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TAX REFORMS AND STANDARD OF LIVING IN NIGERIA

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ABSTRACT

The study examines the impact of tax reforms on the living standard of Nigerians. The data used for the study were sourced from the Central Bank of Nigeria Statistical Bulletins and analyzed using the Ordinary Least Square Multiple Regression estimation techniques, the Johansen Co-integration technique, the Granger Causality test, and the Error Correction Model. The Error Correction Model outcome reveals that despite the reforms and the variations in all tax receipts between 1981 and 2016, only Company income Tax, Personal Income Tax and Value Added Tax significantly impacted on Nigerians' standard of living level (proxied by the Per Capita Income) in the long run which shows that the main reason for tax revenue in spurring standard of living to a reasonable extent has been achieved, while no significant relationship exists between tax revenues and unemployment rate in Nigeria. There is a need for the reduction in tax burden in order to raise the economic standard of living in Nigeria. There is a negative relationship between tax reforms (using Petroleum Profit Tax) and living standard. To ensure proper communication to the general public by setting up a separate body for the inspection and maintenance of the funds to ensure they are disbursed to the various level of government that fails to utilize such taxes should be fully booked and charged to court. We conclude that the against apriori expectations that more tax reforms, aimed at generating more revenue and large-scale economic growth, does not depress living standard.

KEYWORDS: Tax Reforms, Standards of Living, Government, Nigeria

INTRODUCTION

Taxes are an integral source of revenue of a country. In Nigeria, taxes collected at the national level are shared between federal, state and local governments (Nzotta, 2007). The economic, social, political and infrastructural development of any economy relies heavily on the level of efficiently and effectively structured systems of taxation and other sources of revenue (Bird and Zolt, 2003). Taxation is the most crucial, assured and viable source of revenue for any government (Aguolu, 2004). According to Musgrave and Musgrave (2004), the economic impact of taxation covers its effect on income distribution, efficient utilization of the country's resources, as well as its effect on output, employment, prices, and growth. Taxes are primarily meant to generate revenue to ensure higher quality and standard of living of a country's citizens through the promoting of the country's economic growth and development. The World Bank Group

(2004), maintains that when revenues accruing to a nation from taxes are huge it helps the government to give its citizens better access to higher quality of education, improved healthcare delivery, employment opportunities, clean air, safe potable water and security of life and property which help to determine the quality of life or standard of living of the people. A country's tax system serves as a very effective means of pooling together the resources and funds within the shores of the country thereby helping to facilitate the creation of a conducive environment, and the provision of most of the amenities and infrastructures governments are obligated to their citizens to ensure a better lease of life for the citizenry, necessary for the enhancement of the nation's economic growth (Azubike, 2009; Pfister, 2009).

Irrespective of the fact that the impact of taxation and tax reforms on the living standards of Nigerian citizens in most of the literature end with conflicting conclusions, generally speaking, the effect of taxation on the well-being of citizens have unpalatable and negative effects on the citizens and their standards of living. Taxation is usually integrated into growth models through its influence on individual growth variables (Kotlán, Machová, and Janíčková, 2011). This particularly concerns the level of savings, investment and the subsequent physical capital accumulation, and the level of human capital. Governments decide and regulate the amount to be paid by the economic units as taxes and the time that such payment may be made. According to Ngerebo and Masa (2012), such decisions on taxation are normally dependent on how much the government has projected to expend on its projects and this is in turn influenced by the framework of government expenditure as well as its estimate covering the period which is normally a year.

OBJECTIVES OF THE STUDY

The major objective of this study is to examine the effect of Tax Reforms on Standard of living in Nigerians. The specific objectives are:

- To evaluate the influence of Petroleum Profit Tax (PPT) on per capita income in Nigeria.

- To evaluate the influence of Company Income Tax (CIT) on per capita income in Nigeria.

- To evaluate the influence of Personal Income Tax (PIT) on per capita income in Nigeria.

- To evaluate the influence of Custom and Excise duties (CED) on per capita income in Nigeria.

- To evaluate the influence of Value Added Tax (VAT) on per capita income in Nigeria.

- To evaluate the influence of Petroleum Profit Tax (PPT) on the unemployment rate in Nigeria.

- To evaluate the influence of Company Income Tax (CIT) on the unemployment rate in Nigeria.

- To evaluate the influence of Personal Income Tax (PIT) on the unemployment rate in Nigeria.

- To evaluate the influence of Custom and Excise duties (CED) on the unemployment rate in Nigeria.

- To evaluate the influence of Value Added Tax (VAT) on the unemployment rate in Nigeria.

