respondents representing 17% are of the view that the trade unions financial reports help in safeguarding the union members' dues, while 50 respondents representing 33% believe that the financial reports of the trade unions ensure accountability.

Question 8: Does government influence the union's financial management and reporting?



**Table 8: On the level of government influence on union's financial management and reporting.**

Option	No. of respondents	Percentage
Yes	64	43%
No	86	57%
Total	150	100%

*Source: Field Survey 2017*

Based on the table above, it can be seen that 64 respondents representing 43% agreed that there is government influence on union's financial management and reporting, while 86 respondents representing 57% disagreed. This shows that government has little or no influence on union's financial management and reporting.

## SUMMARY OF FINDINGS

The study made the following findings:

- i. The trade unions use cash basis accounting method in preparing their financial reports
- ii. The trade unions financial management and reporting system is guided by regulations
- iii. The trade unions have not yet attained the benchmark of union financial management and reporting standard
- iv. The trade unions present their financial reports regularly to their members
- v. The trade unions' financial report ensures accountability, transparency, builds confidence of members on their leaders.
- vi. There is no government influence on union's financial management and reporting.

## CONCLUSION

The main aim of financial management and reporting is to find an appropriate balance between the benefits of transparency and accountability to users and the compliance costs associated with financial reporting. This balance is achieved most of the time by applying effective principles of financial management and reporting.

Several minor and supporting changes are also required to make the financial management and reporting system fully effective.

## RECOMMENDATIONS

- i. Trade unions should use the modified accrual accounting method in recording and presentation of their financial records and reports.



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- ii. Unions should ensure that they adhere strictly to the principles and regulations of financial reporting standards.

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