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IMPACT OF TAXATION ON INDUSTRIAL PERFORMANCE IN NIGERIA

CALLISTUS OGU (PhD)
Department Of Economics,
Imo State University Owerri

&

PASCAL OJIMADU KEM (PhD)
Department Of Economics
Madonna University Okija
Anambra State

ABSTRACT
The study examined the impact of taxation on industrial performance in Nigeria, from 1981 to 2018. Data were obtained from Central Bank of Nigeria (CBN) statistical Bulletin, Annual Report and Statement of Account for the year 2018 and WDI 2018 and fitted into a single linear model in which industrial performance is proxy by industrial output was the dependent variable and company income tax, petroleum profit tax, customs and excise duty tax, and manufacturing capacity utilization, served as the independent variables. However, from the result, jointly company income tax, petroleum profit tax, customs and excise duty and manufacturing capacity utilization, has a significant relationship on industrial output but individually tested, it shows that, Company income tax and petroleum profit tax has a positive impact and no significant relationship on industrial output while customs and excise duty tax, and manufacturing capacity utilization has a positive impact and significant relationship on industrial output. It was concluded that, the success of fiscal policy in promoting industrial sector depends on the level of public revenue available, the direction of public expenditure and its implementation and it was recommended, Expansionary policies on fiscal policy measures should be encouraged as they play vital role for the growth of the industrial sector output in Nigeria and There is need to redirect fiscal policy measures towards making Nigeria a producer nation through industrial sector which in turn would lead to economic growth and development.

Keywords: industrial output, company income tax, petroleum profit tax, customs and excise duty, manufacturing capacity utilization

INTRODUCTION
In Nigeria, since the late 1980s, taxation has become a major instrument of stabilization. The reasons for the instrumentality are not inconsiderable. First, due to the dominant role of the public sector in major economic activities in Nigeria; this can be traced to several factors, which include the emergence of oil sector and its attendant oil boom of the early 1970s, the need for reconstruction of the devastated areas in Nigeria after the civil war that lasted between 1967 and 1970, the industrialization strategy adopted (import substitution policy) in the economy and the militarization of governance. The second reason for increasing dominance of taxation in the management of the economy is the fall in the international price of oil in the late 1980s.

Furthermore, the persistent fiscal deficit since the early 1970s and given the decline in oil revenue require a new fiscal focus that witness the emergency of the major economic activities (Burges,2003). The socio-economic dimensions of the collapse of the oil prices and the general mismanagement of the economy in the 1980s brought about the issue of economic growth to the core. By the mid 1980s, it was observed that

the formal private sector was going extinct, economic activities as measured by aggregate output, industrial production, non-oil export exports, etc., were all showing distress signs. Above all, there was strong widespread evidence of pervasive and massive poverty in the land in spite of growing public expenditure and fiscal deficit. By 1986, all major socio-economic indicators were pointing downwards. The rate of unemployment was high, purchasing power of the people was down, and poverty was becoming entrenched with economic growth being negative. In sum, there was severe macroeconomic imbalance domestically and externally and it was apparent that the economy required major adjustment.

Given the above negative economic situations, the IMF-World Bank supported structural adjustment programme (SAP) and other economic reforms were adopted in 1986 to correct the perceived imbalances in the economy. Just immediately after the introduction of the structural adjustment programme, it was observed that social indicators were not responding positively to the reformed measures; that is, they were getting worse. This was the common feature of fiscal behaviour in Nigeria at the end of the second quarter of every year. The actual fiscal activities of the government were totally at variance with the budget proposals. The government regular funds itself engaging in extra-budgetary expenditure occasioned largely the observed suffering of the majority of the people. For decades of years now, the economy of Nigeria has been plagued with several challenges. Some of which include misappropriation of public funds, corruption and ineffective economic policies, lack of integration of macroeconomic plans. Others include the absence of harmonization and coordination of policies, inappropriate and ineffective policies, and inability to efficiently manage her enormous human and material endowment by harnessing her economic potentials, in spite of many frequent changing of macroeconomic policies (Ogbole, Sonny & Isaac, 2018).