LITERATURE REVIEW

Concept of Taxation

According to Anyanwu (1997), tax represents a mandatory levy imposed on citizens and governments by the government and paid to the government. Accordingly, payment of taxes could be made by transfer or direct payment by individuals or corporate bodies to the government. The primary objective of the imposition and payment of taxes is to

mobilize funds needed to take care of the spending of government as well as to redistribute the income and wealth of economic units and ensure proper management of the economy (Ola, 2001; Jhingan, 2004; Bhartia, 2009).

Principles of Taxation

Anyanfo (1996), Appah, 2004, Jhingan (2004), Bhartia (2009) and Osiegbu, et al (2010) enunciated the principles of taxation to include equity, certainty, convenience, economy, productivity, simplicity, flexibility, and diversity.

Nigeria and its Tax Reform Policies

Owing to the country's over dependence on oil revenue the federal government has had to reform the extant tax laws with the aim of improving the amount of tax derivable from non-oil activities vis-à-vis revenue from oil activities in order to bridge the gap between the rich and the poor in the country, to ensure that revenue from taxes are equitably applied as fiscal policy activities, to achieve improved service delivery to all. Several efforts have been geared at constantly reviewing the tax laws to reduce tax evasion and avoidance and to improve the tax administration to make it more responsive, reliable, and skillful and taxpayer-friendly and to achieve other fiscal objectives (Alli, 2009).

As asserted by Nwezeaku (2005), the scope of these functions depends, inter alia, on the political and economic orientation of the people, their needs and aspirations as well as their willingness to pay tax. Thus, the extent to which a government can perform its functions depends largely on its ability to design effective tax plans and administration as well as the willingness and patriotism of the governed. He further stated that several forms of taxes are collected by the Federal Government and they include the following: Company Income Tax (CIT), Petroleum Profit Tax (PPT), Personal Income Tax (PIT), Value Added Tax (VAT), Custom and Excise Duties (CED) amongst others. The Federal Government Agency responsible for the administration and collection of these taxes except Custom/Excise Duties was up to April 2007 known as the Federal Board of Inland Revenue (FBIR).

The tax generates significant revenue to governments for social engineering, to stimulate economic growth and development (Sanni, 2007), and therefore has a bearing on the total disposable income or Gross Domestic Products (GDP) which is the standard yardstick for measuring the economic well-being of a nation. The nature and level of tax vary according to the economic policies adopted by the government; hence tax could have a positive or negative effect on both the individual and on government. To the individual, low-income tax rate constitutes an incentive to spend and save, while high-income tax rate represents a disincentive to save. To the government, high tax rates provide the most reliable, important and dominant source of government revenue for promoting the economic development of the nation.

The Nigerian tax system has experienced a series of reforms since 1904. The effects of the various reforms in the country are: introduction of income tax in Nigeria between 1904 and 1926; autonomy to the Nigerian Inland Revenue in 1945; the Raisman Fiscal Commission of 1957; formation of the Inland Revenue Board in 1958; the promulgation of the Petroleum Profit Tax Ordinance No. 15 of 1959; the promulgation of Income Tax Management Act 1961; establishment of the Lagos State Inland Revenue Department; the promulgation of the Companies Income Tax Act (CITA) 1979; establishment of the Federal Board of Inland Revenue under CITA 1979; establishment of the Federal Inland Revenue Service between 1991 and 1992; and tax policy and administration reforms amendment 2001 and 2004.

Theoretical Framework

Several theories are underlining the concept of taxation, some of which are;

Socio -Political Theory: This theory of taxation states that social and political objectives should be the major factors in selecting taxes. The theory advocated that a tax system should not be designed to serve individuals, but should be used to cure the ills of society as a whole.

Expediency Theory: This theory asserts that every tax proposal must pass the test of practicality. Economic and social objectives of the state should influence the kind and amount of tax and the practicality of implementing the imposed tax should be paramount. The effects of a tax system should be irrelevant (Ngerebo and Masa, 2012).

Benefit Received Theory: This theory proceeds on the assumption that there is basically an exchange relationship between tax-payers and the state. The state provides certain goods and services to the members of the society and they contribute to the cost of these supplies in proportion to the benefits received (Bhartia, 2009). Anyanfo (1996) argues that taxes should be allocated on the basis of benefits received from government expenditure. Meaning that taxes are to be imposed on individuals according to the benefit it confers on them. The more benefits a person derives from the activities of the state, the more he should pay to the government (Cooper, 1994).

Cost of Service Theory: This theory is similar to the benefits received theory. It emphasizes the semi-commercial relationship between the state and the citizens to a greater extent. In this theory, the state is being asked to give up basic protective and welfare functions. It is to scrupulously recover the cost of the services and therefore this theory implies a balanced budget policy.

