



EFFECTS OF ONLINE SYSTEM OF TAXATION ON ECONOMIC GROWTH IN NIGERIA (2005–2020)

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ABSTRACT: *This study carried out an empirical analysis of the effect of the online system of taxation on economic growth in Nigeria covering the period of 2005–2020. Data for the research was extracted from the Central Bank of Nigeria (CBN) Statistical Bulletin (2020). The multiple regression with the application of Ordinary Least Square (OLS) technique was employed in obtaining the numerical estimates of the coefficient in different equations (Pre-Online and Post-Online Tax Regimes). The One-Sample Test was employed to estimate the difference between pre-online and post-online taxation systems on economic growth in Nigeria. The major findings of the study revealed that pre-online tax revenue has a negative and non-significant effect on economic growth in Nigeria, post-online tax revenue has a positive and significant effect on economic growth in Nigeria, and there is significant difference between pre- and post-online tax revenue in Nigeria. It is the recommendation of the study that there should be stringent penalties imposed on any individual or corporate body who indulges in any form of tax malpractices, irrespective of states. If the positive impact of tax revenue on economic growth should be maintained, then the online tax system should be constantly reviewed so as to address emerging problems and to evolve with the changing economic landscape and increased complexity of today's business environment.*

KEYWORDS: Online System of Taxation, One-Sample Test, Pre-Online and Post-Online Tax Regimes.



INTRODUCTION

Nations worldwide need proper funding to carry out their governmental functions. Unfortunately, these governmental functions continue to increase over time due to the growing population of citizens and technological development. Abata (2019) explained that societal needs require a lot of resources that could not be accommodated solely by each society. One channel through which such funds are derived is taxation. Taxation is a salient and non-exhaustible source of revenue for the government. It mobilizes a nation's internal resources for the promotion of economic growth and development (Ibadin & Oladipupo, 2018). Awolo (2020) argued that taxation reflects a potent fiscal instrument that facilitates the reduction of private consumption and increases the investment and transfer of resources to the government for economic growth and development. To this end, the act or outcome of taxation is a tax that is collected for the purpose of providing for the citizenry.

Therefore, for a nation to develop politically, economically, and socially, it depends on the amount of tax revenue generated for the provision of infrastructure in that given nation. Therefore, tax facilitates resource reallocation and promotes social equity through wealth distribution. The import of all of these is the enhancement of economic growth and development. Therefore, a system of taxation is one of the most effective means of mobilizing a country's internal resources and creating an environment that helps to promote economic development in that country (Aderibigbe & Zachariah, 2019). Thus, it is obvious that a good tax structure plays numerous roles in the process of economic development of any country, and Nigeria is not an exception.

The Nigerian tax system is lopsided and dominated by oil revenue. However, it is clear that Nigeria's oil revenue can no longer adequately support her developmental objectives due largely to the serious fluctuations in the price of oil in recent years which has led to oil price volatility and a decrease in totally generated revenue by the government. According to the Presidential Committee on National Tax Policy (2017), the central objective of the Nigerian tax system is to contribute to the well-being of all Nigerians directly through improved policy formulation and indirectly through appropriate utilization of tax revenue generated for the benefit of the people. Therefore, the need for the government to generate adequate revenue from internal sources through tax has become a matter of extreme urgency and importance (Aguolu, 2014).

Over the years, the Nigerian tax system has faced so many challenges which have brought about inefficiency, an increase in administrative cost, and consistent low tax yield. Accordingly, the amount of revenue to be derived from the taxation of any nation is completely dependent on the tax system that is put in place. Prior to the introduction of e-tax payment system in Nigeria, billions of Naira traditionally vanished into the pockets of individuals annually and this was believed to be due to a manual system of tax administration characterized by low tax collection, unavailability of tax statistics and poor record-keeping, the complexity of payment, and poor technological exposure on the part of both the taxpayers and tax authorities (Nweke & Odom, 2019).

