VALUE ADDED TAX AND ECONOMIC DEVELOPMENT IN NIGERIA

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Abstract
Motivated by the dwindling revenue to the Nigeria federal government, the study evaluated the implication of value added tax on economic development in Nigeria over the period of 1994 to 2020. The study employed the stationarity test and the ordinary least square. All variables attained stationarity at level as a result of the loglinear standardization employed. The study observed from analysis that while Value Added tax revenue displayed a positive and significant influence on Inflation, which means that higher value added tax tends to fuel inflation, a negative and significant influence can be seen in the light of value added tax and human development index, which shows that VAT retards the level of economic development in the nation. Based on these observations, the study recommended that; public authority should review the value added tax rate to a significant extent from its stale 5%. Public Authority should ensure to embrace strategies that will help to maintain adequacy of accounting procedure in the tax system in order to spur VAT efficiency. Government should increase the number of Value Added Tax agencies in the country to boost Value Added Tax productivity.

Introduction

Every modern state or nation requires a lot of revenue to be able to provide and maintain essential services for its citizen. One ready means of revenue for the government is through the imposition of tax. The imposition of tax by the government is not a new phenomenon. There is hardly any government today that does not rely on taxation (Wuyah, Aku, & Ahmad, 2018). However, apart from the complications that has crept into the taxation system in modern times, the reason for the imposition of tax in fact ceased to be only for the generation of revenue for the state. It has also become the avenue for the redistribution of wealth and re-adjustment of the economy (Ogunmakin, Adebayo, & Ojo, 2021).

Recently, Sarwar, Streimikiene, Waheed, Dignah, and Mikalauskiene (2021) observed that taxation has a rich and colourful background and is almost as old as man, there are quite a number of definitions of tax or taxation depending on the qualities it possess. In that vein, taxation is the process or machinery by which communities or group of persons are made to contribute, in some agreed quantum and method for the purpose of the administration and development of the society (Ocheni, 2018).

One of government major forms of improving internally generated revenue is the Value added tax known also as VAT, According to Nwonyuku (2021), this is a tax on the supply of goods and services which is eventually borne by the final consumer, but collected at each stage of the production and distribution chain. Olaoye (2009) revealed that Value added tax was first introduced by France in 1954; it has since been embraced by well over seventy countries all over the world. These include the entire organization for economic cooperation and development of countries, Japan, Canada, Michigan in USA and many African countries Nigeria inclusive (Afolayan, Okonkwo, & Okaro, 2021).

Abimbola, Bola, and Timothy (2021) emphasized that Value Added Tax (VAT) in Nigeria of today replaced the existing sales tax which had been in operation under Federal Government, legislated Decree NO 7 of 1986 but which was operated on the basis of residence. Apart from the high revenue generation capacity of Value Added Tax, because it is consumption tax, it is not easy to avoid nor evade as it is being done easily with other taxes. The introduction of Value Added Tax (VAT) in 1994 was one of the means of re-organizing the Nigerian economic system. Evidence so far supports the view that Value Added Tax is already a significant source of revenue in Nigeria. For instance, Value Added Tax revenue in the year of its inception (1994) was N8.194 billion, which was 36.5 percent greater than the projected N6 billion for that year (Bank-Ola, 2021).

Obaretin (2020) observed that Scholars have observed that value added tax has become a major source of revenue in Nigeria ever since its introduction in Nigeria in the year 1991 and its effective operation in 1994 on the 1st of January. However, others have criticized the regressive nature of value added tax.

Orisadare and Fasoye (2022) explained that Value Added Tax revenue is generated for distribution to the state and local government in Nigeria. Unlike the oil revenue whose market government has no control over. This helps to reduce over dependence on oil revenue, this assures a sustainable economic development and development. While the performance of Value Added Tax as a source of revenue in Nigeria is encouraging, it means difficult to find attempts to systematically assess the impact on Value Added Tax on the economy, Therefore Recent research work on the impact of taxation on the Nigeria economy impact upon all the various taxes together without isolating Value Added Tax. How and in what direction Value Added Tax has been affecting the Nigeria economy? And the relationship of Value Added Tax on economic development?