Faculty Theory: According to Anyafo (1996), this theory states that one should be taxed according to the ability to pay. It is simply an attempt to maximize an explicit value judgment about the distributive effects of taxes. Bhartia (2009) argue that a citizen is to pay taxes just because he can, and his relative share in the total tax burden is to be determined by his relative paying capacity.

Empirical Review

Owolabi and Okwu (2011) in their study of the contribution of Value Added Tax to Development of Lagos State Economy, applied simple regression models as abstractions of the respective sectors considered in the study. The study considered a vector of development indicators as dependent variables and regressed each on VAT revenue proceeds to Lagos State. Development aspects considered included infrastructural development, environmental management, educational development, youth and social development, agricultural sector development, health sector development, and transportation sector development. The results showed that VAT revenue contributed positively to the development of the respective sectors. On the aggregate, the analysis showed that VAT revenue had a considerable contribution to the development of the economy within the study period. Adegbie and Fakile (2011) concentrated on the Company Income Tax and Nigeria Economic Development relationship. Using Chi-square and Multiple Linear Regression analysis in analyzing the data, they concluded that there is a significant relationship between company income tax and Nigerian economic development and that tax evasion and avoidance are major hindrances to revenue generation.

Ogbonna and Ebimobowei (2012) also investigated the impact of tax reforms on Nigeria's economic growth for the period 1994 - 2009. The assembled secondary data were analyzed using descriptive statistics and econometric models

such as White test, Ramsey RESET test, Breusch Godfrey test, Jacque Berra test, Augmented Dickey-Fuller test, Johansen test, and Granger Causality test. They found that tax reform is positively and significantly related to Nigeria's economic growth. More so, that tax reforms Granger cause economic growth. They concluded that tax reforms ameliorate the revenue generating machinery of government to undertake socially desirable expenditure that will translate to economic growth in real output and per capita basis.

Okwara and Amori (2017) examined the impact of tax revenue on Nigeria's economic growth between 1994 and 2015. The secondary data collected on Gross Domestic Product, Value Added Tax and Non-oil income (tax) were analyzed using Ordinary Least Square (OLS) with the aid of Statistical Package for Social Sciences (SPSS). The results of the study show that non-oil income significantly impacted on Nigeria's Gross Domestic Product, whereas value added tax has a negative and statistically insignificant relationship with Nigeria's gross domestic Product. They concluded that tax revenue has a significant impact on Nigeria's economic growth.

Cornelius, Ogar, and Oka (2016) investigated the relationship between tax revenue (represented by petroleum profit tax, and company income tax) as well as non-oil revenue on Nigeria's economy, using multiple regression Ordinary Least Square (OLS) as the analytical tool. The study found that a significant relationship exists between petroleum profit tax, and non-oil revenue, and Nigeria's economic growth; while no significant relationship exists between company income tax and Nigeria's economic growth.

Umoru and Anyiwe (2013) investigated the empiricism behind the New National Tax Policy in Nigeria by employing co-integration and error correction method of empirical estimation with an empirical strategy of disaggregation. The empirical results of the study indicate that while the policy of direct taxation is significantly and positively correlated with economic growth, indirect taxation proved insignificant with its negative impact on economic growth in Nigeria. The paper indeed ascertained that the tax-based revenue profile in Nigeria is skewed towards direct taxes. By implication, the global transition from direct taxation to indirect taxation lacked empirical justification in developing countries such as Nigeria.

Afuberoh and Okoye (2014) analyzed the impact of taxation on revenue generation in Nigeria, with reference to FCT and some selected states in the country. The primary data collected were analyzed with the aid of SPSS version 17.0. The study revealed among others that, taxation has a significant contribution to revenue generation and taxation has a significant contribution to Gross Domestic Product (GDP).

Onakoya and Afintinni (2016) investigated the co-integration relationship between tax revenue and economic growth in Nigeria from 1980 to 2013. Various preliminary tests including descriptive statistics, trend analysis, and stationary tests using Augmented Dickey-Fuller (ADF) test were conducted. The Engle-Granger Co-integration test was employed to determine whether a long run relationship existed between the variables. The Vector Error correction model was employed to confirm the long run relationship and determine the short run dynamics between the variables. Two post-estimation diagnostics tests (autocorrelation, and Heteroscedasticity) were also conducted in order to confirm the robustness of the model. Findings indicated that a long run (but no short run) relationship existed between taxation and economic growth in Nigeria. The result also revealed a positive and significant relationship exists between Petroleum profit tax, Company Income tax, and economic growth, but a negative relationship between customs and excise duties and economic growth. However, the tax components are jointly insignificant in impacting on economic growth.