In the recent past, the international tax community has been encouraging the introduction of electronic tax (e-Tax) systems/platforms as part of technical assistance programs to modernize and strengthen tax administration. Today, the use of e-Tax platforms has spread from developed to developing countries considering the effectiveness, reduced compliance cost,



convenience, flexibility, and increased accountability that the platforms offer. A recent study shows that over 100 economies now use electronic tax systems. These e-Tax systems help reduce the time spent on paying taxes and filing tax returns (Silvanus, 2020). However, with the improvement in tax revenue engineered by the e-Tax payment, it is expected that economic growth should positively and significantly respond to this improvement. However, it is still seen that the economy of Nigeria is still as deplorable as it was before the introduction of the e-Tax payment system. This study is therefore motivated to compare the effect of pre and post e-Tax payment systems on the economic growth of Nigeria. This will help to find out the era that is most effective in promoting economic growth and development and hence, identify the factors behind their ineffectiveness.

LITERATURE REVIEW

Conceptual Issues

Taxation is a non-penal fee imposed by the government through its agent on the profits, income, or consumption of its subjects or citizens. It is also seen as a mandatory and obligatory payment given by people and organizations to defray government spending (Ehinomen & Adeleke, 2018). According to Okafor (2012), a tax is a charge made by the government on the income or wealth of a person or business entity for the benefit of all. The term does not include specific charges levied against a specific person or property in exchange for current or permanent benefits and privileges available only to those who pay such charges.

Similarly, Omotoso (2018) defines taxes as the transfer of actual economic resources from the private to the public sectors, in order to fund public sector operations. According to this definition, taxes is the transfer of financial resources from private economic agents such as households and corporations to the public sector, in order to support societal progress.

Therefore, a good tax structure plays multiple roles in the process of economic development of any nation, of which Nigeria is not an exception (Appah, 2019). Taxes can be structured into direct and indirect taxes. There are different components of direct taxation, which include the personal income tax, petroleum profit tax, company income tax, and educational tax. The different components of indirect taxation in Nigeria include Value Added Tax and Custom and Excise Duty.

Electronic Tax System

An electronic tax system, often known as an online tax system, is a computerized tax administration system that is specifically built to manage tax administration from taxpayer registration through payment processing and tax return submission. As a result, the use of information technology in the enforcement of basic tax operations such as online registration, online filing of tax returns, online payments, and general database maintenance resulted in what is now known as an electronic tax system. It is a procedure in which tax paperwork is filed through the internet, generally without the requirement for a paper return. The system encompasses the use of internet technology, the worldwide web, and software for a wide range of tax administration and compliance purposes (Muturi & Kiarie, 2015).



Economic Growth

Economic growth, in general scope, has been used to measure the rhythm of any country, and it is generally the sustained increase in a country's productive capacity, reflected in the growth of a nation's gross national product in a year over that of the previous year, and an increase in per capita national output or net national product over a long period of time (Inyiama & Ubesie, 2016). Economic growth, in a similar way, is the increase over time of a country's economic capacity to produce those goods and services needed to improve the well-being of the citizens in increasing numbers and diversity (Okwori & Sule, 2016). This implies that the rate of increase in total output must be greater than the rate of population growth, and this should satisfy the maximum want of the maximum number of people. Chigbu and Njoku (2015) maintained that economic growth represents an increase in the amount of goods and services produced over a specific period of time in a country. Economic growth has conventionally been measured in Real Gross Domestic Product (Jones & Ekwueme, 2016) which expresses an indication of quantitative improvements in a nation's economy.

Empirical Review

Ethel and Onuorah (2021) examined the effect of e-tax payments on revenue generation in Nigeria. The specific objectives of the study are to determine the effect of e-company income tax payment on revenue generation in Nigeria, and ascertain the effect of e-capital gain tax payment on revenue generation in Nigeria. The study applied secondary data obtained from the Federal Inland Revenue Service tax report and CBN Statistical Release and Quarterly Economic Reports. The data used were secondary and covered the period from the first quarter of 2012 to the second quarter of 2018. The data collected were analyzed using the Ordinary Least Square Method. The results show that e-company income tax payment has an insignificant positive effect on revenue generation in Nigeria at 5% level of significance. The positive effect means that an increase in company income tax payment will increase revenue generation in Nigeria, though the impact is statistically insignificant at 5%. On the contrary, e-capital gain tax payment has a negative impact on revenue generation and was statistically insignificant at a 5% level of significance. The negative effect means that a decrease in e-capital gain tax payment will decrease revenue generation in Nigeria, though the impact is statistically insignificant at 5%.