It thus becomes imperative to recognize the potential value of value added tax and its effect on economic development in Nigeria by giving clearer and simplified insight into the implication of value added tax on revenue generation in Nigeria and to examine its empirical impact on economic development in Nigeria so as to provide reasonable solutions and recommendations that will be geared to reveal the benefit of Value Added Tax in Nigeria macro economy.

As a point of departure, attention needs to be brought to the fact that only a handful of empirical works on the subject exist in the context of the Nigerian economy. Ajakaiye (1999) undertook the most detailed study in Nigeria, including an extensive investigation of the impact of VAT on key sectoral macroeconomic aggregates, by using a Computable General Equilibrium (CGE) model of the Nigerian economy. Unfortunately, the study was carried out when VAT was only six years old in Nigeria, too early to get reliable conclusions on its impact on other macroeconomic aggregates. Besides, from 1994 to date, the economic environment in Nigeria has undergone a number of changes. Also, related variables such as Value added Revenue were overlook in other work and the other related literatures failed to employ adequate statistical techniques and relied majorly on theoretical and investigative work, this study thus intends to carry out an up to date and empirical work on the topic at hand

Statement of the Problem

Given the recent clamour to increase value added tax from 5% to 7.5%, there has been renewed emphasis to evaluate the implication of this direct form of tax on development level in Nigeria. Obaretin (2020) emphasized that one of the recurrent problems of the three-tier structure of the government in Nigeria is dwindling revenue generation as characterized by yearly budget deficits and insufficient funds for economic development and development.

The primary problem as observed by Orisadare and Fasoye (2022) is that the willingness to pay tax, which may depend on the other aforementioned issues in tax-revenue generation, remains a key taxation-challenge in Nigeria. In the ease of tax payment, evidence from the World Bank Business Report 2019 and 2020, show that Nigeria ranked 109 and 138, respectively, out of 183 countries; in Sub-Saharan Africa (SSA), it ranked 27 out of 46 countries. This result is poor, despite some improvements the government has made to the tax system in the recent past.

In Nigeria, despite the fact that Value Added Tax was introduced by the federal government as an instrument to generate additional revenue. Yet, most prominent Nigerians and interest groups had spoken against its introduction. It would appear that VAT is laddered with some problems. After its adoption into the Nigeria tax system, it has become a controversial issue that generates debate among several authors like Ocheni (2018) that the purpose of introducing value added tax as one of the methods of taxation in Nigeria economy has not yet known.

The uncommon nature of this tax system makes majority of the populace unaware of its existence which makes people scorn the payment and its collection. The lack of adequate trained personnel, mobility to reach remote areas, low level of literacy as well as poor social or political climate which hinders effective administration of this tax, Furthermore, there is the fear about the ability of the Federal Inland Revenue Service (FIRS) to administer VAT judge from their performance of administering personal income tax and other relevant tax over the years (Nwonyuku, 2021).

The major problem affecting value added tax and economic development in Nigeria according to Okoye and Gbegi (2013) is the cost of collecting tax in Nigeria (both social and economic cost) is too high to the extent that, if left unchecked, the cost may soon outweigh the benefit or value derived from such operation and that will not be appropriate for the system. The government spends more to realize a miserable pittance. The rate of corruption on the part of tax officials is alarming as most of them connive and collude with supposed-tax- payer to evade and avoid tax. Sometimes, the tax officials are not properly trained on the modern ways of tax administration. The inadequate social infrastructures in Nigeria call for attention as to how tax revenue generated is to be expanded and accounted for, especially where those in authority continue to spend these hand-earned resources with reckless abandon.

Also, the averagely poor people spend a large portion of their income on purchases some of which carry VAT. More over in Nigeria the revenue from VAT is routinely shared out according to agreed percentages while not a lot of research has been done to determine the effects(s) of this new revenue source on some aspects of the economy (Sanwar et al., 2021). This paper is therefore to investigate VAT contribution especially to economic development.