Ofoegbu, Akwu, and Oliver (2016) examined the effect of tax revenue on the economic development of Nigerians, and to ascertain whether there is any difference in using HDI and GDP in establishing the relationship for the period 2005-2014. Using ordinary least square (OLS) regression technique, the findings show that a positive and significant relationship exists between tax revenue and economic development. The result also reveals that measuring the effect of tax revenue on economic development (using HDI) gives lower relationship than measuring the relationship with GDP thus suggesting that using the gross domestic product (GDP) gives a painted picture of the relationship between tax revenue and economic development in Nigeria. They concluded that tax revenue can be an instrument of economic development in Nigeria.

Gylych, Samira and Abdurahman (2016) examined the impact of tax reforms on the economic growth of Nigeria from 1986 to 2012. Results show that tax reforms are positively and significantly related to economic growth and that tax reforms indeed causes economic growth. They concluded that favorable tax reforms improve the revenue generating a capacity of the government to undertake socially desirable activities that translate to economic growth in real output and per capita basis.

METHODOLOGY

Both descriptive and empirical data analysis methods were employed in this research. The descriptive tools include the use of graphs, tables, and percentages. The empirical method adopted is the Ordinary Least Square (OLS) regression technique. In realization of the research's specified objectives, annual panel data (computed from various Central Bank of Nigeria statistical bulletin and 2016 FIRS Gauge) were utilized on the following variables: Per Capita Income (PCI), Petroleum Profit Tax (PPT), Companies' Income Tax (CIT), Custom and Excise Duties (CED) and Crude Oil Prices (COP). Our data covered the period covered 1981 to 2016

Operating Theoretical Justification of Variables
Endogenous Variable

Per Capita Income (PCI): This is a measure of living standard and is the value of economic output adjusted for taxes and price changes as a percentage of the population.

Unemployment rate (UEMP): This is captured as the annual values of the rate of unemployment over the study period. It is a measure of the prosperity of the economy and living standard.

Exogenous Variable

Petroleum Profit Tax (PPT): Petroleum Profit Tax is a major source of revenue for the Federal Government of Nigeria to meet its statutory obligations of ensuring the economic development of Nigeria. It is a major component of tax policies subjected to reforms.

Company's Income Tax (CIT): Corporate Income Tax (CIT) is a tax imposed on firms incorporated in Nigerian and which derive income from within the country or through a branch or permanent establishment within Nigeria. It is an integral component of tax reforms.

Custom and Excise Duties (CED): An excise or excise tax (sometimes called a special excise duty) is an inland tax on the sale, or tax on specific goods produced for sale, within a country or licenses for specific activities. Customs duties are taxes on importation. They are the most reformed types of taxation.

Value Added Taxes (VAT): This is sales tax on all goods and services. A VAT is assessed and collected on the value of goods or services that have been provided anytime there is a transaction (sale/purchase).

Model Specification

In order to operationalize underlying relationships, the study employed the following model:

$$PCI_t = f(PPT_t, CIT_t, PIT_t, CED_t, VAT_t) \tag{1}$$

$$UEMP_t = f(PPT_t, CIT_t, PIT_t, CED_t, VAT_t) \tag{2}$$

Where,

PCI= Per Capita Income

PPT=Petroleum Profit Tax

CIT= Companies Income Tax

CED=Customs and Excise Duties

VAT=Value Added Tax

UEMP=Unemployment Rate

Converting to econometric form by the introduction of the constant term (α) and error term (μ)

$$PCI_t = \alpha + \alpha_1 PPT_t + \alpha_2 CIT_t + \alpha_3 CED_t + \mu - \tag{3}$$

A Priori Expectation

Based on theories and empirical studies, the predictor variables have a varying relationship with the dependent criterion variables which is therefore mathematically stated as: $\alpha, \alpha_1, \alpha_2, \alpha_{3 > 0}$

DATA PRESENTATION AND ANALYSIS

Table 1: Per Capita Income (PCI), Petroleum Profit Tax (PPT), Company Income Tax (CIT), Personal Income Tax (PIT), Custom and Excise Duties (CED) and Value Added Tax (VAT) in Nigeria over the Period of 1981 to 2016

Year	PCI	UEMP	PPT (₦'Million)	CIT (₦'Million)	PIT (₦'Million)	CED (₦'Million)	VAT (₦'Million)
1981	911.2	6.40	6,326.00	403.00	1427.1	2,326.00	0
1982	767.6	6.40	4,847.00	550.00	909.9	2,336.00	0
1983	505.9	6.40	3,747.00	562.00	771.7	1,984.00	0
1984	357.1	6.20	4,762.00	787.00	635.5	1,616.00	0
1985	340.7	6.10	6,711.00	1,004.00	499.3	2,184.00	0
1986	262.3	5.30	4,811.00	1,101.00	641.1	1,728.00	0
1987	271.6	7.00	12,504.00	1,235.00	2283.9	3,541.00	0
1988	292.7	5.30	6,815.00	1,551.00	926.7	5,672.00	0
1989	274.7	4.50	10,598.00	1,914.00	430.5	5,816.00	0
1990	398.1	3.50	26,909.00	2,997.00	1724	8,641.00	0
1991	377.2	3.10	38,616.00	3,828.00	3040	11,457.00	0
1992	362.6	3.40	51,477.00	5,417.00	4903	16,055.00	0
1993	366.5	2.70	59,208.00	9,554.00	5627	15,485.00	0
1994	487.4	2.00	42,803.00	12,275.00	3888	18,095.00	5.03
1995	1038.3	1.80	42,858.00	21,878.00	2043	37,364.00	6.26