This means that-the growth and development of the Nigeria's economy has been unstable over the years and as a result, the country's economy has witnessed so many shocks and disturbances both internally and externally over, despite the fiscal measures introduced since 1986, and given the prominence role of fiscal policy through taxation in macroeconomic management in Nigeria. Growth of the economy has remained mirage as economic recession remained widespread and pervasive, particularly in the rural areas, even though taxation are still recognized as potent tool for enhancing growth, redistributing income and reducing poverty.

However, considering Keynesian theory which sees taxation as a tool for overcoming fluctuations in an economy by postulating a positive relationship between deficit financing and investment, and consequently, on the economic growth. This in other words, signifies that increase in debt of a nation and other fiscal policy instruments can as well transform the economy positively. But the evidence from statistical data in Nigeria indicates that, these variables have not toed in pattern of direction with the theory. For instance, the growth rate of government revenue (taxes) and investment (government expenditure) increased from 19.7% to 52.8%, 79.2% to 116.8% in 1974 down to 1975 in real terms respectively, while that of industrial output and GDP decreased from 199.8% to 70.6% in the corresponding years. Within these periods, although that tax revenue increased considerably alongside the government expenditure, but these increase have not translated to industrial output and GDP growth. Similarly, debt growth rate equally increased from 19.4% to 32.7% with the same period (CBN, 2014).

The same was also observed between 1993 and 1994 where government revenue growth rate increased from 16.2% to 36.0%, through taxation, while industrial output and GDP decreased from 106.0% to 15.8% and 1.2% to 0.2% respectively. Still in those years, debt growth rate decreased from 53.8% to 48.8%. Observing another two years; 2004 and 2005, both government revenue and investment increased from 12.9% to 38.7% and 16.3% to 27.7% respectively, while that of industrial output and GDP within the same periods, decreased from 10.4% to 6.5% and debt itself increase from 3.0% to 11.3%. In the same vein, it is equally observed that government revenue slightly increased from 54.2% to 59.4% from 2013 to 2014.

However, industrial output and GDP decreased from 12.5% to 11.7% and 10.% to 0.6% respectively and the debt as usual increased from 8.8 % to 11.0 % within the same periods (CBN,2014). From the above trend, it is observed that there is low level of investment in both human and non human productive sectors like agriculture, commerce and industry. On the aspect of human resources which comprise education and

health, the values of HDI shows that Nigeria is ranked 156 with the value of 0.459 out of the 187 countries. The rank places Nigeria at the bottom, which means that the country is considered to have low level of human capital development. On the aspect of non-human resources, the trend equally indicates that the country's most investments are bogus as they are not usually being completed; and every incomplete project has no significant economic implication. Therefore, the likely adverse economic implication of such deviations, or in other words, the cyclical fluctuations in the country's economic activities would leads to the periodic increase in the country's unemployment and inflation rates as well as the external sector disequilibria; and these factors are highly conjectured as being able to militate against the growth of any economy. Therefore, having observed the above problem, the need to empirically research on the impact of taxation on industrial output in Nigeria becomes imperative.

Upon several government policies on the stability of Nigerian economy through industrial sector, there have been a lot of challenges facing the growth of Nigerian industrial sector as identified by researchers. However, this study is specifically interested in examining the level of significant, taxation has on industrial sector output in Nigeria due to its low contribution to the growth of the economy. Most studies on taxation dwelt on the determinants, its impact on economic growth, its impact on capital formation, its impact on capital stock, deficit and macroeconomics variables, while studies on industrial sector focuses on its productivity, bank lending, economic growth, global economic downturn, monetary policy, banking sector reform, and its performance. However, in Nigeria, both variables have valuable significant effect on economic growth and stabilization, but study about their relationship has research gap, as there seems to be little or no attention on the impact of taxation on industrial output in Nigeria. This study seeks to fill this research gap.

