

# Agricultural Budgetary Allocation and Economic Growth in Nigeria: Implications for Agricultural Transformation in Nigeria

Oyakhilomen Oyinbo

Department of Agricultural Economics and Rural Sociology  
Ahmadu Bello University, Zaria, Nigeria  
email: ooyinbo@abu.edu.ng

Abdulsalam Zakari

Department of Agricultural Economics and Rural Sociology  
Ahmadu Bello University, Zaria, Nigeria

Grace Zibah Rekwot

Department of Agricultural Economics and Rural Sociology  
Ahmadu Bello University, Zaria, Nigeria.

## Abstract

The objective of this paper is to investigate the link between agricultural budgetary allocation and economic growth in Nigeria from an econometric perspective. The results of the analysis show that the relationship between agricultural budgetary allocation and economic growth in Nigeria is positive but not significant in the long run, while the relationship is positive and significant only for the two-year lagged value of agricultural budgetary allocation. This observed relationship is not unrelated to the low budgetary allocations to agriculture over the years in Nigeria. This implies that there is a need for a significant increase in budgetary allocations to agriculture in order to ensure that the agricultural sector plays a pivotal role in the national transformation of Nigeria.

## Author's Note

Author's note text (half-inch from either margin; first line indented an additional quarter-inch). Oyakhilomen Oyinbo is a Lecturer in the Department of Agricultural Economics and Rural Sociology, Ahmadu Bello University, Nigeria. He is interested in the economics of climate change vis-à-vis agriculture, poverty and agriculture linkages, food consumption and gender issues.

Abdulsalam Zakari is an Associate Professor of Agricultural Economics and head of the Department of Agricultural Economics and Rural Sociology, Ahmadu Bello University, Nigeria.

Grace Zibah Rekwot is a postgraduate student in the Department of Agricultural Economics and Rural Sociology, Ahmadu Bello University, Nigeria.

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## 1. Introduction

The Food and Agricultural Organisation (FAO) recommends that 25 per cent of government capital budget be allocated to agricultural development. This has not been achieved by the various administrations of Nigeria, thereby affecting government programmes and policies for the sector (Iganiga and Unembili, 2011). Nigeria has also consistently failed to reach the 10 per cent agriculture budget standard of the Maputo declaration, which has led to negative implications for food security (Ochigbo, 2012). Total expenditure on agriculture, as a percentage of overall expenditure, fluctuated from 4.57 per cent between 1986-1993, to an average of 4.51 per cent per annum between 1994-1998, to 3.53 per cent between 1999-2005; this reflects intensified efforts by the government to reduce its size (Udoh, 2011). This incessant reduction in agricultural expenditure over the years relative to the overall expenditure of Nigeria has led to inadequate funds for the sector. In this light, (Ujah and Okoro, 2009) emphasized that the inadequate funding of the agricultural sector could never make the sector sustainable. While agricultural spending expressed as a share of total spending is generally low in African countries compared to other developing countries, Nigeria fares unfavourably even within the African context. When public spending in agriculture in Nigeria is benchmarked relative to public spending in other sectors, the value of the indicator for agriculture is lower than the values of all other sectors, such as industry, construction, trade, and services (Mogues *et al.*, 2008). Nigeria has embarked on an agricultural transformation agenda that, as spelt out by Tijani (2011), involves value chains of prioritized commodities that would provide more income to farmers, processors, and marketers; and provide opportunities for both local and foreign direct investment into the agricultural sector; thereby ensuring food security, poverty reduction, and job and wealth creation. Therefore, the agricultural agenda is invariably aimed at enhancing economic growth in Nigeria, and this call for the assessment of the relationship between government expenditure in financing agriculture and economic growth and its implication for the transformation agenda of Nigeria. Despite myriad studies that have been undertaken to understand the relationship between government expenditure and economic growth in Nigeria, it is worth noting that most of these studies disaggregate the sectors of the economy from the few sector-specific studies, with none of the sector-specific studies solely addressing agricultural expenditure – i.e. economic growth linkage without recourse to the other sectors of the economy. In view of the foregoing, this study was designed to carry out a sector-specific study on the relationship between expenditure in the agricultural sector and economic growth in Nigeria.

## 2. Review of Empirical Studies on Government Expenditure and Economic Growth

Several cross-country (Ghura, 1995., Devarajan *et al.*, 1996., Guseh, 1997., Kelly, 1997., Alexious, 2009) and country-specific (Knoop, 1999., Alexiou, 2007, Irmen and Kuehnel, 2008., Hussain, 2011, Dandan, 2011) studies have been carried out across the globe to examine the relationship between government expenditure

and economic growth, but their data periods, methodologies and findings differ from some studies indicating that government expenditure has a negative impact on economic growth and others positing that government expenditure has a positive impact on economic growth. The incongruent findings of the studies could be attributed to the short data periods of some of the studies, which must have affected the reliability of the inferences drawn from the studies. The inconsistencies between the methodologies and time series analyses of most of the studies must have also accounted for the variations in the findings of the studies. In Nigeria, Nasiru (2012) employed the Granger Causality test to examine the relationship between government spending and economic growth, and the results showed that while government capital expenditure causes economic growth, there was no observable causal relationship between recurrent government expenditure and economic growth. The policy implication of this findings is that any reduction in capital expenditure would have negative repercussions on economic growth in Nigeria. Through an augmented Solow model, Usman *et al.* (2011) posited that expenditure on administration, education, transportation and communication has a negative impact on economic growth in the short run, while FDI and expenditure on health and other services have a positive impact on economic growth. Maku (2009) discovered that both government expenditure and private investment have no significant influence on economic growth in Nigeria, and that the rate of government expenditure to real GDP has been rising since the enactment of the Structural Adjustment Programme (SAP) without contributing significantly to economic growth in Nigeria. Nurudeen and Usman (2010) used the data period of 1970 to 2008 in their study, and the estimation results showed that total capital expenditure (TCAP), total recurrent expenditure (TREC), expenditures on transport and communication (TRACO), education (EDU), and health (HEA), including inflation (IFN) and overall fiscal balance (FISBA), are statistically significant in explaining changes in economic growth. However, expenditures on defence (DEF) and agriculture (AGR) are not significant in explaining economic growth. Loto (2011) investigated the growth effect of sectoral expenditures on economic growth and discovered that expenditures on national security, transportation, and communication were positively related to economic growth, but were not statistically significant. Meanwhile, expenditure on education, though negative, was not significant; expenditure on agriculture was negatively related to economic growth; and expenditure on health was positively related to economic growth.