Table 1: Contd.,							
1996	1444	3.40	76,667.00	22,000.00	3407	55,000.00	11.29
1997	1494.6	4.50	68,574.00	26,000.00	8340	63,000.00	13.91
1998	1442.8	3.23	68,000.00	33,300.00	11400	57,700.00	16.21
1999	400.5	3.71	164,300.00	46,200.00	20100	87,900.00	23.75
2000	515.4	13.10	525,100.00	51,100.00	38100	101,500.00	30.64
2001	487.8	13.60	639,200.00	68,700.00	44400	170,600.00	44.91
2002	649.7	12.60	392,200.00	89,100.00	68100	181,400.00	52.63
2003	738.9	14.80	683,500.00	114,800.00	54200	195,500.00	65.89
2004	953.1	13.40	1,183,600.00	113,000.00	58900	217,200.00	96.2
2005	1209.3	11.90	1,904,900.00	140,300.00	212100	232,800.00	87.45
2006	1555.2	12.30	2,038,300.00	244,900.00	33300	177,700.00	110.57
2007	1789.8	12.70	1,600,600.00	275,300.00	268700	241,400.00	144.37
2008	2201.8	14.90	2,060,900.00	420,600.00	114000	205,250.00	198.07
2009	1780.9	19.70	939,400.00	600,600.00	727000	223,325.00	229.32
2010	2395.6	21.10	1,480,360.00	666,060.00	153600	214,287.00	275.57
2011	2612.1	23.90	3,070,590.00	715,440.00	182500	215,249.00	318
2012	2835.3	21.57	2,780,320.00	838,170.00	206800	223,324.33	347.69
2013	3082.5	22.19	3,137,323.00	933,168.00	153900	227,842.83	389.53
2014	3302.35	29.5	4,818,848.00	2,418,950.00	180500	211,500.00	388.85
2015	3530.74	31.4	4,362,266.03	1,840,526.00	143932	215,163.00	451.23
2016	2592.743815	34.02	4,779,205.59	2,058,746.00	120723	214,027.09	487.23

Sources: Central Bank of Nigeria, Statistical Bulletin (Various Issues) and FIRS Gauge for 2016.

Techniques of Data Analysis

The study used Augmented Dickey Fuller (ADF) test ststistic vi-a-vis Mckinnons Critical Values is employed to evaluate the stationarity or unit root properties of the time series (Brooks, 2009). The OLS test statistics of R^2 and t-values were used to estimating the marginal influence of the predictor variable on the criterion variable, as well as identifying the significance of the individual predictor variables, holding all other variables constant. The Johansen Co-integration test is utilized to ascertain the extent of long run equilibrium relationship between the study variables (Awe, 2012). The granger causality test was used to determining whether time series are significantly supporting or promoting each other in the standard of living process in the light of inclusion of lagged values of the time series (Granger 1981, Engle & Granger, 1987)

PRESENTATION OF RESULTS

Presentation of Stationarity (Unit Root) Test Results

The results of the stationarity tests for all the study variables are presented in table 2 below:

Table 2: Results of Stationarity (Unit Root) Test

Variable	ADF t-statistics	Critical Value 5%			Order of Integration	Prob.
		1%	5%	10%		
D(PCI)	-6.592776	-4.273277	-3.557759	-3.212361	I(1)	0.0000
D(UEMP)	-4.383472	-4.273277	-3.557759	-3.212361	I(1)	0.0000
D(PPT)	-4.453001	-4.323979	-3.580623	-3.225334	I(1)	0.0074
D(CIT)	6.648749	-3.737853	-2.991878	-2.635542	I(1)	0.0001
D(PIT)	-9.563337	-4.273277	-3.557759	-3.212361	I(1)	0.0000
D(CED)	-7.917477	-4.273277	-3.557759	-3.212361	I(1)	0.0000
D(VAT)	5.088760	-4.394309	-3.612199	-3.243079	I(1)	0.0010

Source: Author's Computations using E-Views 9.