Empirical Literature Review

The effect of taxation and industrial output in Nigeria has been investigated in prior research studies. However, different factors have been used to measure the taxation in relation to the tax revenue generated. This section is divided according to the research objectives. Some of these works are identified below:

Eze and Ogiji (2018), Utilized an error correction analysis to ascertain the impact that fiscal policies have on the output of the manufacturing sector in Nigeria. The findings showed that a negative significant relationship exist between government tax revenue and manufacturing sector output in Nigeria. The findings also revealed a significant positive relationship between Government expenditure and the output of the manufacturing sector in Nigeria. A level relationship also existed between fiscal policies and manufacturing output based on the results. A recommendation was made that the government should embark on expansionary fiscal policies because such policies have the propensity to accelerate manufacturing production in Nigeria.

Abdul-Rahamoh, et al., (2013), examined critically the effect of petroleum profit tax on industrial sector performance using multiple regression method from 1970 to 2010 found that petroleum profit tax and other variables had significant impact on industrial sector performance and therefore concluded that the abundance of petroleum and its associated income has been beneficial to the industrial sector from 1970 to 2010.

(Afuberoh & Okoye, 2017) also studied the impact of taxation on revenue generation on industrial sector in Nigeria. Regression analysis using SPSS Version 17 was employed by the researcher in testing categorical statements; he discovered that taxation has a negative contribution to industrial sector performance in Nigeria.

(Onoh, 2017) looked at impact of value added tax on Nigerian manufacturing sector, ordinary least squares was used by the researcher to analyze obtained data; the analysis revealed a strong positive impact of Value Added Tax on manufacturing output in Nigeria. The study also recommended that VAT should not be high on the infant industries, so as to enable them grow.

Charles (2012) investigated the performance of taxation on manufacturing sector in Nigeria, using econometrics test procedures. The result indicates that taxation negatively affect manufacturing index

performance while company lending rate, income tax rate, inflation rate and exchange rate negatively affect the performance of manufacturing sector.

Rina, Tony and Lukytawati (2010) examined the impact of fiscal policy on industry and growth of economy in Indonesian using the computable general equilibrium (CGE) model. It was found that fiscal policy has a positive impact on Indonesian macroeconomic performance in terms of change in, investment, consumption and capital rate of return. This finding has research gap on the model used. This is because computable general equilibrium model is not a good model for correlation.

Ogbole, Sonny and Isaac (2018) focussed on the comparative analysis of the impact of fiscal policy on industrial activities in Nigeria during regulation and deregulation, using the econometric methods of co-integration and error correction model. The study indicates that there is a negative difference in the effectiveness of fiscal policy in stimulating the industrial sector during and after regulation period. They recommend that government fiscal policy should refocus and redirect government expenditure towards production of goods and services so as to enhance the industrial sector..

Sikiru and Umaru (2017) studied the causal link between fiscal policy and manufacturing output in Nigeria, using Engle-Granger approach and error correction models which was estimated to take care of short-run dynamic. The result indicates that taxation negatively impacted on manufacturing output during the period covered.

Becker and Holmes (2018) analyze the effect of taxation on both firms which are profitable and unprofitable in Germany. Investment, Tax, Liquidity and Firm growth were the main variables. They described the events in which payout taxes has changed by three percentage points and compare the five years tax change effect with two years following it. Research findings concluded that payout tax adjustment has an economically considerable adverse effect on allocation of the investment, profitability but has no relationship with the firm growth of the firms.

Gatsi, Gadzo and Kportorgbi (2017) employed panel data methodology covering ten listed manufacturing firms from Ghana over seven years from 2005 to 2012 to empirically determine the effect of corporate income tax on financial performance. The study showed that there is a significant negative relation between corporate income tax and financial performance. Also, firm's size, age of the firm and growth of the firm revealed a statistically significant positive relationship with financial performance.