Theoretical Framework

This study at hand reviews the following theories on Taxation (VAT) such as The Theory of Laffer Curve and The Khaldun's Theory of Taxation, Benefit Received Theory, Socio-political theory, expediency theory and Economic development theories.

Theory of Laffer curve

This theory was propounded by Professor Arthrun Laffer; the theory explains the theoretical representation of the relationship between government revenue raised by taxation and all possible rates of taxation. The theory demonstrated with a curve (i.e. the laffer curve) which was constructed through experiment. It considers the amount of tax revenue raised at the extreme tax rate of 0% and 100%, he concluded that a 100% tax rate raises no revenue in the same way that a 0% tax rate raises no revenue. This is because, at 100% rate, there is no longer incentive for a rational taxpayer to earn any income, thus, the revenue raised will be 100% of nothing. It follows that there must exist at least one rate in between where tax revenue would be a maximum. Laffer attributes the concept to Ibn Khaldun and Keynes J.M. one potential result of this theory is that, increasing tax rate beyond a certain point will become counter-productive for raising further tax revenue because of diminishing returns (Wuya et al., 2018).

Revenue Productivity Theory

The importance of taxation in revenue generation cannot be overemphasized. Authorities on finance based their arguments principally on this as an important criterion used to judge a good tax. The two aspects of revenue productivity agree that the tax base must be large enough and that the cost of operating the tax system must below the revenue it generates. Adam Smith also argued that it made little sense to institute a tax system in which the cost of collecting the tax is higher than the realized tax revenue. Others like, David Ricardo and J.S Mills emphasized this prominence by putting revenue first in their division of public finance into three namely; "revenue, expenditure and public debt". The major essence of introducing VAT was to raise revenue; the law setting up VAT affirms this position. (Afolayan et al., 2021) called it the look-inward approach. This is another important criterion used to judge a good tax. The two aspects of revenue productivity agree that the tax base must be large enough and that the cost of operating the tax system must be low (Bank-Ola, 2021).

In furtherance of the economic principle, the revenue productivity theory agrees that it makes little sense to institute a tax system for which the cost of collection is higher than the realized tax revenue. The theory further emphasizes the aspects of having a large enough tax base to cover at minimum cost and stresses an efficient tax administration so as to enforce compliance. (Singh, 2019).

Socio political theory: The theory propounded by Wagner (1999), advocates that tax system should not be designed to serve individuals, but should be used to cure the ills of a society as a whole. Hence, they stated that social and political objectives should be the major factors in selecting taxes and each economic problem should be looked at in its social and political context and appropriate solution found thereof. This theory maintained that the essence of tax is to bridge the gap between national development needs and funding of the needs. Besides, taxes are found to be unable to achieve macro objectives except when re-engineered. This implies that taxes are designed as a strategic option to cure the ills of the society thereby improving the economic development of the state and the whole nation at large (Agbo & Nwadialor, 2020).

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 (Nwonyuku, 2021).

Empirical Review

Few empirical works exist on the subject of VAT especially in developing countries amongst them is included the following.

Orisadare and Fasoye (2022) examined the effect of VAT on economic development in Nigeria between 1994 and 2020 using consumer price index (CPI) as a threshold. A technique of Threshold Vector Autoregressive (TVAR) was employed and the results reveal that a VAT above the 10 percent threshold value endangers the economy while a VAT below the 7.59 percent threshold value does not harm the economy; rather, it improves people's well-being. It is therefore recommended that Nigerian economy should maintain the lower VAT threshold to cushion the effect of ever rising CPI on the citizens.

Abimbola Ayodeji, Bola Olatunbosun Aroyewun, and Timothy Adisa Soetan (2021) investigated the relationship between Value Added Tax (VAT) and economic development in Nigeria from 2004 to 2018. Secondary data obtained from both Central Bank of Nigeria statistical bulletin and National Bureau of Statistics (NBS) were used for the study, while regression analysis was used to analyze the data obtained. The results showed a positive and significant relationship between values added tax and economic development in Nigeria. The study recommends that value added tax (VAT) should be sustained and all identified loopholes should be covered for VAT revenue to continue to contribute more significantly to economic development in Nigeria.