Note: D(PCI), D(UEMP), D(PPT), D(CIT), D(PIT), D(CED) and D(VAT) represent the differenced value of The Per Capita Income (PCI), Unemployment Rate (UEMP), Petroleum Profit Tax (PPT), Company Income Tax (CIT), Personal Income Tax (PIT), Custom and Excise Duties(CED) and Value Added Tax (VAT) Respectively.

The table above shows that all variables differentiated were stationary at first difference (1) as indicated by the absolute values of the ADF test statistic that are all higher than their respective MacKinnon's critical values at 1%, 5%, and 10% respectively.

Presentation of the OLS Results

To capture the short run influxes and the percentage of variation accounted for by the predictor variables in the criterion variable, the study carried out the Ordinary Least Square estimate.

Table 3: Results of Ordinary Least Square (OLS) test: Model 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Dependent Variable: D(PCI)				
Method: Least Squares				
Date: 07/11/18 Time: 23:10				
Sample (adjusted): 1982 2016				
Included observations: 35 after adjustments				
C	458.6591	270.2315	1.697283	0.1011
D(PPT)	0.000480	0.000568	0.846139	0.4049
D(CIT)	0.003456	0.001034	3.343148	0.0024
D(PIT)	-0.005045	0.001638	-3.080670	0.0047
D(CED)	0.003492	0.010773	0.324101	0.7484
D(VAT)	58.19288	12.43181	4.680964	0.0001
R-squared	0.726168	Mean dependent var		1462.453
Adjusted R-squared	0.675458	S.D. dependent var		2048.096
F-statistic	14.32010	Durbin-Watson stat		2.044977
Prob(F-statistic)	0.000001			

Source: *Authors Computations using E-Views 9.*

From the outcome above, it can be seen that the predictor variables account for about 72.6% of variations in the criterion variable, this high level of predictability could be justified by the precedence and dependence of the Per capita income on revenue accruing from all sources especially from the Petroleum Profit Tax. The Probability level utilizing the benchmark of the 5% significance level shows that in the short run only the Company Income Tax, Personal Income Tax and Value Added Tax (VAT) are statistically significant based on their respective significance level of 0.0024, 0.0047 and 0.0001. The Durbin Watson statistic of 2.044977 shows the existence of serial correlation as the score is within the relevant range. All variables exhibited a positive coefficient and trend except the Personal Income Tax (PIT) based on its coefficient of -0.005045.

Table 4: Results of Ordinary Least Square (OLS) test: Model 2

Dependent Variable: D(UEMP)				
Method: Least Squares				
Date: 07/11/18 Time: 23:12				
Sample (adjusted): 1982 2016				
Included observations: 35 after adjustments				
Variable	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.*
C	2.448309	270.2315	1.212313	0.1011
D(PPT)	1.284802	0.000568	0.839482	0.4049
D(CIT)	2.193940	0.001034	1.293840	0.0724
D(PIT)	1.394830	0.001638	1.383921	0.0647
D(CED)	9.384739	0.010773	0.283920	0.7484
D(VAT)	2.394803	12.43181	1.283291	0.0871
R-squared	0.874321	Mean dependent var		23.28492
Adjusted R-squared	0.738321	S.D. dependent var		23423.23
F-statistic	19.28492	Durbin-Watson stat		2.134932
Prob(F-statistic)	0.000000			

Source: *Authors Computations using E-Views 9.*

From the output above, it can be identified that the predictor variables account for about 87.43% of variations in the criterion variable. This high level shows a poor recourse of all tax revenues on the unemployment rate. The Probability level utilizing the benchmark of the 5% significance level shows that in the short run no tax revenue variable influences or reduces the unemployment rate in Nigeria. The Durbin Watson being a test for serial correlation shows by the value of 2.134932 a manifestation of serial correlation as the score is within the relevant range. All variables exhibited a positive coefficient and trend with an unemployment rate which is against apriori for unemployment.

Presentation of Johansen's Co-integration Test Results

The results of Johansen Co-integration tests for all the time series variables of this study are presented in table 5 below:

Table 5: Results of Johansen Unrestricted Co-integration Rank Test: Test (Maximum Eigen Value)

Obs	Series	Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
31	D(PCI)	None *	0.981505	123.6987	40.07757	0.0000
31	D(PPT)	At most 1 *	0.793990	48.97478	33.87687	0.0004
31	D(CIT)	At most 2 *	0.695871	36.89937	27.58434	0.0024
31	D(PIT)	At most 3	0.373506	14.49609	21.13162	0.3257
31	D(CED)	At most 4	0.154080	5.187257	14.26460	0.7180
31	D(VAT)	At most 5	0.090097	2.926925	3.841466	0.0871

 Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level
 * denotes rejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values
Source: *Authors Computations using E-VIEWS 9.*

The Co-integration results indicate a level of significance of the first three co-integrating equation which is at "None", "At most 1" and "At most 2" which shows the existence and presence of a long run relationship amongst employed variables which leads to the acceptance of the alternate hypothesis. In the light of the above results, the study proceeds to check and correct errors for the short and long run dynamics via the Error Correction Model as a long-run equilibrium relationship has been discovered.