Ezejiofor et. al (2015) seeks to assess whether tax as a fiscal policy tool affect the performance of the selected manufacturing companies in Nigeria. To achieve the aims of the study, descriptive method was adopted and data were collected through the use of six years financial accounts of the selected companies. The hypothesis formulated for the study was tested with the ANOVA, using the Statistical Package for Social Sciences (SPSS) version 20.0 software package. The study found that Taxation as a fiscal policy instrument has a significant effect on the performance of Nigerian manufacturing companies. The implication of the finding is that the amount of tax to be paid depends on the companies' performances. Based on the findings, it was recommended among others that the government is required to be sensitive to the variables in the tax environment and other macro-environmental factors so as to enable the manufacturing sector cope with the ever changing dynamics of the manufacturing environment.

Summary of Literature/Gaps

Many of the empirical studies reviewed dealt largely on effect of taxation using petroleum profit tax (PPT), company income tax (CIT) and custom and excise duties as measures against industrial output through Gross Domestic Product (GDP) in Nigeria. The crux of this study is to examine the effect of taxation on industrial ouput in Nigeria, using revenue from petroleum profit tax (PPT), company income tax (CIT), custom and excise duties, while industrial output was used to measure industrial performance and economic growth in Nigeria.

The different methodologies used by the different authors, the environments or settings under which the studies were carried out, the nature of data and sources in different jurisdictions and the policy thrust, among others could account for these differences. Besides, the proxy and concept of industrial output used

by a number of the authors was the inflation-unadjusted GDP. In a setting, like Nigeria, where inflation is relatively uncontrolled, the use of the unadjusted GDP is not good enough and GDP comprises of total output in the economy from different sectors which can not be used as a proxy for industrial output. However, in this study, the industrial output is used as a measure that reflects the true value of all goods and services produced in a given year by the industrial sector. Besides, unlike many authors reviewed above, a concentration is made on some indirect taxes, given their popularity as revenue generating instruments. Conclusively, this study contributes to existing literature by providing empirical evidence from Nigeria, an emerging economy, on the relationship between taxation and industrial output in Nigeria.

RESEARCH METHODOLOGY

This section is saddle with the responsibility of carrying out of scientific or better put empirical investigation of the impact of taxation on industrial sector performance in Nigeria. The chapter therefore shall emphasize econometric methods and statistical tools of measurement, research design, data processing and estimation of parameters. Moreso, it goes into model specification and method of estimates

MODEL SPECIFICATION

Our model is a linear one of the form:

INDOT = (Xi)……(1)

Where; INDOT = Industrial Output

Xi = set of chosen explanatory variables.

The chosen variables are reflected in the model as

INDOT = F (CIT, PPT, CET,MCU)……(2)

Where,

INDOT = Industrial Output

CIT = company income tax

PPT = petroleum profit tax

CET = customs and excise tax

MCU = Manufacturing Capacity Utilization

The functional relationship thus becomes,

$INDOT = b_0 + b_1 CIT + b_2 PPT + b_3 CET + b_4 MCU + U$…….(3)

Where

INDOT = Industrial Output

CIT = company income tax

PPT = petroleum profit tax

CET = customs and excise tax

MCU = Manufacturing Capacity Utilization

b_0 = constant

b_1 to b_4 =parameter coefficients

U= Stochastic error term.

UNIT ROOT TEST

However, literature has shown that most macro economic variables are not mean reversing as a result of their time sensitiveness, Dickey and Fuller (1981). It implies that they are not integrated to order zero. Hence, we shall subject the variables to unit root test using Augmented Dickey – Fuller (ADF) test in order to check the problem of auto correlation. It is stated below,

Equations 4 transform to:-

$$\Delta \text{ In } INDOT = \beta_0 + \beta_1 \Delta CIT_{t-1} + \beta_2 \Delta PPT_{t-1} + \beta_3 \Delta CET_{t-1} + \beta_4 \Delta MCU_{t-1} + U_{t\ldots\ldots\ldots} \quad (4)$$

Where Δ = First difference operator

t – 1 = lag of each of the series

X_{t-1} = the lag of other explanatory variables

The long run equilibrium relationship between interest rate and capital market was investigated using Engle and Granger co-integration test. The Engle and Granger co-integration test is given as

$Y_t = A_1Y_{t-1} + \ldots + A_pY_{t-p} + BX_t + \varepsilon_T$ .... (5)

Where Y_t is a vector of non stationary 1(1) variables; X_t is a vector of deterministic variables and ε_T is a vector of innovations. The individual influence of the co integrated variables can only be separated with an error correction mechanism through an error correction model as shown below.

