



VALUE ADDED TAX AND OUTPUT GROWTH IN NIGERIA

Bakare Adewale Stephen Ph.D.

Department of Economics, Adekunle Ajasin University

P.M.B 001 Akungba- Akoko, Ondo State, Nigeria

stevebakare@yahoo.com

Abstract

In most countries where value added tax has been introduced, the level of taxes revenue has risen steadily over the course of the last century. Such significant increases in taxation raise serious questions about the effect they have had upon economic growth. Up till now, economic models that could offer insight into this question were lacking. Much of the growth literature focused on the relationship between income tax and output growth. Consequent upon this, this study investigated the enormity of the impact of the value added tax on output growth in Nigeria. Ordinary least square regression analytical technique (OLS) was employed for the empirical study. The a priori expectation is that value added tax will impact positively on output growth in Nigeria. The study found that a positive and significant relationship exist between value added tax and output growth in Nigeria. The results of the finding showed that; the past values of value added tax could be used to predict the future behaviour of output growth in Nigeria. The main conclusion of this study therefore is that Value Added Tax has the potential to assist in the diversification of revenue sources, thereby providing enough funds for economic growth and development and reducing dependence on oil for revenue. Hence our findings and conclusion support the need for the government to satisfy the principle of economic justice in the allocation of VAT revenue. The revenue generated from VAT should be efficiently utilized for building infrastructure required for sustainable growth and development.

Keywords: Taxation, Value added Tax, output growth, income tax, expenditure tax, production process, diversification of revenue, source of revenue

INTRODUCTION

The spread of the value added tax (VAT) has been the most important development in taxation over the last half-century. Besides Nigeria, VAT has now been adopted by over 156 countries; and in these countries it typically accounts for about one-quarter of all tax revenue (IBFD 2004). The VAT is very much work in progress as many more countries continue to adopt it. In sub-Saharan Africa, for example, VAT has been introduced in Benin, Cote d'Ivoire, Guinea, Kenya, Madagascar, Mauritius, Niger, Senegal, Togo and lately, Nigeria. Evidence suggests that in these countries, VAT has become an important contributor to total government revenues.

Bogetic and Hassan, (1993) found that VAT has been an effective source of revenue in Ecuador and Mexico since at least 1973 and by 1983; it accounted for 12.35% and 19.71% of total government revenues in these countries, respectively. Indonesia introduced VAT in 1983 and by 1988; the ratio of VAT revenue to GDP had risen to 4.5%. These impressive performances of VAT in virtually all countries where it has been introduced clearly influenced the decision to introduce VAT in Nigeria in 1994. Evidence so far supports the view that VAT is already a significant source of revenue in Nigeria too. For example the actual VAT revenue for 1994 was N7.2 billion which made tax revenue 36.5% higher than the projected N6 billion for the year. Similarly, the actual Value Added Tax revenue for 1995 was N20.7 billion compared with the projected N12 billion. The actual Value Added Tax revenue for 1996 was N31 billion compare with the projected N22 billion. In terms of its contributions to total federally collected revenue, VAT accounted for about 40.6% in the years under review. The indication is that Nigeria may soon join the growth list of developing countries where VAT contributes at least 20% of total government revenue. Needless to say, Value Added Tax has the potential to assist in the diversification of revenue sources, thereby providing enough funds for economic growth and development and reducing dependence on oil for revenue.

VAT is a broad-based tax levied on sales up to and including, at least, the manufacturing stage, with systematic offsetting of tax charged on inputs—except perhaps on capital goods—against that due on outputs. The essence of a VAT is that it is charged on a wide range of transactions, with a mechanism for offsetting tax paid on inputs against tax paid on outputs. Beyond this, the VATs observed in practice exhibit considerable diversity as regards, inter alia, the base of the tax and the range of economic activity to which the tax applies. As a result, there can be room for disagreement as to whether a given tax is properly called a VAT or not. While there are many variations on the structure of the VAT and how it is implemented, there is wide agreement on some core issues. First, consensus favors ensuring that the final base of the tax is consumption. Such a VAT, which requires that tax on capital goods be credited, does not distort the prices that producers face in buying and selling from one another, and, accordingly, has the

desirable feature of preserving production efficiency (so that the tax does not move the economy off its production possibility frontier). Secondly, given that it is levied at each stage of production, ensuring that the VAT bears only on consumption also requires both full crediting of the tax paid on inputs and the absence of breaks in the VAT chain. The exemption of inputs causes such breaks. There is also agreement that the invoice credit method should be used. This is for several reasons notably that by explicitly linking the tax credit on the purchaser's inputs to the tax remitted by the supplier of those inputs; it discourages fraudulent undervaluation of intermediate sales. The VAT was initially developed to meet rising revenue requirements that could not easily be satisfied by existing turnover taxes, the cascading nature of which could seriously distort economic decisions.