Ofurum, Amaefule, Okonya and Henry (2018) empirically examined the impact of E-taxation on Nigeria's revenue and economic growth. The study aimed at determining how the implementation of E-taxation in 2015 has affected tax revenue. Data were sourced through secondary means from Federal Inland Revenue Service and CBN statistical economic reports on a quarterly basis, from the second quarter of 2013 to the fourth quarter of 2016. Analysis of data was done through the use of paired sample t-test and simple regression. The findings of the analysis revealed that the implementation of electronic taxation has not improved tax revenue. It was recommended amongst others that the federal government through the Federal Inland Revenue Services should conduct more enlightenment seminars in all 36 states in the country to increase the knowledge on the use of all electronic services on their platform.

Olurankinse and Oladeji (2018) examined self-assessment, electronic taxation payment systems and revenue generation in Nigeria. The study population comprised 30 companies quoted in the Nigerian stock exchange. Pearson's product moment correlation coefficient statistical tool and regression analysis were used to test the hypothesis by the application of



SPSS Version 20.0. The results of the analysis indicated a positive and significant relationship between self-assessment and e-taxation payments systems and revenue generation in Nigeria.

Allahverd, Alagoz and Ortakapoz (2017) analyzed the impact of e-tax assessment framework on expense income and cost in Turkey. The examination utilized optional information obtained from the Turkish income authority; the pieces of information were inspected in two gatherings, which are pre-electronic duty time of 1993–2004 and post-electronic duty time of 2005–2016. Mann-Whitney U Test was utilized to dissect the information. The exploration additionally gave data on the electronic change of the assessment framework and the Turkish Tax System. As indicated by the observational consequence of the exploration, the progress to the electronic expense framework decidedly influenced the assessment incomes and diminished the expense per charge.

METHODOLOGY

Research Design

This study adopts *ex-post facto* design. The *ex-post facto* design was adopted on the basis that it does not provide the study an opportunity to control the variables mainly because they have already occurred and cannot be manipulated.

Area of Study

The thematic area of this study is to carry out an empirical investigation of the effect of the online taxation system on economic growth in Nigeria, covering the period 2005 to 2020. Tax revenue and other control variables were used as explanatory variables while Gross Domestic Product (GDP) was a measure of economic growth.

Source of Data

The study predominantly used a secondary source of data. These data were time series data collected using the desk survey approach from text books, journals, internet, CBN statistical bulletin and other relevant government publications. The study covers the period from 2005 to 2022.

Method of Data Analysis

In analyzing the data gathered, the regression model and One-Sample Test was employed to establish the effect of independent variables on dependent variables. The study made use of the economic approach in estimating the relationship between taxation and economic growth. The Ordinary Least Square (OLS) technique was employed in obtaining the numerical estimates of the coefficient in the different equations. The ordinary least square method was chosen because it possesses some optimal properties. Its computational procedure is fairly simple.



Model Specification

The model for this study is specified thus:

In implicit form, we have: $GDP = f(TAXR, INF, GEX)$

Transforming equation 3.1 into an explicit econometric form, we have:

$$GDP = \beta_0 + \beta_1 TAXR + \beta_2 INF + \beta_3 GEX + \mu$$

where:

GDP = Gross Domestic Product (Measure of Economic Growth)

TAXR = Tax Revenue

INF = Inflation

GEX = Government Expenditures

μ = The disturbance error term

$\beta_0, \beta_1, \beta_2, \beta_3$ = Structural parameters of the independent variables to be estimated

A priori expectation: $\beta_1 > 0, \beta_2 < 0, \beta_3 > 0$

Unit Root/Stationarity Test

The prerequisite condition in the time series analysis recommends a series to be stationary. Non-stationarity of time series data in most cases is considered as an issue in an empirical analysis as the use of a non-stationary series can bring about spurious regression. Therefore, the importance of unit root test cannot be over emphasized in determining whether the variables are stationary or not. This study therefore utilized the augmented Dickey and Fuller (1979) as well as the Phillips and Perron (1988) unit root tests for its analysis. The augmented Dickey-Fuller (ADF) consists of estimating the following equations:

$$\Delta \psi_t = \Omega \psi_{t-1} + \sum_{i=1}^p \beta_i \Delta \psi_{t-i} + \varepsilon_t$$

$$\Delta \psi_t = \alpha_0 + \Omega \psi_{t-1} + \sum_{i=1}^p \beta_i \Delta \psi_{t-i} + \varepsilon_t$$

$$\Delta \psi_t = \alpha_0 + \Omega \Psi + \beta_2 t + \sum_{i=1}^p \beta_i \Delta \psi_{t-i} + \varepsilon_t \dots \dots \dots 3.3$$

where: $\Omega = (\lambda - 1)$

The null hypothesis is $H_0: \Omega = 0$ and the alternative hypothesis is $H_a: \Omega < 0$.