Bank-Ola (2021) examined the impact of value added tax on economic development in Nigeria from 1999 to 2019.

The Auto-Regressive Distributed Lag (ARDL) model were employed using time series data. The result of the analysis in the short run, shows that VAT has a negative and significant effect on economic development whereas in the long run, the effect was positive but insignificant on economic development. Inflation also has a significantly positive effect, whereas interest rate has a significantly negative effect on economic development in the long run. The study concludes that in the long run, a positive relationship exist between value added tax and economic development in Nigeria. Hence, the Nigerian government should implement policies geared towards ensuring a stable and sustainable value added tax rate and administration through accountability, transparency and blockages of leakages in the system in order to thrive the nation's economy and bring about improvement in government revenue, thereby leading to infrastructural development in the country and ultimate growth in the economy.

Afolayan, Okonkwo, and Okaro (2021) assessed the effect of an increase in VAT rate on inflation rate in Nigeria; and the relationship between Value Added Tax and Nigeria's total debt outstanding. The work hypothesized that: VAT rate increase would not significantly cause a change in inflation rate in Nigeria; and there is no significant relationship between VAT revenue and Nigeria's total debt outstanding. The study adopted the ex post facto research method using a regression technique (Koyck Model) which rides on adaptive expectation hypothesis. Data were sourced from Federal Inland Revenue Services (FIRS) and Central Bank of Nigeria (CBN) statistical bulletins. The findings showed that increase in VAT rate does not guarantee more revenue that will bring about significant reduction in government borrowing but could worsen inflation rate in Nigeria. The paper concluded that general paucity of patriotism among citizens tend to frustrate even seeming good policies of the government. The government should have the political will to entrench culture of transparency and accountability; impose VAT on foreign goods that have local substitutes, and all luxury goods; work towards institutionalizing the tax institution such that no person should influence the tax policies selfishly.

Sarwar, Streimikiene, Waheed, Dignah, and Mikalauskiene (2021) evaluated the effect of the recent introduction of value added tax (VAT) and Vision 2030 on the economy of Saudi Arabia. To check this, those variables are added to the analysis which contribute to economic development including labor, capital, oil price, financial development, and trade openness to examine that how economic transformation affects the role of these variables in economic development. According to the vector error correction (VEC) model, the impact of labor becomes negative after VAT, however, the impact of capital and financial development becomes significant by this transformation. The coefficients of oil prices, for positive and negative shocks, are significant and negative. Financial development and trade openness are reporting surprising results; positive shocks have shown negative coefficients. However, after Vision 2030, trade openness has a significant and positive coefficient. Policy implications include diversification of exports, reviving the private financing mechanism and restructuring the export/import policies.

Ogunmakin, Adebayo, and Ojo (2021) examined VAT and minimum wage in Nigeria: implications on government revenue and the living standard of the Nigerian workers. It was a qualitative study; hence, analysis was based on the available literature. Based on the findings, it was concluded that increase in VAT rate will undoubtedly reduce consumer patronage of disposable items of Nigerian worker and therefore will affect their purchasing power. Therefore, the intended benefits of the new minimum wage are defeated. Thus, it recommended that small businesses with a threshold of about N10m should be exempted from VAT. The government, through the appropriate agencies, should ensure a thorough supervision of how government revenues are utilized and how expenditures are controlled. This might avail the government-needed revenue to defray its expenditures. Also, the business environment should be made friendly to investors. This might engender the establishment of more companies through which tax revenue will be increased.

Nwonyuku (2021) discusses major provisions of the contemporary Value Added Tax Act and the need for the Pharmaceutical Society of Nigeria to comply with them in order to achieve effective public healthcare delivery. It is the assertion of this paper that, since the focus of pharmacy practice is on achieving effective healthcare delivery through technological revolution, and it takes raising public fund to attain it, hence, complying with the tax laws in Nigeria will effectively contribute towards making the dreams come true. This paper firmly abreast to the fact that pharmaceutical companies that are tax compliant also tend to be World Health Organization compliant.