Key features of the VAT are that it is a broad-based tax levied at multiple stages of production, with—crucially—taxes on inputs credited against taxes on output. That is, while sellers are required to charge the tax on all their sales, they can also claim a credit for taxes that they have charged on their inputs. Its advantages is that revenue is secured by being collected throughout the process of production (unlike a retail sales tax) but without distorting production decisions (as a turnover tax does). Suppose, for example, that firm A sells its output (produced using no inputs) for a price of N1000 (excluding tax) to firm B, which in turn sells its output for N4000 (again excluding tax) to final consumers. Assume now that there is a VAT at a 10% rate. Firm A will then charge Firm B N1100, remitting N100 to the government in tax. Firm B will charge final consumers N400, remitting tax N300 i.e. output tax of N400 less a credit for the N100 of tax charged on its inputs. The government thus collects a total of N400 in revenue. In its economic effects, tax is thus equivalent to a 10% tax on final sales (there is no tax incentive, in particular, for B to change its production methods or for the two firms to merge), but the method of its collection secures the revenue more effectively. Zero rating refers to a situation in which the rate of tax applied to sales is zero, though credit is still given for taxes paid on inputs. In this case, the firm will be due for a full refund of taxes paid on inputs. In a VAT designed to tax domestic consumption only, exports are zero rated, meaning that exports leave the country free of any domestic VAT. This destination principle and is the international norm in indirect taxation, with total tax paid on a good being determined by the rate levied in the jurisdiction of its final sale and revenue accruing to that jurisdiction. The alternative to destination-based taxation is origin-based taxation, under which the tax is paid at the rate of, and to the country or countries in which the item is produced rather than consumed. Exemption is quite different from zero rating in that, while tax is also not charged on outputs, tax paid on inputs cannot be reclaimed. Thus, no refunds are payable. In this case, because tax on intermediate transactions remains unrecovered, production decisions may be affected by the VAT. These conceptual clarifications form the background and the significance of the study.

Statement of the Problem and the Research Objective

In most countries where VAT has been introduced, the level of taxes revenue has risen steadily over the course of the last century. An increase from about 5–10 per cent of GDP at the turn of the century to 20–30 per cent at present is typical. Such significant increases in taxation raise serious questions about the effect they have had upon economic growth. Up till now, economic models that could offer insight into this question were lacking. Much of the growth literature focused on the relationship between income tax and output growth. By definition, such exogenous growth model could not explain the effect of indirect taxation. It is only since the development of endogenous growth theory that a tool has existed for investigating how indirect taxation affects growth. These new models explicitly measure the processes through which growth is generated and, by doing so; can trace the effects of VAT upon the gross domestic product.

More importantly, the positive impact of VAT can readily be implied; but the magnitude or the extent of it is still scantily discussed in empirical literature. It is therefore the objective of this study to investigate the enormity of the impact of the VAT on output growth in Nigeria. The paper is therefore organized as follows. Following the introductory section, Section 2 reviews the literature. The methodology of the study is discussed in Section 3. An empirical analysis of the link between VAT and output growth in Nigeria is considered in Sections 4. Finally, Section 5 presents the summary and conclusions of the paper.

LITERATURE REVIEW

Theoretical and empirical studies show that VAT has become very popularly in many African countries even as far back as the 1960s. For instance, Cote D'Ivoire and Guinea introduced it in 1960 and Senegal in 1961. There are indications that in other parts of the world, particularly in the 1980s and 1990s VAT have gained prominent position in taxation system. From Kadlor (1975), it is established a similitude of VAT, called 'expenditure tax' was recommended for the Nkurumah government of Ghana in the 1950s and India in 1957. In the latter, it was twice introduced and was also twice rejected. Tax literature and empirical studies have it that over 136 countries with more than 50% being developing, had embraced VAT. Nigeria eventually introduced it in 1994. According to Naiyeju (1994); the most significant fiscal revolution of the twentieth century is VAT". The view of Naiyeju (1994) on the effectiveness and equity of VAT has strong supports in some earlier works of tax experts. Examples include Due (1981), Tanzi (1999) and Schiwartzman (1969). Specifically, Due (1981) affirmed that where the goal of taxation is to realize a large amount of revenue, the value-added tax is the most attractive. Schwartzman (1969) advised the Reagan Administration of the US to correct fiscal

deficit by increasing income tax rate or “if there is too much resistance to raising income tax rates, the administration might propose imposing a VAT”.