Co-Integration Test

Following the unit root test, the next process is to estimate the long-run cointegration among electricity demand and manufacturing performance. This will be used to test if there exists a long-run relationship between the variables under investigation. The Johansen or Engel-Granger methodology will be used. The long-run equilibrium relationship is estimated with the following equation:

$$X_t = \alpha_0 + \alpha_1 Z_t + \varepsilon_t$$

If there is cointegration, α_0 and α_1 estimates reveal “super-consistent” estimators in the OLS regression. In this estimation, fitted values of ε_t series are tested for stationarity. In this analysis DF or ADF may be used. However, in hypothesis testing, critical values constructed by McKinnon (1991) are used. If this series is stationary, we can conclude that there is cointegration between X_t and Z_t . The fitted values of ε_t may be used as the error correction terms of the model.

Error Correction Model (ECM)

The error correction analysis is an econometric analysis carried out if the variables under investigation are seen to be cointegrated. The Error Correction Mechanism (ECM) was used to estimate the speed of adjustment of the short-run dynamics of the variables and timing to long run convergence.

Test for Goodness of Fit

This test involves the test of the goodness of fit. To evaluate the working hypothesis of this study, R^2 , the coefficient of determination, is used to test the explanatory power of the variable. R^2 lies between zero and one ($0 \leq R^2 \leq 1$). The closer R^2 is to 1, the greater the proportion of the variation in the dependent variables attributed to the independent variables.

T-Test of Significance

To test for the statistical significance of individual regression coefficient, t-statistic was used. A two-tailed test was conducted at 5% level of significance. The null hypothesis H_0 was tested against the alternative hypothesis H_1 .

F-Test of Significance

To test the statistical significance of the entire regression, the f-ratio is used. The test was conducted at 5% level of significance.

Note: t^* = computed t-value
 $t_{0.025}$ = tabulated t-value
 f^* = computed f-value
 $f_{0.05}$ = tabulated f-value



Autocorrelation Test

In order to avoid some of the pitfalls of the Durbin-Watson d-test of autocorrelation, the Breusch-Godfrey Serial Correlation LM Test will be used to carry out the test of autocorrelation.

Data and Sources

The data to be used in this study are time series secondary data on tax revenue, inflation, government expenditures and Gross Domestic Product (GDP).

Econometric Software for the Work

The software used in this research is the E-views version 10. The primary purpose of using this software is because the data for the study is secondary in nature.

RESULTS AND ANALYSIS

Unit Root Result/Analysis

To ensure the results of the analysis are not spurious, the variables were subjected to stationarity tests also known as unit-root tests. The Augmented Dickey Fuller (ADF) statistic was employed. The decision rule based on the ADF test is that its statistic must be greater than the Mackinnon Critical Value at 5% level of significance and in absolute terms. The results of the unit-root test are reported in Table 4.1 below.

Unit-Root Test Result

Table 1

VARIABLE	ADF STAT.	CRITICAL VAL.	ORDER
GDP	-2.216906	-1.098896	I(1)
TAXR	-3.957889	-3.098896	I(1)
INF	-3.968616	-3.098896	I(1)
GEX	-6.807288	-3.119910	I(1)

Source: Author's Computation Using E-views 10

Table 1 clearly shows none of the variables were stationary at level form. They were all made stationary at first difference. Hence, the variables are integrated at order one. This entails that estimating the regression with these different time series data will yield reliable coefficients.



