



ORIGINAL RESEARCH PAPER

Management

VALUE ADDED TAX AND ECONOMIC GROWTH OF NIGERIA (A CRITICAL APPRAISAL)

KEY WORDS: Value Added Tax, Underground Economy, Human Capital, Crowding out of funds, Neoclassical growth model.

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ABSTRACT

This research is focused on the impact of Value Added Tax on Economic Growth in Nigeria. It covers the period between 1999 and 2019. Secondary data sourced from the Central Bank of Nigeria Statistical Bulletin as well as Nigeria Bureau of Statistics were utilized. The ordinary least square estimating technique was adopted. The result revealed that Government expenditure, Investment and Value Added Tax were statistically significant to changes in Economic Growth in Nigeria. However, human capital development was not statistically significant to changes in Economic growth with in the period covered by the study. It was therefore recommended that even though Value Added Tax is marginally significant to changes in economic growth, government should not increase it to fund annual budget. Government is also advised to increase acquisition of skills of its labour force to boost human capital segment. Also government should increase capital expenditure which is the productive aspect of her annual expenditure instead of the usual lion share given to recurrent expenditure in annual budget. This is the only way economic growth can be sustainable in Nigeria.

INTRODUCTION:

The value added tax in Nigeria was conceived to replace the erstwhile sales tax. This is backed up by Decree 102 of 1993. It became effective on 1st January, 1994. Thereafter, it was referred to as Cap VI LFN 2004 as amendment of Decrees 30, 31 and 34 of 1996, 18 of 1998 and that of 2007. The tax authority is the Federal Inland Revenue Service (FIRS).

Value Added Tax (VAT) in Nigeria is a multi-staged tax collection on sales at all stages of production and distribution. Value addition here means the incremental value of a product using labour contributed to raw materials to produce the final goods and services (Abdullahi, 2014).

The incidence of VAT is shifted successively from one stage of value addition to another, until it is finally borne by the consumer of that product. VAT is imposed at the single rate of 5% on the invoiced value of goods or services supplied by a taxable person.

From its conception the basic or specific objective include the following; To:

- Maintain even tax incidences across the various stages of production chain.
- Provide incentives for export and enhance favourable balance of payment.
- Shift taxation towards consumption rather than savings.
- Reduce Nigeria overdependence on oil as a major revenue earner.
- Increase the revenue base of the various tiers of government.

The decree establishing VAT, specified what goods or services should be subjected to VAT i.e. VAT able Activities and also those non VAT able. Under the decree Non VAT able goods include:

- Agricultural chemicals
- Shelter and clothing
- Medical and pharmaceutical products
- Books, newspapers and magazines
- Commercial vehicles and their spare parts.
- All exports
- Basic food items
- Plant, machinery and equipment purchased for oil exploration
- Baby products.

NonVat Able Services Include:

- Plays and performances conducted by educational institutions as a means of acquiring knowledge.
- House rent

- All exported services
- Services of micro finance bank and mortgage institutions, medical services.
- Commercial transportation.

Vat Able Items In A Financial Institution Include:

- Fees charged on advisory service or merger, acquisition, private placement and public issues
- Commission on turnover (COT)
- Commission on transfers
- Charges on bank draft
- Fees charge on letter of credit
- Bills for collection
- Fees charged on from 'M'.
- Fees charged on bank guarantees

The decree establishing VAT also specifies those eligible to register for collection of VAT; they include

- Every organisation that trade in goods and services for a consideration is obliged to register with FIRS tax office.
- A resident of Nigeria, who performs services outside Nigeria, is expected to register.
- A non-resident company that carries on business in Nigeria.
- Every ministry, statutory body and other agencies of government shall register as agent for VAT purpose.

So far VAT has continued to play the role of enhancement or boosting of the revenue of governments in Nigeria. However, in recent times there has been a disagreement among experts as to whether there is any impact on Nigeria economic growth. The issue here is not whether revenue is being generated or not but to what extent has this revenue impacted on Nigeria economic growth over the years. Many studies have been done in this area but none has been able to utilize appropriate time series data compatible with modern analytical econometric tools. This study is therefore undertaken to bridge this gap and extend the knowledge in this aspect of our development.

OBJECTIVES

The main objective of the study is to empirically investigate the impact of Value Added Tax on Nigeria Economic Growth. Other specific objectives include to:

- Determine the impact of government expenditure on economic growth.
- Evaluate the impact of investment of economic growth,
- Ascertain the impact of human capital on economic growth.

Hypotheses

H₀: Significant relationship does not exist between Value

Added Tax and Economic Growth in Nigeria.

Ho₂: Significant relationship does not exist between government expenditure and economic growth in Nigeria.

Ho₃: There is no significant relationship between investment and economic growth in Nigeria.

Ho₄: There is no significant relationship between Human capital and Economic growth in Nigeria.

Literature Review

In a study conducted by Adereti and Sauni (2011) on the impact of VAT on GDP in Nigeria using simple regression analysis, they discovered that VAT revenue to total tax revenue averaged 12.4% which is low compared to 30% in Ivory Coast, and 19.7% for Mexico. Their investigation also revealed that there exist a positive correlation between VAT revenue and GDP.