In spite of resistance experienced in the introduction of VAT in some countries, it is clear that by the early 1990s, the tax had gained prominence position all over the world and has contributed to output growth. Some of the strongest evidence for an empirical link between taxation and growth is reported in Plosser (1993). Plosser regressed the rate of growth of per capita GDP on the ratio of tax revenues to GDP for OECD countries and finds a significant negative relationship. The limitation of this finding is that the OECD countries concentrated on income tax as its major source of tax revenue. Taking account of this, Easterly and Rebelo (1993b) showed that the negative relationship all but disappears when the effect of initial income is accounted for and VAT was introduced. This observation makes the claims of Plosser rather doubtful. Easterly and Rebelo (1993) extend this analysis by using several different measures of the marginal rate of tax in regressions involving other determinants of growth. In response to some of the difficulties already noted, four different measures of the marginal tax rate are used: statutory taxes; revenue as a fraction of GDP; income-weighted marginal income tax rates; and marginal rates from a regression of tax revenue on tax base. From a number of regressions involving these variables, Easterly and Rebelo concluded: ‘The evidence that tax rates matter for economic growth is disturbingly fragile’. A similar conclusion is derived by Agell, Lindh and Ohlsson (1997). In their regressions, the tax variables are the marginal tax rates calculated in Mendoza, Razin and Tesar (1994). The clear finding is that, when value added tax is excluded from the regressions, the tax variable is insignificant.

In particular, it has investigated how growth is related to the composition and level of VAT. The results show that as the share of indirect taxes increases, growth is increased. Levine and Renelt (1992) have shown that the finding of a negative relationship is not robust to the choice of conditioning variables. Engen and Skinner (1996) label the regressions described above as ‘top-down’ since they work with aggregate measures of taxation. Instead of doing this, they propose a ‘bottom-up’ method which involves calculating the effect of indirect taxes on investment and productivity, and then summing these to obtain a total measure. This study is an extension of Engen and Skinner (1996).

METHOD AND MATERIALS

This study however adopted the taxation-growth model developed by Eric Engen and Jonathan skinner (1996) with modification. The original taxation-growth model of Eric Engen and Jonathan skinner was stated as $\dot{y}_i = \alpha_i k_i + \beta_i m_i + m_i$ where the real GDP growth rate in country i is denoted by \dot{y}_i and the net investment rate (expressed as a fraction of GDP),

equivalently the change over time in the capital stock, is given by k_i . The percentage growth rate in the effective labor force over time is written m_i , while the variable m_i measures the economy's overall productivity and growth. There are two other relevant variables in equation 1, which are the coefficients measuring the marginal productivity of capital, α_i , and the output elasticity of labor, β_i . For example, if there were a one percentage point increase in the growth rate of the (skill-adjusted) labor force and β were equal to 0.75, the implied increase in the economic growth rate would be 0.75 percentage point. Alternatively, if the investment rate were to rise by one percentage point and α were 0.10, the growth rate of output would rise by 0.10 percentage point. This theoretical framework allows us to measure how value added tax might affect output growth in Nigeria. The usual explanatory variables for output growth in Nigeria would be value added tax, national savings, government expenditures and total tax revenue. This will replace the capital stock and labour force stated by Eric Engen and Jonathan skinner. If we substitute these variables into Eric Engen and Jonathan skinner model, we can state the modified taxation- growth model as: $\dot{y}_i = \alpha_i \text{VAT} + \beta_i \text{TTR} + \Omega_i \text{GOVEXP} + \emptyset_i \text{GNS} \dots \dots \dots 1$

Where:

- \dot{y}_i = Real Gross Domestic Product
- VAT = Value Added Tax
- TTR= Total Tax Revenue
- GOVEXP = Government Expenditures
- GNS = Gross National Saving.

If we include the stochastic error term, the model takes the form

$$\dot{y}_i = \alpha_i \text{VAT} + \beta_i \text{TTR} + \Omega_i \text{GOVEXP} + \emptyset_i \text{GNS} + \mu_i \dots \dots \dots 2$$

where; μ_i is the Error term and is assumed to be normally distributed in zero and constant variance.