Descriptive Statistics

Table 2

	GDP	TAXR	INF	GEX
Mean	78867.67	5411.769	11.57875	3686.084
Median	75903.25	5341.850	11.50000	3376.050
Maximum	152324.1	8879.000	18.55000	8121.640
Minimum	22884.90	2693.900	6.600000	1321.300
Std. Dev.	41103.51	1679.575	3.161299	1946.850
Skewness	0.341963	0.402520	0.429685	0.843147
Kurtosis	1.961651	2.586399	2.721323	3.043752
Jarque-Bera	1.030615	0.546103	0.544118	1.897001
Probability	0.597317	0.761054	0.761809	0.387321
Sum	1261883.	86588.30	185.2600	58977.34
Sum Sq. Dev.	2.53E+10	42314605	149.9072	56853383
Observations	16	16	16	16

Source: Author's Computation Using E-views 10

Table 2 shows the summary statistics of all the variables under study in their raw form. It shows the mean, maximum, minimum and standard deviations of all variables. The skewness, kurtosis and Jarque-Bera statistics of all variables shown in Table 4.2 fully indicates the true nature of the data series since the probability value of the Jarque-Bera statistics of all the series are shown to be greater than the acceptable 0.05 for GDP, TAXR, INF, and GEX indicating normality of the series. These average values were used in the determination of the contribution of each form of tax revenue to GDP. Their respective minimum and maximum values are equally shown indicating variations over the years for the respective series; this is further shown in the trends of GDP and each of the independent variables provided. The standard deviation values indicate the dispersion or spread in the data series. The higher the value, the higher the deviation of the series from its mean and the lower the value, the lower the deviation of the series from the mean.



Long-Run Cointegration Test

Table 3

Date: 04/13/22 Time: 06:04

Sample: 2005 2020

Included observations: 16

Trend assumption: Linear deterministic trend

Series: GDP TAXR INF GEX

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized	Eigen-value	Trace Statistic	Critical Value	Prob.**
None *	0.981458	93.80650	47.85613	0.0000
At most 1 *	0.840448	37.97835	29.79707	0.0046
At most 2	0.584102	12.28294	15.49471	0.1439
At most 3	3.81E-05	0.000534	3.841466	0.9835

Trace test indicates 2 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: *Author's Computation Using E-views 10*

The cointegration test was conducted to ascertain if the variables have a long-run relationship with each other. It can be clearly seen from Table 3 that the trace test indicates two cointegration equations at 0.05 level of significance. This entails that the variables have a long-run relationship or convergence with each other. This is a pre-condition for the estimation of the regression analysis.



Regression Analysis (Pre-Online Taxation System Era: 2005–2012)

Table 4

Dependent Variable: GDP

Method: Least Squares

Date: 04/13/22 Time: 06:13

Sample: 2005 2012

Included observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4047.415	9998.713	0.404794	0.7063
TAXR	-0.361951	1.463703	-0.247284	0.8169
INF	-418.4814	755.6010	-0.553839	0.6092
GEX	-18.99325	3.377581	-5.623329	0.0049
R-squared	0.946420	Mean dependent var	44891.13	
Adjusted R-squared	0.906234	S.D. dependent var	16857.47	
S.E. of regression	5161.958	Akaike info criterion	20.24287	
Sum squared resid	1.07E+08	Schwarz criterion	20.28259	
Log likelihood	-76.97149	Hannan-Quinn criter.	19.97497	
F-statistic	23.55137	Durbin-Watson stat	1.997681	
Prob (F-statistic)	0.005286			

Source: *Author's Computation Using E-views 10*



Numerical Coefficients

The regression result displayed in Table 4 clearly shows that the numerical coefficient of tax revenue in the pre-online dispensation yielded a negative value. This is shown to have yielded a negative numerical parameter of -0.361951. The meaning of this is that tax revenue in the pre-online era did not contribute positively to economic growth in Nigeria. It entails that the country was even at economic growth loss, subscribing to the offline system of tax administration. Hence, for a one percent increase in tax revenue in the pre-online era, the economic growth is lowered by 0.361951 percent and vice-versa.

Inflation (INF) and government expenditures which were used as control variables yielded negative values at the magnitude of -418.4814 and -18.99325 respectively. This also entails that in the pre-online taxation system era, government expenditures and inflation were not contributing positively to economic growth in Nigeria.

Coefficient of Determination (R-Squared)

The R-squared which measures the explanatory power of the independent variables yielded 0.946420. This entails that the explanatory power of the independent variable is strong and significant. It means that changes in the dependent variable (GDP) is significantly explained by the influences of the independent variables (TAXR, INF, GEX).