Also, Ajakaiye (2002) investigated the macroeconomic effects of VAT, it was revealed that VAT revenue is already a significant source of revenue to the three tiers of government in Nigeria.

Contributing To the VAT Debate, Izedomi and, Okunbor (2021) examined the contribution of VAT to the development of the Nigerian economy. Using simple regression analysis method, they found out that positive and insignificant correlation exist between VAT revenue and GDP. They therefore recommended that all leakages in the VAT collection process should be blocked.

In their contribution, Yakubu and Jubrin (2013) focused on the impact of value added tax (VAT) on economic growth of Nigeria, using Johansen Cointegration test. They discovered that VAT have positive impact on economic growth of Nigeria. They concluded that this tax policy should be implemented with other fiscal policy measures to achieve maximum benefit.

Umeorah (2013) also looked at the effects on VAT on economic growth of Nigeria. Using the simple linear regression method for the period (1994 -2010). It was discovered that VAT has a significant effect on GDP and also on total tax revenue in Nigeria.

In their contribution, Bakare and Stephen (2013) investigated the enormity of the impact of the value added tax on output growth in Nigeria. They used the ordinary least square regression analysis method. The study revealed that the past values of VAT could be used to predict the future trend of output growth in Nigeria. They therefore concluded that VAT revenue is a substantial part of total revenue and should therefore be used to develop the needed infrastructure to enhance sustainable growth and development.

Also Nelson (2011) used the determinants of VAT revenue and assessed the response of VAT structure to changes in its tax bases using Paul Samuelson's (1955) fundamental general equilibrium analysis of the public sector to derive its main results. The demand function for the public good was derived from a constrained model of utility Maximization. In the same approach, tax revenue was taken as a function of household income, which paved the way for estimation of Engel Curves for public goods.

The study discovered that growth elasticity for VAT are all greater than one. The result further showed that total GDP elasticity of VAT revenue is less than the elasticity with respect to monetary GDP. This suggests the existence of an underground economy in Kenya over the period of the analysis. This points to the fact that VAT revenues respond with substantial lags to changes in its determinants and that VAT revenues are sensitive to unusual circumstances.

METHODOLOGY

This study uses the ex-post facto research design in view of the fact that the data used were already in existence and had affected the Nigerian economy being studied. The time series data were sourced from the Central Bank of Nigeria statistical bulletin for various years and the various publications of the Federal Inland Revenue Service (FIRS) as well as the Nigerian Bureau of Statistics Publications. The researcher adopted the multiple regression analysis method and the ordinary least square regression technique was used to estimate the time series data from 1999 to 2020 using e- views 10 statistical software.

This starts with the determination of the unit root to find out the stationarity of the data or otherwise.

Theoretical Underpinnings

Our econometric model is based on Mankiw, Romer and Weil model (1992). These authors were following the basic neoclassical growth models. In the present day, this is modified to include human capital which is proxy by the proportion of people with a minimum of secondary school education to the total work force. Also government expenditure and taxes were incorporated as these form an integral part of public budget. All data were sourced from the Nigerian Bureau of Statistics and the Central Bank of Nigeria website.

Generally, from Macroeconomics, we know that:

$$GDP = (C + I + G - T)$$

Where:

C = Consumption expenditure by household

I = investment expenditure by business

G = Expenditure by government

T = Taxes on expenditure

Therefore the econometric model for this work rest principally on work of Mankiw, Romer and Weil (1992). Hence the model for the impact of value added tax on the Nigerian economy is formulated thus:

$$RGDP = \alpha_1 INV + \alpha_2 HUM + \alpha_3 GEP - \alpha_4 VAT + U_t$$

Where: RGDP = Economic growth, proxy by RGDP ie (Real Gross Domestic Product)

Inv = Investment Expenditure

HUM = Human Capital

GEP = Government expenditure

VAT = Value Added Tax

α = Intercept

$\alpha_1, \alpha_2, \alpha_3$ and α_4 = Parameters to be estimated

U_t = Error term

PRESENTATION AND DISCUSSION OF RESULTS

Dependent Variable: RGDP				
Method: Least Squares				
Date: 11/28/21 Time: 07:38				
Sample: 1999 2019				
Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
HUM	0.003894	0.004046	0.962251	0.3502
INV	34.39403	1.275939	26.95586	0.0000
VAT	-0.682949	0.240788	-2.836306	0.0119
GEP	0.025683	0.010889	2.358636	0.0314
C	-2101006.	742191.8	-2.830812	0.0120
R-squared	0.987773	Mean dependent var	7141083.	
Adjusted R-squared	0.984716	S.D. dependent var	20030599	
S.E. of regression	2476319.	Akaike info criterion	32.48670	
Sum squared resid	9.81E+13	Schwarz criterion	32.73540	

Log likelihood	-336.1104	Hannan-Quinn criter.	32.54067
F-statistic	323.1485	Durbin-Watson stat	1.468681
Prob(F-statistic)	0.000000		

Source: Author's computation using e views 10.