In consonance with economic theory, it is expected that the level of VAT, national savings, government expenditures and total tax revenue to a large extent determine the level of economic growth of a country. Thus, the *a priori* expectation may be denoted mathematically as: $\alpha_1 > 0, \beta_i > 0, \Omega_i > 0, \emptyset_i > 0$

The study focused on the growth implications of VAT in Nigeria. Time series secondary data were used for the analysis. The time series data spans between 1994 and 2021. The secondary data were obtained from such publications as World Bank Digest of Statistics, Central Bank of Nigeria statistical bulletin and International Financial Statistics. Data were also obtained from website, Journals and Newspapers.

Since the study makes use of time series secondary data, we checked the temporal properties of the variables in the model via unit root tests in order to determine the stationarity of the variables. The secondary data use for the study was processed using the ordinary least square (OLS) packages. These packages are suitable because it is efficient in term of output and adequacy of statistics generated. The empirical study uses a simulation approach to investigate the determinant and economic implication of value added tax in Nigeria. The study employs error correction mechanism to overcome the problem of spurious regression often associated with non-stationary time services data. The ECM reveals that changes on a variable at time are not independent variable but also on its own legged changes. This enables us to indices flexibility by contributing the short run and long run dynamic in a unified manner.

ANALYSIS, RESULTS AND DISCUSSIONS

This section focuses on data analysis, results and discussions on the growth implications of value added tax in Nigeria. The analysis intends to determine the econometric effect of some explanatory variable such as total tax revenue, government expenditure, gross national saving and value added tax on output growth using Nigeria's data.

Test of Stationarity for the Model

In order to test for stationarity under this research work, the augmented Dickey-fuller (ADF) and Philip-Perro (PP) unit root test was used because of its superiority over the Dickey-Fuller (DF). The ADF and PP test decision rule is that the test statistics of a particular variable must be greater than its critical values in absolute term before one can accept that a variable is stationary. We inferred from table 1 that all variables in the model except real GDP i.e. value added tax, national savings, government expenditures and total tax revenue are stationary (NS) at level indicated as 1(0), Since the t-statistics are greater than the critical values at 5% level of significance in absolute term. The real GDP was stationary at the second difference. We therefore conclude that all variables are not characterized by unit root problem and accept the hypothesis that says VAT, RGDP, TTR, GOVEXP and GNS have no unit root problem.

Table 1: Test of Stationarity for the Variables

Variables	Test statistic	5% critical value	Level	S/NS
VAT	/3.1908341/	/3.1003/	1(0)	S
RGDP	/4.811800/	/3.1222/	1(2)	S
INTRE	/12.00686/	/3.1003/	1(0)	S
GoVEXP	/5.243578/	/3.1003/	1(0)	S
GNS	/3.350548/	/3.0818/	1(0)	S

Test for Co-integration, For the Model

Here, we can now test whether the regression residuals are co-integrated, that is to test whether there is a long-run relationship between the dependent and independent variables in the model above. Therefore, by employing Johansen Co-integration test we make use of the likelihood Ratio and Max-Eigen from the model respectively by comparing their values with the critical values at 5% level. If the values of the likelihood ratio/Max-Eigen are greater than the critical values, then, we conclude that there will be long-run equilibrium relationship. Otherwise, the regression residual is not co-integrated.

Table 2: Test for Co-integration for the Model

Likelihood ratio	5 percent critical value	Hypothesized no of CE(s)
133.4514	68.52	None **
70.98928	47.21	At most 1**
31.42048	29.68	At most 2*
17.64300	15.41	At most 3
4.898053	3.76	At most 4

From table 2, we can conclude that there is a long-run equilibrium relationship between the dependent and independent variables in model 2 since the value of the likelihood ratio is more than critical value at 5% level of significance.

Table 3: The Regression Results

Variable	coefficient	Std. Error	t-Statistic	prob.
C	-4.324265	1.034653	-5.432534	0.0954
VAT	0.417868	0.132786	2.935638	0.0865
GNS	0.393875	0.096837	3.659702	0.0214
TTREV	0.514533	0.198986	2.576436	0.0174
GOVEXP	-0.402876	0.032524	-6.087575	0.0034
ECM(-1)	-0.616456	0.276438	-5.819453	0.0097
R-squared	0.637676	Mean dependent var	50649.49	
Adjusted R-squared	0.594646	S.D. dependent var	44144.69	
S.E. of regression	0.393875	Akaike info criterion	13.96584	
Sum squared resid	0.514533	Schwarz criterion	13.75483	
Log likelihood	-176.16456	F-statistic	19.64646	
Durbin-Watson stat	1.906836	Prob(F-statistic)	0.000159	

Interpretation and Discussion of Results

The Statistical Significance of the Parameter Estimate

The statistical significance of the parameter estimate can be verified by standard error test; the adjusted R -squared, t-statistics, the F-statistic and the Durbin-Watson statistics.