The Error Correction Model

$$Equation\left[\eta_m INDOT_t = \alpha_1 + \sum_{i=2}^{p}\alpha_i\eta_m Z_t - \left(\lambda ECM_{t-i} + v_{4t}\right)\right] \ldots\ldots\ldots\ldots\ldots\ldots(6)$$

Where $-\lambda ecm$ is the error correction mechanism, $-\lambda$ is the magnitude of error corrected each period specified in its a priori form so as to restore $\eta_m logKF_t$ to equilibrium

Also the optimum lag length of the was determined using the multivariate versions of information criteria of Akaike's Information Criteria (AIC) and Schwarz's Bayesian Information Criteria (SBIC).

DIAGONISTIC TEST OF THE MODEL

Diagnostic test of the model were carried out using the coefficient of multiple determination, R^2 analysis of variance and Durbin Watson statistics

ANSWERING OF RESEARCH QUESTION

The research question was answered using the coefficient of the independent variables.

TEST OF HYPOTHESIS

The Hypotheses were tested at 5% level of significance using the coefficients of the independent variables and following the Rule: Reject the Null hypothesis if the tprob is less than 0.05, otherwise accept the Null hypothesis when tprob is greater than 0.05 i.e. Reject if tprob <0.05, Accept if tprob > 0.05

NORMALITY TEST

The Normality test procedure is conducted to ascertain the normality distribution of the error term of the variables under consideration. The decision rule that guide the test is stated as follows: If the probability of Jarque-Bera is less than 0.05 you conclude that the variables are not normally distributed or otherwise.

MULTICOLINEARITY TEST

This is one of the assumptions that must hold before applying OLS estimation. The multicolinearity test is calculated to ascertain the degree of relationship that exists between the dependent and independent variables. The decision rule that guide the test is stated as follows: if the correlation matrix shows a variable that have above 0.8 then there is multicolinearity in the model.

HETROSCEDATICITY TEST

This is one of the assumptions of random variable (Ut). it is used to test if the error term is constant over time.

The Stochastic equation for conducting the rest is stated as follows:

$Ut = \beta_0 + \beta_1 (CIT) + \beta_2 (PPT) + \beta_3(CET) + \beta_4(MCU) + \beta_5 (CIT)^2 + \beta_6(PPT)^2 + \beta_7(CET)^2 + \beta_8(MCU)^2 + Vt$……(7)

The decision rule that guide the test is stated as follows:

if the probability of f-statistics is less than 0.05 we conclude that there is hetroscedaticity in the model inclining that the error term is not constant. if the probability of f-statistics is greater than 0.05 we conclude that there is homoscedaticity inclining that the error term is constant.

METHOD OF DATA ANALYSIS

Ordinary least square method was used. It was chosen because of its qualities as the linear unbiased estimator.

SOURCE OF DATA

Data were sourced from the Central bank of Nigeria (CBN), Statistical Bulletin, and Annual Report and statement of Account of various Years and WDI

DATA PRESENTATION AND ANALYSIS

INTRODUCTION

To the model developed in chapter 3 data from CBN 2018 and World Bank Development Indicator 2018 for the year 1981 to 2018 were fitted using the ordinary least square method and E-views computer software. The computer outputs are exhibited in Appendix.

DIAGNOSTIC TESTS OF THE MODEL

Diagnostic test of the model were carried out using the coefficient of multiple determination, Analysis of variance and Durbin Watson statistics. The relevant results are stated in Table 4.1 below

TABLE 4.1: DIAGNOSTIC TEST RESULTS

TEST STATISTIC	VALUE
R^2	0.940272
Adjust R^2	0.933032
F- statistics	129.8755
Prob(F Statistic)	0.000000
D.W	1.031671

SOURCE: REGRESSION RESULT (SEE APPENDIX)

EXPLANATORY POWER OF THE MODEL

R^2, the coefficient of multiple determinations was used to test the explanatory power of the model and the goodness of fit. From the result R^2 adjusted for degree of freedom is 0.940272 (Table 4.1). This indicates that 94% of systematic variations in the dependent variable are explained by changes in the independent variables in the model. This level of explanatory power was considered satisfactory.