Thus, a nexus does exist between Value Added Tax Act compliance and attaining technological revolution in pharmaceutical practice in Nigeria. It is as against the backdrops that this paper purports to encourage Value Added Tax Act compliance in pharmaceutical practice in Nigeria, which would in turn, optimize tax revenue collection and voluntary compliance that can make taxation the pivot of national healthcare development. The paper employs secondary model of data collection and recommends the need to introduce taxation as a mandatory part of citizenship education in Pharmacy and other related medical courses at tertiary institution in Nigeria.

Obaretin (2020) examined the impact of Value Added Tax on economic development in Nigeria for the period 1994 to 2018. The study employed a longitudinal research design. The data used in the study were generated from the office of the Federal Inland Revenue Service, and United Nation Data bank and the data generated were analyzed using the Auto-Regressive Distribution (ARDL) regression estimation technique. The result from the finding unveils that VAT has a positive and significant impact on economic development in Nigeria. The study recommended that Government should ensure that the revenue that is generated from VAT is expended on projects that will impact on the citizens of the country and regularly tax audit should be carried out on registered VAT collectors to ensure that the tax collected is remitted to the appropriate authority.

Nwafor (2010) carried out a work on the effect on VAT on the Nigeria economy 1997 to 2007 using regression analysis. The empirical result of her Hypothesis shows that VAT has a significant positive effect on Nigeria economy as well as on the consumption patterns of Nigeria. Her work also showed that VAT has contributed significantly to the increase standard of living in the Nigeria economy. Evidences from her result also showed that there is no significance different between inflation rate before the introduction of VAT and after the introduction of VAT. However, she therefore argued that the introduction of VAT in the Nigeria economy has contributed significantly to increase Economic development and increased standard of living.

Methodology

Research Design: For the purpose of this study, The Ex-post facto research design is utilized which is an aspect of the quasi-experimental research design as it seeks to evaluate the relationship between the employed variable using historical data. The population of this study entails all economic activities related to taxation (Value Added Taxation) and Economic development in Nigeria at the national level with a reference to the population (Per capita).

Sample Size: The sampling size for this study entails the extracted variable is made up of the Value added tax revenue, coupled with the Economic development Measures which houses the human development index and Inflation of the nation (transmission mechanism) over the time period of 1994 to 2020.

Data Collection Method: The study employed secondary time-series data. Which is collected from Central Bank of Nigeria (CBN) statistical bulletin, Federal office of statistic, Federal Inland Revenue Service annual statements. The data is collected is time series as it spans over a period of time (1994 - 2020).

Model Estimation

The main aim of this study is to examine the influence of Value Added Tax and Economic development in Nigeria. The model follows the classical linear regression model (CLRM)

$INF_t = f(VREV_t)$ -- (3.1)

$HDI_t = f(VREV)$ -- (3.2)

Converting to econometric form by the introduction of the constant term (α0) and error term (μ)

$INF_t = \alpha 0 + \alpha 1 VREV_t + \mu_t$------------------------------ (3.3)

$HDI_t = \beta 0 + \beta_1 VREV_t + \mu$------------------------(3.4)

Where:

INF	=	Inflation Rate
HDI	=	Human development index
VREV	=	Value Added Tax Revenue
α_0	=	Constant Term
α_1, α_2	=	Coefficients of Predictors
μ	=	Error Term/White Noise
t	=	time series

Operational Measures of Variables

Human development index (HDI): measured using the summary average achievement in key dimensions of human development: life expectancy for health, expected years of schooling, mean of years of schooling for education and Gross National Income per capita for standard of living..

Inflation (PCI): Inflation or average income measures the average income earned per person in a given area, measured as a unit.

Value Added Tax Revenue (VAT): This entails all quantitative record of Value Added Tax collected over the years in the nation, Measured in Millions of Naira, and expected to exhibit a positive theoretical association to the measures.