- For the model, when compared half of each coefficient with its standard error, it was found that the standard errors of all the variables are less than half of the values of the coefficients of the variables. Thus all the variables passed the standard error test. The decision rule is that, the variables are statistically significant.
- The value of the adjusted R-squared for the model is high, pegged at 60 percent. It implies that: value added tax; national savings, government expenditures and total tax revenue explained about 60 percent systematic variations in output growth over the observed years in the Nigerian economy while the remaining 40 percent variation is explained by other determining variables outside the model.
- The t-statistics is used to test for the statistical significance of the parameter estimate. But very often such formal testing can be shortcut by adopting the “2-t” rule of significance. The rule state that if the number of degrees of freedom is 20 and more and if the level of significance, is set at 0.05, then the null hypothesis $\beta_2= 0$ can be rejected if the t value exceeds 2 in absolute value, implying that the parameter estimate is statistical significant. Of course, one can always refer to the t- table to obtain the precise level of significance, and should always do so when the degrees of freedom are fewer than 20. In our regression results, the degree of freedom is higher than 20 and the estimated values of t exceed 2 in absolute value for all the variables. Thus, the variables are adjudged to be statistically significant.
- The F-statistics is used to test for stability in the regression parameter estimate when sample size increases, as well as the overall significance of the estimated regression model. Thus, we compare the calculated F^* with the critical value at 5% level (0.05) at $K-1$, i.e. $(29-1 = 28$ and $N-K=29-8=21$ degree of freedom for the model. Where; $k =$ the number of parameter estimated, and $N=$ the number of the observed years. If $F^* > F_{0.05}$, we reject the null hypothesis and accept the alternative hypothesis and vice versa. From the statistic table, $F_{0.05}$ at $(21, 28)$ degree of freedom is 2.03 while estimated F^* is 19.64646. Obviously $F^* > F_{0.05}$ that is $(19.64646 > 2.03)$. This implies that the parameter estimate is statistically significant and stable.
- The value of Durbin Watson is 1.9 for the model. This falls within the determinate region and implies that there is a negative first order serial autocorrelation among the explanatory variables in the model.

In summary, since all the econometric test applied in this study show a long run statistically significant relationship between the dependent and independent variables from the model, thus, we accept the alternative hypothesis which states that: Value added tax has significant implications on output growth in Nigerian.

The Theoretical Significance of the Parameter Estimate

For the theoretical significance of the overall estimates, we evaluated the signs and the sizes of the coefficients of the variables. According to the results, only government expenditure has wrong sign (i.e. negative) and it is statistically significant. This is in contrary to our a priori expectations. It implies that government expenditure does not contribute to output growth in Nigeria. But other variables have correct signs (i.e positive) It implies that value added tax; national savings, and total tax revenue have positive impact on output growth in Nigeria. This result is expected.

Most important for the objective of this study is the relationship between the value of the total tax revenue, added tax and output growth. The results reveal significant and positive relationship between the total tax revenue, value added tax and output growth. This result is similar to the findings of Easterly and Rebelo (1993 Agell, Lindh and Ohlsson (1997 and Mendoza, Milesi-Ferretti and Asea (1997) which found positive and significant relationship between the value total tax revenue, added tax and output growth. Evidence from the results supports the view that VAT is a significant source of revenue in Nigeria too. For example the results reveal a 41 % increase in output growth in Nigeria as a result of the introduction of VAT. This is in agreement to the statistics VAT accounted for about 40.6% of the total tax revenue in Nigeria during the years under review. The indication is that Nigeria has joined the growth list of developing countries where VAT contributes at least 20% of total government revenue.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The discussions in this paper point to a set of issues on the relationship between the value of total tax revenue, value-added tax and output growth. Specifically, the study assessed the impact of the value added tax on output growth. In trying to achieve this objective, an ordinary least square multiple regression approach was adopted for the data analysis. From the previous arguments in this paper and from the empirical results, it is clear that there is a significant relationship between the value total tax revenue, value added tax and output growth in Nigeria. With 60 percent of the changes in output growth being explained by the model, it is only logical to summarize that other factors, for which a major share are qualitative factors, explain the 40 percent of the variability in output growth in Nigeria. The study has therefore

brought out in clear terms an enormous relationship between VAT and output growth in Nigeria. It shows in concrete terms that VAT does contribute positively to output growth in Nigeria. In other words; VAT is productive and sustainable in Nigeria. It can be concluded that Value Added Tax has the potential to assist in the diversification of revenue sources, thereby providing enough funds for economic growth and development and reducing dependence on oil for revenue.