The first step in this section was to ascertain the stationarity of the time series data using the Augmented Dickey Fuller Test. The result shows that government expenditure and investment were stationary at levels. However, Value Added Tax and Human Capital only became stationary after the first difference.

The ordinary least square result is presented below:

RGDP = - 21901005 + 34.39 + 0.0039 + 0.026 - 0.68

-(2101006) (26.96) (0.96) (2.36) (-2.836306)

$R^2 = 0.99$

R^2 Adjusted = 0.98

F-Statistic = 233.14

DW = 1.5

Note: Figures in brackets are t-value.

From the equation above R^2 is 0.99. This means that about 99 percent of the total variation in GDP is explained by the regressors i.e. human capital, investment, value added tax and government expenditure. The remaining 1 percent is caused by the factors outside the model but covered by the error term. Also, the computed F-ratio of 323.14 is greater than the table value of 3.16, thus we reject the null hypothesis which says the entire model is statistically insignificant and accept the alternative hypothesis. Furthermore, the computed Durbin Watson is 1.5 which by the rule of the thumb is not too far from 2. We therefore conclude that there is moderate degree of autocorrelation. This may be attributed to time lag in policy implementation and inconsistency in government policies. It is also in line with (Yeigen, 1984) which stated that the presence of autocorrelation in a model does not invalidate the model.

Hypothesis Testing:

From the above result, the coefficient of investment is 34.314 and is rightly signed. The implication of this is that one unit change in investment will result in 34.40 unit change in GDP while other explanatory variables are held constant. Also, with p- ratio of 0.00 and calculated t-value of 26.96 greater than the table value of 1.721 it implies that it is statistically significant. We therefore reject the null hypothesis which says that there is no significant relationship between Gross Domestic Product (GDP) and investment. This is in line with a similar study by Mankiw and Romer (1992) which conforms with basic neoclassical growth model where growth of capital accumulation represented increased savings or investment activities is the basic source of economic growth.

The coefficient of human capital of 0.0039 and is rightly signed. This implies that one unit change in human capital will lead to 0.0039 changes in GDP all other things being equal. The p - ratio is 0.35 while the calculated t-value of 0.96 is less than the table value of 1.721 implying that it is statistically insignificant. We therefore accept the null hypothesis which states that there is no significant relationship between human capital and economic growth. This is also confirmed by Mankiw and Romer (1992) in a similar study where human capital was insignificant in explaining changes in GDP within the period covered by the study.

From the result also the coefficient of government expenditure of 0.0257 is rightly signed. This implies that one unit change in government expenditure will result in 0.0257 unit change in gross domestic product (GDP) all things being equal. Again the p - ratio is 0.03 and the calculated t-values of 2.359 is greater than the table value of 1.721 at 5 percent level

of significance. We therefore reject the null hypothesis which says that there is no significant relationship between government expenditure and gross domestic product. The result above is in line with similar study by Blanney and Gemmell (1999) as well as Hong (2012) which classify government expenditure into productive and unproductive spending. While the productive relates to education, health care, defence and infrastructure, unproductive relates to pension, recreation, culture, religion etc. They concluded that the productive aspect of government spending has positive impact on economic growth while the unproductive segment impact economic growth negatively.

The coefficient of value added tax (VAT) of - 0.683 is rightly signed. This is because VAT remains and outflow of fund. The burden of VAT falls squarely on the final consumers and this can crowd out funds needed for investment purposes which by extension lead to decrease in gross domestic product. (Blundell, 2009) The implication of our result is that one unit change in value added tax revenue will lead to -0.683 unit change in gross domestic product. This showed that VAT affect economic growth negatively. However, the t-values of -2.84 is lesser than the table value of 1.721 in absolute terms implying that VAT is statistically significant at 5% level. This is in line with the result of similar study by Macek and Rudolf (2015), on OECD countries, where they discovered that corporate tax followed by personal income tax and Value Added Tax though significant but they were harmful to economic growth within the period covered by their study. It also confirms Teixeira and Fortuna (2003), Lin (2001) that a positive dependency can exist between economic growth and taxation if revenues from taxes are used only for human capital accumulation.

CONCLUSION

The conclusion drawn from the results of this study is that increases in VAT revenues reduces savings and investments and this affect economic growth negatively.

Recommendations

1. Based on the findings of the study it is recommended that even though VAT revenues may be marginally significant to economic growth, government should resist the temptation of increasing it to fund annul budgets. This will enhance tax payers ability to increase savings needed to fund investment which can drive economic growth positively.
2. From the study human capital which is the productive segment of national labour force was an insignificant influencer of economic growth. Government should therefore increase skill acquisition of our young school leavers. This will enhance the country manpower requirement needed to drive economic growth in the right direction.
3. It is also recommended that government should reduce its expenditure on the unproductive aspect of its spending and channel more funds to the productive segment. This will no doubt increase infrastructure which will have a spillover effect on economic growth in the positive direction.

Implication OfThe Study

Even though value added tax may be marginally significant in explaining the changes in economic growth, government should resist the temptation of increasing it to fund annual budget as the only way such increases can lead to economic growth is by ploughing such revenue into human capital development which has been lacking in the Nigerian situation.

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