Results and Discussion

Unit Root Test (Augmented Dickey Fuller)

Due to the underlying shocks inherent in time series variables, and also shocks that could be found in the error terms (other variables not captured by the model), we therefore intend to capture the stationarity of the employed variables, since a stationary variables is useful in forecasting and predicting and has a great possibility of the effect of shock to die out gradually, while non-stationary data are not suitable for long run test.

Table 2: Results of Stationarity (Unit Root) test:

Variable	ADF T-statistics At Level	Probability Level	Order of Integration
INF	-4.578579***	0.0006	I(0)
HDI	-5.354184***	0.0000	I(0)
VREV	-5.214372***	0.0004	I(0)

Source: Extracted from Eviews-12.

Going by the respective test critical values of level, it can be identified that all variables are stationary at the level I(0) showing a great level of integration amongst variables. Table 2 also goes to show that employed data possess trends capable of being used for analysis in their original value, this parameter therefore leads to the ordinary least square test.

Multiple Regressions (Ordinary Least Square)

The multiple regression was carried out using the Ordinary Least Square regression tool, as it is the best unbiased linear regression estimator.

Table 3: Model 1 - Ordinary Least Square Output

Dependent Variable: INF
Method: Least Squares
Date: 01/25/22 Time: 09:27
Sample: 1994 2020
Included observations: 27

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	38512.47	1589.195	24.23395	0.0000
VREV	43.38263	19.17633	3.486912	0.0003
R-squared	0.745997	Mean dependent var		55937.93

Adjusted R-squared	*0.739997*	*S.D. dependent var*	*15410.37*
S.E. of regression	*3774.852*	*Akaike info criterion*	*19.44167*
Sum squared resid	*2.56E+08*	*Schwarz criterion*	*19.59089*
Log likelihood	*-201.1376*	*Hannan-Quinn criter.*	*19.47406*
F-statistic	*157.6581*	*Durbin-Watson stat*	*1.999214*
Prob(F-statistic)	*0.000000*		*0.000000*

Source: Eview-10 Output (Authors Computation).

From the output above in Model I, it can be observed that the coefficient of the constant (C) is 38512.47, which signifies that if all other variables are kept at a constant or zero, the criterion variable Inflation will decrease by approximately 38512.47 units, which shows a high rate of positive expression by the economic output of Nigeria as it tends to increase regardless of the minute movement and characteristics of the employed predictor variables as relating to Value Added Tax. The predictor variable adhered to the a priori expectation as it displayed a positive movement with the criterion variable.

The R-square (Coefficient of Determination) shows an explanation of 0.945997 percent of the employed model, i.e., 94.60 percent of the variance of the criterion variable is explained by the predictor variable. Which shows how well fitted the regression is based on the unique theoretical combinations of variables. While the remaining 05.40% is captured by other variables not included in the model i.e. the error term.

The adjusted R-square an extension of the coefficient of determination which takes to cognizance corrections for the variables employed shows a slight reduction to 0.739997 signifying approximately 74%, which still shows a good measure of success of the regression in predicting the values of the criterion variable.

All standard errors are minimal with the highest being the constant standard error of 1589.195 (C) while the lowest being 29.17633 (VREV) for Value Added Tax Revenue.

The Durbin-Watson being a test for auto/serial correlation shows an output of 1.999214 which signifies an absence of serial or autocorrelation of the residual (error term).

The F-statistics testing the overall hypothesis of the slope coefficient displays a very significant short run relationship based on the probability output of 157.6581 at a probability level of 0.000000 which is less than the critical value of 0.05 (0.00 < 0.05). Therefore, we reject its null hypothesis and accept the alternate that there is a significant (short-run) relationship between employed variables.