OVERALL SIGNIFICANCE OF THE MODEL

To test the overall significance of the regression, analysis of variance (ANOVA) is 129.8755 and prob (F-Statistic) is 0.000000. Testing the null hypothesis that the coefficients are equal to zero at 5% level of significance, we reject the null hypothesis since the probability f-statistics is less than 0.05 in each case. We therefore conclude that the independent variables have significant impact on the dependent variable in the model.

AUTO CORRELATION

The Durbin Watson (DW) Statistic was used to test the first order auto-regressive scheme. From the result (Table 4.1) D.W is 1.031671 and it is approximately to two. Testing the null hypothesis that the residuals are not auto-correlated with a first order scheme, we accept the null hypothesis of no autocorrelation in the model.

DIAGNOSTIC TEST: CONCLUSION

We conclude that the model developed for this study was adequate for the purpose judging by the explanatory power, the overall significance of regressions and the absence of autocorrelation.

ANSWERING OF RESEARCH QUESTIONS

The research questions were answered using the coefficients of the independent variables. The regression results are displayed in Table 4.2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2589.115	1177.421	-2.198972	0.0350
CIT	0.000128	0.000362	0.352843	0.7264
PPT	0.000111	7.06E-05	1.569646	0.1260
CET	0.015930	0.005005	3.182780	0.0032
MCU	2.67E-07	1.18E-07	2.272045	0.0297

SOURCE: AUTHOR'S ANALYSIS (SEE APPENDIX)

The result of the regression can be summarized in equation from as follows:

INDOT = --2589.115 + 0.000128CIT + 0.000111PPT + 0.015930CET + 2.67E-07MCU

S.E = (1177.421) (0.000362) (7.06E-05) (0.005005) (1.18E-07)

T_c = (-2.198972) (0.352843) (1.569646) (3.182780) (2.272045)

RESEARCH QUESTION

What is the impact of company income tax, petroleum profit tax, customs and excise duty tax, and manufacturing capacity utilization on industrial output in Nigeria?

From the regression result stated above (Table 4.2) company income tax, petroleum profit tax, customs and excise duty tax, and manufacturing capacity utilization has a positive impact on industrial output in Nigeria. This is shown by the positive coefficient of CIT, PPT, CET and MCU. In addition, for each unit change in CIT, PPT, CET and MCU (0.000128), (0.000111) (0.015930) and (2.67E-07) respectively of such change is transmitted to industrial output in the Country.

TEST OF SIGNIFICANCE (HYPOTHESES TESTING)

The significance test was tested for the significance of the independent variables at 5% level using t-prob, t-statistic and the coefficients of the independent variables. The rule applied was: if significant probability is greater than the prescribed level of 5% or 0.05 we accept the null hypothesis otherwise we reject the null hypothesis when significant probability is less than 0.05. The regression results are shown in the Table below.

TABLE 4.3: REGRESSION

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2589.115	1177.421	-2.198972	0.0350
CIT	0.000128	0.000362	0.352843	0.7264
PPT	0.000111	7.06E-05	1.569646	0.1260
CET	0.015930	0.005005	3.182780	0.0032
MCU	2.67E-07	1.18E-07	2.272045	0.0297

SOURCE: AUTHOR'S ANALYSIS (SEE APPENDIX)

To test the significant, the significant probability of CIT, PPT, CET and MCU, from the regression result (Table 4.3) is (0.7264), (0.1260), (0.0032), and (0.0297) respectively. Following the rule we reject the null hypothesis for CET and MCU since significant probability is less than 0.05 and accept the null hypothesis for CIT and PPT since significant probability is greate than 0.05, and conclude that CET and MCU has a significant impact on industrial output while CIT and PPT are not significant.