F-Test of Significance

The F-statistics yielded 23.55137 with a corresponding probability value of 0.005286. This entails that the test is statistically significant at the entire regression plane. It also entails that the joint influence of the independent variables is statistically significant.

Autocorrelation Test (Durbin-Watson)

The Durbin-Watson which yielded 1.997681 entails that the model is free from autocorrelation. This means that there is no problem of serial correlation of errors in the series. Hence, the numerical coefficients are reliable.

Heteroskedasticity Test

Table 5

Heteroskedasticity Test: Breusch-Pagan-Godfrey

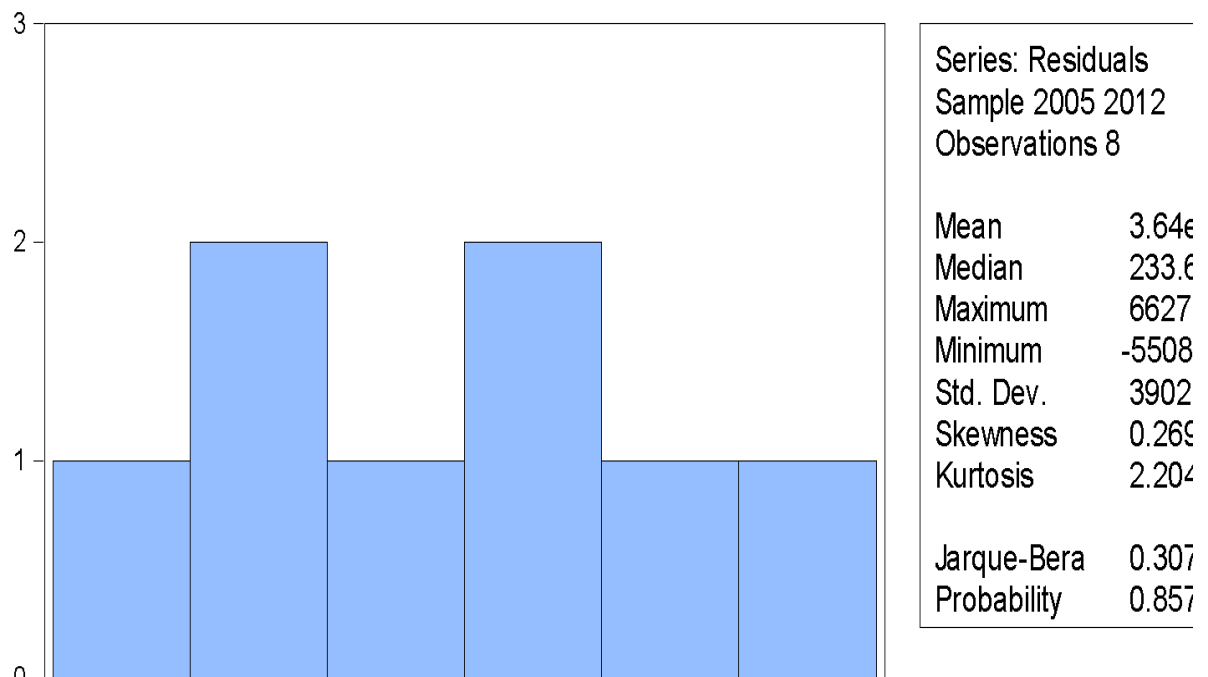
F-statistic	1.553276	Prob. F(3,4)	0.3318
Obs*R-squared	4.304777	Prob. Chi-Square(3)	0.2304
Scaled explained SS	0.648113	Prob. Chi-Square(3)	0.8853

From Table 5, it can be clearly seen that the F-statistics of the heteroskedasticity test yielded 1.553276. This entails that the model is homoskedastic. Hence, the mean and variance are constant overtime. This is desirable in a time series analysis.



Normality Test

Table 6



Source: Author's Computation Using E-views 10

Table 6 above clearly shows that the Jarque-Berra yielded 0.307825 with a probability value of 0.857347. Since the probability value is greater than 0.05, we accept the null hypothesis which states that the residuals are normally distributed. Hence, residuals of the model are normally distributed.