Model 2 - Ordinary Least Square Output

Dependent Variable: HDI
Method: Least Squares
Date: 01/25/22 Time: 09:43
Sample: 1994 2020
Included observations: 27

Variable	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.*
C	*-13607.05*	*6871.277*	*-1.980280*	*0.0632*
VREV	*-203.0929*	*96.10511*	*-2.609918*	*0.1248*

R-squared	*0.757011*	*Mean dependent var*	*4772.340*
Adjusted R-squared	*0.685567*	*S.D. dependent var*	*19309.88*
S.E. of regression	*16321.51*	*Akaike info criterion*	*22.36992*

Sum squared resid	*4.80E+09*	*Schwarz criterion*	*22.51914*
Log likelihood	*-231.8841*	*Hannan-Quinn criter.*	*22.40230*
F-statistic	*4.997119*	*Durbin-Watson stat*	*1.865194*
Prob(F-statistic)	*0.001878*		

Source: Eview-10 Output (Authors Computation).

From the output above in Model 2, it can be observed that the coefficient of the constant (C) is -13607.05, which signifies that if all other variables are kept at a constant or zero, the criterion variable Human development index will decrease by approximately -13607.05 units, which shows a high rate of negative expression by the human development index in Nigeria as it tends to increase regardless of the minute movement and characteristics of the employed predictor variables as relating to Value Added Tax.

It can be seen from above that the Value Added Tax Revenue (VREV) displays a negative increment, going against the a priori expectation. The R-square (Coefficient of Determination) shows an explanation of 0.757011 percent of the employed model, I.e. 75.70 percent of the variance of the criterion variable is explained by the predictor variable. Which shows how well fitted the regression is based on the unique theoretical combinations of variables. While the remaining 24.30% is captured by other variables not included in the model i.e. the error term.

The adjusted R-square an extension of the coefficient of determination which takes to cognizance corrections for the variables employed shows a slight reduction to 0.685567 signifying 68.56%, which still shows a good measure of success of the regression in predicting the values of the criterion variable.

All standard errors are minimal with the highest being the constant standard error of 6871.277 (C) while the lowest being 126.1511 (VREV) for Value Added Tax Revenue. The Durbin-Watson being a test for auto/serial correlation shows an output of 1.865194 which signifies an absence of serial or autocorrelation of the residual (error term).

The F-statistics testing the overall hypothesis of the slope coefficient displays a very significant short run relationship based on the probability output of 4.997119 at a probability level of 0.001878 which is less than the critical value of 0.05 (0.00 < 0.05). Therefore, we reject its null hypothesis and accept the alternate that there is a significant (short-run) relationship between employed variables.

Discussion of Findings

The study found empirically the following:

Despite the sufficiency of both model, it was identified that the Value Added tax revenue (VREV) displayed a positive and significant influence on Inflation, which means that higher VAT tends to fuel inflation.

While a negative and significant influence can be seen in light of VAT and human development index, which shows that VAT retards the level of economic development in the nation. This findings counters the benefit received theory of tax and simulates studies from scholars like Ocheni (2018), Afolayan et al., (2021), Aderetu et al (2011), Olaoye (2009) and Ebeke and Ehrhart (2010) amongst others.

Conclusion and Recommendations

This study evaluated the influence of value added taxation on economic development in nigeria over the inception period of 1994 to 2020, utilizing key variables such as Value Added Tax, and Inflation rate and Human development index as Dimensions of Economic development concludes that value added tax play a minute and adverse role in the nation's economic system as it is yet to achieve its growth aim, and it is seen to violate other studies that advocated a more positive and significant influence on Human development index in the nation, showing that despite the "present policy of liberalization of the Nigerian Economy being vigorously pursued by the Federal Government and Nigeria is fast becoming an investors haven albeit with a few teething problems". Which might still be linked to incomplete computation of actual Value added taxes (VAT), and many parallel market activities contributing towards the widening of the nation's economic output.

Recommendations

Based on the research findings and conclusion, the following recommendations were made:

- Due to the adverse influence of the Value Added tax on the development index, public authority should review the Value Added Tax rate to a significant extent from its stale 5%
- Public Authority should ensure to embrace strategies that will help to maintain adequacy of accounting procedure in the tax system in order to spur VAT efficiency.
- That government should increase the number of Value Added Tax agencies in the country to boost Value Added Tax productivity.
- That Public Authority should regulate the rise in the level of interest rate in the country in order not to provoke price instability in the country.

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