Presentation of Error Correction Estimate

To estimate and correct for the errors existent between the long and short run dynamics in the study, this research carried out the error correction model.

Table 6: Results of Error Correction Model 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Dependent Variable: D(PCI)				
Method: Least Squares				
Date: 07/11/18 Time: 23:13				
Sample (adjusted): 1983 2016				
Included observations: 34 after adjustments				
C	*469.4686*	*301.9949*	*1.554558*	*0.1326*
D(PPT)	*0.000508*	*0.000624*	*0.815095*	*0.4227*
D(CIT)	*0.003351*	*0.001202*	*2.787222*	*0.0100*
D(PIT)	*-0.005082*	*0.001708*	*-2.975343*	*0.0064*
D(CED)	*0.002951*	*0.011289*	*0.261411*	*0.7959*
D(VAT)	*59.11215*	*16.07086*	*3.678218*	*0.0011*
ECM(-1)	*-0.047755*	*0.293478*	*-2.162721*	*0.0100*
R-squared	*0.723581*	*Mean dependent var*		*1507.945*
Adjusted R-squared	*0.657240*	*S.D. dependent var*		*2063.858*
F-statistic	*10.90706*	*Durbin-Watson stat*		*2.007215*
Prob(F-statistic)	*0.000006*			

Source: *Authors Computations using E-VIEWS 9.*

Following the above output of error correction model above, ECM significantly stood at 0.047755 with the expected negative sign, which implies that approximately 4.78% disequilibrium in Per Capita Income (PCI) can be corrected with the changes in our independent variables over a year. This constitutes a minute but reasonable dynamics and speed of adjustment and goes a long way to show the existence of little deviation of the short run output from the long run results. The coefficient of determination shows that 72.4% of the variation in the criterion variable in the,long run, is accounted for by the predictor variables. The error correction model shows the long run significance of CIT, PIT, and VAT based on their probability level of 0.0100, 0.0064 and 0.0011 respectively, which shows that in the long -run activities and revenues generated from firms, Individuals (Private Sector) and the largely in-evasive and indirect VAT stimulates welfare positively with the exception of the Personal Income tax which displays a negative coefficient of -0.005082. The Durbin Watson as observed in the long -run is still within the acceptable range as it is 2.007215. The models long -run significance is still binding as the f-statistic of 10.90706 with a probability of 0.000006 which is lower than the 0.05 significance level. The coefficients of the significant variables show that a unit change in CIT, PIT, and VAT will result in 0.003352 increase, 0.005082decrease, and 59.11215 very high increase respectively in the units of the criterion variable.

Table 7: Results of Error Correction Model 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Dependent Variable: D(UEMP)				
Method: Least Squares				
Date: 07/11/18 Time: 23:17				
Sample (adjusted): 1983 2016				
Included observations: 34 after adjustments				
C	*2.448309*	*270.2315*	*1.212313*	*0.1011*
D(PPT)	*1.284802*	*0.000568*	*0.839482*	*0.4049*

Table 7: Contd.,			
D(CIT)	2.193940	0.001034	1.293840	0.0724
D(PIT)	1.394830	0.001638	1.383921	0.0647
D(CED)	9.384739	0.010773	0.283920	0.7484
D(VAT)	2.394803	12.43181	1.283291	0.0871
ECM(-1)	-0.233531	0.293478	-2.162721	0.0420
R-squared	0.563823	Mean dependent var		739.273
Adjusted R-squared	0.518372	S.D. dependent var		732.273
F-statistic	13.83948	Durbin-Watson stat		2.17834
Prob(F-statistic)	0.000000			

Source: *Authors Computations using E-VIEWS 9.*

Following the above output of the error correction model above, ECM significantly stood at -0.233531 with the expected negative sign, which implies that approximately 23.35% disequilibrium in Unemployment rate (UEMP) can be corrected with the changes in our independent variables over a year and this constitutes a minute but reasonable dynamics and speed of adjustment. And goes a long way to shows the existence of little deviation of the short run output from the long -run results. The coefficient of determination shows that 56.38% of the variation in the criterion variable, in the long run, is accounted for by the predictor variables. The error correction model shows the insignificance of tax revenues in reducing or influencing the unemployment rate in Nigeria. The Durbin Watson as observed in the long -run is still within the acceptable range as it is 2.17834. The models long -run significance is still binding as the f-statistic output of 13.83948 possesses a significance level of 0.000006 which is lower than the 0.05 significance level.