Regression Analysis (Post-Online Taxation System Era: 2013–2020)

Table 7

Dependent Variable: GDP

Method: Least Squares

Date: 04/13/22 Time: 06:53

Sample: 2013 2020

Included Observations: 8

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.86350	1.816262	5.981243	0.0039
TAXR	0.000406	0.197869	0.002052	0.0085
INF	0.009827	0.017403	0.564673	0.6025
GEX	0.000124	2.08E-05	5.977639	0.0039
R-squared	0.928044	Mean dependent var	11.61001	
Adjusted R-squared	0.874077	S.D. dependent var	0.232619	
S.E. of regression	0.082546	Akaike info criterion	-1.844062	
Sum squared resid	0.027256	Schwarz criterion	-1.804341	
Log likelihood	11.37625	Hannan-Quinn criter.	-2.111963	
F-statistic	17.19649	Durbin-Watson stat	2.016116	
Prob (F-statistic)	0.009472			

Source: *Author's Computation Using E-views 10*

Numerical Coefficients

The regression result displayed in Table 7 clearly shows that the numerical coefficient of tax revenue in the post-online dispensation yielded a positive value. This is shown to have yielded a positive numerical parameter of 0.000406. The meaning of this is that tax revenue in the post-online era contributes positively to economic growth in Nigeria. It entails that the country is at an advantage in terms of tax revenue collection and generation and potentials in boosting economic growth unlike the offline system of tax administration. Hence, for a one percent increase in tax revenue in the post-online era, there is a higher economic growth by 0.000406 percent.

Inflation (INF) and government expenditures which were used as control variables yielded positive values at the magnitude of 0.009827 and 0.000124 respectively. This also entails that in the post-online taxation system era, government expenditures and inflation are contributing positively to economic growth in Nigeria.



Coefficient of Determination (R-Squared)

The R-squared which measures the explanatory power of the independent variables yielded 0.928044. This entails that the explanatory power of the independent variable is strong and significant. It entails that 92.8% of the variations in GDP is significantly explained by the influences of the independent variables (TAXR, INF, GEX).

F-Test of Significance

The F-statistics yielded 17.19649 with a corresponding probability value of 0.009472. This entails that the test is statistically significant at the entire regression plane. It also entails that the joint influence of the independent variables is statistically significant.

Autocorrelation Test (Durbin-Watson)

The Durbin Watson which yielded 2.016116 entails that the model is free from autocorrelation. This means that there is no problem of serial correlation of errors in the series. Hence, the numerical coefficients are reliable.

Heteroskedasticity Test

Table 8

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.554426	Prob. F(3,4)	0.6722
Obs*R-squared	2.349562	Prob. Chi-Square(3)	0.5031
Scaled explained SS	0.317337	Prob. Chi-Square(3)	0.9567

From Table 8, it can be clearly seen that the F-statistics of the heteroskedasticity test yielded 1.554426. This entails that the model is homoskedastic. Hence, the mean and variance are constant over time. This is desirable in a time series analysis.

One Sample T-Test

Table 9

Variable	Mean Value
Pre-Online Tax Revenue	2231.665
Post-Online Tax Revenue	3887.113

Probability Value = 0.000

From Table 9, it can be clearly seen that the mean value of pre-online tax revenue yielded 2231.665 while post-online yielded 3887.113. This shows that the tax revenue in the post-online dispensation is greater than the pre-online era. This shows a clear difference of 1655.448.



CONCLUSION AND RECOMMENDATION

The effect of the online taxation system on economic growth in Nigeria between 2005 to 2020 has been achieved in this study. However, to achieve the aforementioned aim, the researcher divided the study into two eras (pre-online and post-online taxation systems). Based on the findings of the study, the researcher therefore concludes that the post-online tax era is most preferred as compared with the manual system of tax revenue generation that was accompanied by unattended problems.

RECOMMENDATIONS

Based on the findings and conclusions of this study, the following recommendations are made:

1. Proper monitoring and control of the system must be put in place, such as collection of relevant information about users in order to evaluate usage and address challenges faced, and also provision of data validation mechanisms as is the case with smart systems.
2. There should be stringent penalties imposed on any individual or corporate body who indulges in any form of tax malpractice irrespective of states, if the positive impact of tax revenue on economic growth is maintained.
3. The online tax system should be constantly reviewed so as to address emerging problems and to evolve with the changing economic landscape and increased complexity of today's business environment.
4. Tax incentives should be granted to online tax users in order to encourage taxpayers in adopting the system as well as ensure compliance.

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