UNIT ROOT TEST
UNIT ROOT / STATIONARITY
The Unit Root test is conducted to ascertain the level of stationarity of the variables under consideration. It is conducted based on the following decision rule: If the absolute value of the Augmented Dickey Fuller (ADF) test is greater than the critical value, either at the 1%, 5% 0r 10% level of significant at the order zero, one or two, we conclude that the variables under consideration are stationary, otherwise they are not. For the variable under consideration the following values were obtained:

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INDOT /-3.952437/ = 3.952437 (at first difference).
CIT /-6.291179/ = 6.291179 (at first difference).
PPT /-6.013013/ = 6.013013 (at first difference)
CET /-5.233142/ = 5.233142 (at first difference)
MCU /-3.510582/ = 3.510582 (at first difference).
The critical value is calculated at the 5% level of significant. Decision: Since the absolute value of the variables under consideration is greater than the critical value of the 5% level of significant, we conclude that the variables under consideration are stationary.

Co-integration Test Result
A necessary but not sufficient condition for co-integrating test is that each of the variables be integrated of the same order. The Johansen co-integration test uses two statistics test namely: the trace test and the likelihood eigenvalue test. The first row in each of the table test the hypotheses of no co-integrating relation, the second row test the hypothesis of one co-integrating relation and so on, against the alternative of full rank of co-integration. The results are presented in table 4.4 below.

TABLE 4.4: Engel-Granger Co-Integration Test Result

ADF Test Statistic	-4.474500	1% Critical Value*	-3.6228
		5% Critical Value	-2.9446
		10% Critical Value	-2.6105

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 09/12/19 Time: 05:08
Sample(adjusted): 1983 2018
Included observations: 36 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-1.064795	0.237970	-4.474500	0.0001
D(RESID01(-1))	0.739186	0.199432	3.706451	0.0008
C	-32.61392	252.7137	-0.129055	0.8981

Source: Author's Analysis

The result above (TABLE 4.4), we conclude that the variables are co-integrated since the unit root test of the residual is stationary at level this shows that there is no long-run relationship between the variables in Nigeria.

SHORT-RUN ESTIMATE

The Error Correction Mechanism (ECM) was used to obtain the short-run estimate at 5% level of significance. The result from the ECM is presented in table 4.5 below.

TABLE 4.5 CORRECTION MECHANISMS

Dependent Variable: D(INDOT)
Method: Least Squares
Date: 09/12/19 Time: 05:09
Sample(adjusted): 1982 2018
Included observations: 37 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	400.2242	339.1974	1.179915	0.2470
D(CIT)	7.82E-05	0.000223	0.350798	0.7281
D(PPT)	0.000122	7.24E-05	1.683362	0.1024
D(CET)	-0.000950	0.008731	-0.108838	0.9140
D(MCU)	1.89E-07	1.64E-07	1.150135	0.2589
ECM(-1)	-0.280356	0.253632	-1.105366	0.2775

Source: Author's Analysis

From the result in TABLE 4.7 since the coefficient of the ECM(-1) which is negative we say that there is convergence.

MULTICOLINEARITY TEST

This is one of the assumptions that must hold before applying OLS estimation. The multicolinearity test is calculated to ascertain the degree of relationship that exists between the dependent and independent variables. The decision rule that guide the test is stated as follows: if the correlation matrix shows a

variable that have above 0.8 then there is multicolinearity in the model. However, from the result in the appendix, it was discovered that there is evidence of multicolinearity in the model though not a severe problem.

NORMALITY TEST

The Normality test procedure is conducted to ascertain the normality distribution of the error term of the variables under consideration. The decision rule that guide the test is stated as follows: If the probability of Jarque-Bera is less than 0.05 you conclude that the variables are not normally distributed or otherwise. However, from the result in the appendix, it was discovered that the variables are not normally distributed because the probability of Jarque-Bera is less than 0.05 in the model.