It is however important to keep in mind that the assessment of the impact of VAT on output growth will not be of much use if the information and research results are not integrated within decision-making processes. Hence our findings and conclusion support the need for the government to satisfy the principle of economic justice in the allocation of VAT revenue. The revenue generated from VAT should be efficiently utilized for building infrastructure required for sustainable growth and development. Furthermore the policymakers should embark upon effective monitoring of the tax agents to ensure proper implementation of the tax and also to ensure proper record keeping. Although, monitoring of tax agent is contained in the decree, this monitoring has not been really effective hitherto.

SCOPE FOR FURTHER STUDIES

The following suggestions are imperative for further studies

- 1) Tax Compliance and Enforcement: Assess the effectiveness of tax compliance measures and enforcement strategies related to VAT. Determine whether improved compliance can lead to increased VAT revenue and subsequently boost economic growth.
- 2) Tax Incidence Analysis: Conduct a tax incidence analysis to determine who bears the burden of VAT in Nigeria. Examine whether VAT primarily affects consumers, producers, or both, and how this impacts economic growth and income distribution.
- 3) Fiscal Federalism: Study the dynamics of VAT revenue sharing among the federal, state, and local governments in Nigeria. Assess the impact of VAT revenue allocation on state-level economic growth and development.
- 4) Tax Policy Reform: Analyze the potential benefits and drawbacks of VAT policy reform in Nigeria, such as broadening the tax base, changing rates, or introducing exemptions. Evaluate the implications of different reform scenarios on economic growth.
- 5) Comparative Studies: Conduct comparative studies with other countries that have implemented VAT systems to draw lessons and insights for Nigeria. Examine how VAT policies and their enforcement mechanisms have influenced economic growth in similar contexts.

These suggestions offer a variety of avenues for further research on the relationship between Value-added Tax and economic growth in Nigeria. Researchers are advised to explore these areas to deepen understanding of the topic and inform policy decisions that can enhance Nigeria's economic development.

REFERENCES

- Agell, Jonas, Peter Englund, and Jan Södersten (1996). "Tax Reform of the Century—the Swedish Experiment." *National Tax Journal* 49 (4): 641–62.
- Due, J.F. and Friedlander, K. (1981): *Government Finance; Economics for the Public Sector* Richard D. Irwin Inc. Illinois.
- Eric Engen And Jonathan Skinner (1996). "Taxation And Economic Growth". *National Tax Journal* 49 (4): 617-42
- Easterly, William, and Sergio Rebelo. "Fiscal Policy and Economic Growth: An Empirical Investigation." *Journal of Monetary Economics* 32 (3): 417–58.
- International Bureau of Fiscal Documentation (IBFD, 2004); *Corporate Taxes 2003–04, Worldwide Summaries* (Price waterhouse Coopers).
- Kadlor N. (1975): "Will Under developed Countries Learn to Tax?" in *Readings on Taxation and In Developing Countries* ed. Bird, R and Oldman, O. John Hopkins University, Baltimore.
- Levine, Ross, and David Renelt (1992). "A Sensitivity Analysis of Cross-Country Growth Regressions." *American Economic Review* 82 (4): 942–63.
- Naiyeju, J.K. (1998): "Fiscal Policy Thrust of the 1998 Budget" in *Bullion*, Vol. 22, No. 1, January/March 1998, Central Bank of Nigeria.
- Plosser, C. (1993), 'The search for growth', in *Policies for Long Run Growth*, symposium series, Kansas City: Federal Reserve of Kansas City.
- Razin, A. and Tesar, L. L. (1994), 'Effective tax rates in macroeconomics', *Journal of Monetary Economics*, vol. 34 : 297–323.
- Schwartzman D. (1969): *Economic Policy; An Agenda for the 1990s* Praeger publishers, New York, pp 1-28
- Tanzi, V., (1999). "Corruption and the Budget: Problems and Solutions" in A.K.Jain (ed.), *Economies of Corruption*, Boston: Kluwer Academic Publishers, pp 111-127.
- Zeljko Bogetic and Fareed M. A. Hassan (1993). "Personal Income Tax Reform and Revenue Potential in Transitional Economies: Bulgaria" *World Bank, Washington D. C.* 1 (1): 24-36.