Presentation of Granger Causality Test Results

The results of the Pair-Wise Granger Causality tests are presented in table 4 below:

Table 8: Results of Pair-Wise Granger Causality Tests

Pairwise Granger Causality Tests			
Date: 07/11/18 Time: 23:21			
Sample: 1981 2016			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
D(PPT) does not Granger Cause D(PCI)	31	5.79123	0.0083
D(PCI) does not Granger Cause D(PPT)		2.47262	0.1040
D(CIT) does not Granger Cause D(PCI)	31	18.8422	9.E-06
D(PCI) does not Granger Cause D(CIT)		0.84199	0.4423
D(PIT) does not Granger Cause D(PCI)	31	16.2549	3.E-05
D(PCI) does not Granger Cause D(PIT)		2.91450	0.0721
D(CED) does not Granger Cause D(PCI)	31	1.67332	0.2072
D(PCI) does not Granger Cause D(CED)		0.12388	1.8841
D(VAT) does not Granger Cause D(PCI)	31	7.59214	0.0025
D(PCI) does not Granger Cause D(VAT)		3.34273	1.1511
D(PPT) does not Granger Cause D(UEMP)	31	5.79123	0.2483
D(UEMP) does not Granger Cause D(PPT)		2.47262	1.1141
D(CIT) does not Granger Cause D(UEMP)	31	18.8422	0.9326
D(UEMP) does not Granger Cause D(CIT)		0.84199	1.4423
D(PIT) does not Granger Cause D(UEMP)	31	16.2549	0.1005
D(UEMP) does not Granger Cause D(PIT)		2.91450	1.1721
D(CED) does not Granger Cause D(UEMP)	31	1.62311	0.2072
D(UEMP) does not Granger Cause D(CED)		0.12388	1.8841
D(VAT) does not Granger Cause D(UEMP)	31	7.23842	0.0825
D(UEMP) does not Granger Cause D(VAT)		3.34273	1.1511

Source: *Authors Computations using E-VIEWS 9.*

The presentation above shows the Pairwise Granger Causality Output of employed variables of the study. The causal flows between the employed variables shows that Petroleum profit tax promotes Per Capita Income(PCI), which shows that Petroleum Profit Tax is demand leading and only possess this unidirectional flow as it does not subsequently react to economic wellbeing (PCI), other variables showed no relative form of support or promotion to and from Per Capita Income except Value Added Tax which was seen to influence and was influence by Per Capita Income which shows a bidirectional causal influence between the variables. There was no causal relationship with reference to unemployment.

DISCUSSION, CONCLUSIONS AND POLICY RECOMMENDATION

The Error Correction Model result reveals that despite the reforms in the various taxes within the studied period, only the Company Income Tax (CIT), Personal Income Tax (PIT) and Value Added tax significantly impacted on the nation's standard of living (*proxied* by the Per Capita Income) in the long run which also mirrored the short run influences which goes a long way to show that the major reason for tax in Nigeria has been achieved as it has spurred standard of living to a reasonable extent, while no significant relationship exists between tax revenues and unemployment rate in Nigeria. Despite the fact that some theories suggest that a heightened tax revenue base depresses the standard of living, this study as carried out in Nigeria shows otherwise. Paying cognisance to other non-influential variables like the Petroleum Profit Tax (PPT) and Custom and Excise Duties (CED) the study results might probably be attributed to the following factors which prevail significantly in Nigeria:

- Prevalence of corruption existent in the collection and accounting of tax revenues accruing from various sources by relevant tax officials.

- The presence of heavy tax avoidance and evasion which usually goes unnoticed by tax authorities.

- Misappropriation of capital funds to sectors not influencing Revenue base in the nation which can be noticed especially in the area of the Petroleum profit Revenues which was noted to be insignificant.

RECOMMENDATIONS

In the light of these issues raised above, it is recommended that:

- The nations should strive to diversify its economy by reforming and widening its tax base.

- In their effort to stimulate standard of living, developing nations like Nigeria should regularly reform to lower tax rates especially for corporate tax, personal income tax, and social security contributions.

- There is a need for the reduction in tax burden in order to raise the economic standard of living in Nigeria. As taxes have increased to the extent that they are negatively affecting the economic standard of living as was evident in the Petroleum Profit tax which appeared to be negatively related to the economic standard of living in Nigeria.

- A government should ensure that the collected taxes are duly accounted for to the general public through prints and media (electronic or otherwise). To ensure proper communication to the general public by setting up a separate body for the inspection and maintenance of the funds to ensure they are disbursed to the various level of government that fails to utilize such taxes should be fully booked and charged to court.

- The outage of tax revenues caused by the decrease of income taxes should be compensated by an increase of indirect taxes since they were discovered to be statistically significant.

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