HETROSCEDATICITY TEST

This is one of the assumptions of random variable (Ut). it is used to test if the error term is constant over time. The decision rule that guide the test is stated as follows:

If the probability of f-statistics is less than 0.05 we conclude that there is hetroscedaticity in the model inclining that the error term is not constant. if the probability of f-statistics is greater than 0.05 we conclude that there is homoscedaticity inclining that the error term is constant. However, from the result in the appendix, it was discovered that there is evidence of hetroscedaticity inclining that the error term is not constant in the model, i.e 0.001439

DISCUSSION OF RESULT

The results shows that jointly company income tax, petroleum profit tax, customs and excise duty and manufacturing capacity utilization, has a significant relationship on industrial output but individually tested, it shows that,

Company income tax has a positive impact and no significant relationship on industrial output; this is not inline with the apriori expectation. The implication of this result may be corruption in the collection of tax especially organizations in the country. Some organization may not want to show the true position or profit of their company in so doing it affects the collection of true value of tax in those organizations.

Petroleum profit tax has a positive impact and no significant relationship on industrial output; this is not inline with the apriori expectation. The implication of this result may also be corruption in the collection of tax especially energy and gas sector in the country especially through illicit financial outflow and avoiding to show the true profit of the organization.

Customs and excise duty tax has a positive impact and significant relationship with industrial output; this is not inline with the apriori expectation. The implication of this result may be corruption in the collection of tax especially at the sea ports or borders. This perpetrated by the customs officials in conniving with the organizations bringing raw material or exporting their goods outside the shore of the country.

Manufacturing capacity utilization has a positive impact and significant relationship with industrial output; this is inline with the apriori expectation.

In conclusion the model was adequate judging by the joint test, the R^2 was also high it shows that the explanatory variables explained high magnitude of the dependent variable.

SUMMARY OF FINDINGS

The study examined the impact of taxation on industrial performance in Nigeria, using data from the period of 1981 to 2018 gotten from CBN statistical bulletin 2018 and WDI 2018. The findings of the study may be summarized as follows:

i. Company income tax has a positive and no significant impact on industrial output in Nigeria.
ii. Petroleum profit tax has a positive and no significant impact on industrial output in Nigeria.
iii. Customs and excise duty tax has a positive and significant impact on industrial output in Nigeria.
iv. Manufacturing capacity utilization has a positive and significant impact on industrial output in Nigeria.

CONCLUSION

The study examined the impact of taxation on industrial performance in Nigeria, from 1981 to 2018. Data were obtained from Central Bank of Nigeria (CBN) statistical Bulletin, Annual Report and Statement of Account for the year 2018 and WDI 2018 and fitted into a single linear model in which industrial performance is proxy by industrial output was the dependent variable and company income tax, petroleum profit tax, customs and excise duty tax, and manufacturing capacity utilization, served as the independent variables. However, from the result, jointly company income tax, petroleum profit tax, customs and excise duty and manufacturing capacity utilization, has a significant relationship on industrial output but individually tested, it shows that,

Company income tax and petroleum profit tax has a positive impact and no significant relationship on industrial output while customs and excise duty tax, and manufacturing capacity utilization has a positive impact and significant relationship on industrial output. It was concluded that, the success of fiscal policy in promoting industrial sector depends on the level of public revenue available, the direction of public expenditure and its implementation.

RECOMMENDATIONS

From the foregoing, we recommend as follows;

1. Expansionary policies on fiscal policy measures should be encouraged as they play vital role for the growth of the industrial sector output in Nigeria.
2. There is need to redirect fiscal policy measures towards making Nigeria a producer nation through industrial sector which in turn would lead to economic growth and development.
3. Government economic policies should be on diversification of the economy to enhance the performance of industrial sector, so as to create more employment opportunities, because it may be a more effective way of reducing the level of unemployment and increasing the growth of the economy.
4. Fiscal policy should be given more priority attention towards the industrial sector by increasing the level of budget implementation, which will enhance aggregate spending in the economy.
5. Consistent government implementation will contribute to the increase performance of industrial sector.

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