### 3. Methodology

This study utilized a secondary dataset of 30 years (1980-2010) that was obtained from the annual reports and statistical bulletins of various issues of the Central Bank of Nigeria and the National Bureau of Statistics. The dataset includes budgetary allocation to agriculture, real gross domestic product, the inflation rate, and the exchange and interest rates of Nigeria. Keynesian and Wagnerian macroeconomic theories are two major divergent theories in economics concerning the relationship between government expenditure and economic growth (Dandan, 2011). This study adopts the Keynesian macroeconomic approach in specifying economic growth as a function of agricultural expenditure. Keynesian

macroeconomic theory generally assumes that increased government expenditure can lead to high aggregate demand and in turn rapid economic growth; Wagnerian theory, meanwhile, contends that an increase in national income causes more government expenditure. The Augmented Dickey Fuller (ADF) test was used to examine the stationarity of the dataset in order to overcome the problem of spurious regression that is common in the time series analysis of non-stationary variables. The model of the ADF test with the constant term and trend is as follows:

$$\Delta Y_t = \varphi_1 + \varphi_2 t + \delta Y_{t-1} + \sum_{i=1}^n \gamma_i \Delta Y_{t-1} + \varepsilon_t \dots \dots \dots (1)$$

The dependent variable,  $Y_t$ , is regressed with its own lags,  $n$ .  $\Delta$  is defined as the first different operator, and  $\varepsilon_t$  is a Gaussian white noise error term. The null hypothesis ( $H_0: \delta = 0$ ) implies that the series has a unit root (non-stationary or integrated of order zero) and the alternative hypothesis ( $H_0: \delta < 0$ ) indicates that the series is stationary. The decision rule is to accept the null hypothesis assuming the calculated ADF statistic is less than the Mackinnon critical values, with the null hypothesis being rejected otherwise. The Johansen Cointegration Test was employed to examine the long-term relationship between the variables under study after establishing the stationarity of the variables. A linear combination of two or more  $I(1)$  series may be stationary or  $I(0)$ , in which case the series are cointegrated. The null hypothesis for the Johansen Cointegration test ( $H_0: r = 0$ ) implies that cointegration does not exist, while the alternative hypothesis ( $H_a: r > 0$ ) implies that it does. If the null for non-cointegration is rejected, the lagged residual from the cointegrating regression is imposed as the error correction term in a vector error correction model (VECM) given below as:

$$\Delta y_t = \Pi y_{t-1} + \sum_{i=1}^{k-1} \Gamma_i \Delta y_{t-i} + \mu + \varepsilon_t \dots \dots \dots (2)$$

Where:

$\Delta y_t$  = First Difference of An  $(n \times 1)$  Vector of the  $n$  Variables of Interest

$\Pi$  =  $(n \times n)$  Coefficient Matrix

$y_{t-1}$  = Lagged Values of  $Y_t$

$\Gamma$  =  $(n \times (k-1))$  Matrix of Short-Term Coefficients

$\mu$  =  $(n \times 1)$  Vector of Constant

$\varepsilon_t$  =  $(n \times 1)$  Vector of White Noise Residuals

The underlying principle of the Johansen Cointegration Test is that if the coefficient matrix ( $\Pi$ ) has been reduced in rank ( $r < n$ ), it can be decomposed into a matrix  $(n \times r)$  of loading coefficients ( $\alpha$ ) and a matrix  $(n \times r)$  of cointegrating vectors ( $\beta$ ) such that  $\Pi = \alpha \beta'$ .  $r$  is the number of cointegrating relations (the cointegrating rank). The loading coefficients ( $\alpha$ ) indicate the cointegration relationships in the individual equations of the system and of the speed

of adjustment to disequilibrium. This represents the causality in the system and the direction of the causality flows, while the cointegrating vectors ( $\square$ ) represent the long-term equilibrium relationship. Johansen (1988) considered two likelihood ratio tests, namely the Trace and the Maximum Eigen Value statistic tests, which are used to determine the number of cointegrating equations given by the co-integration rank ( $r$ ). The Trace statistic tests the null hypothesis of  $r$ -cointegrating relations against the alternative of  $k$ -cointegrating relations, where  $k$  is the number of endogenous variables for  $r = 0, 1, \dots, k - 1$ . The Maximum Eigen Value statistic tests the null hypothesis of  $r$ -cointegrating vectors against the alternative of  $(r + 1)$ -cointegrating vectors.

### 3.1 Model Specification

A Keynesian-macroeconomic viewpoint of the relationship between government expenditure and economic growth was adopted in this study; therefore, economic growth (EG) was modelled to be a function of budgetary allocation to agriculture (BBA). However, to avoid the omission of relevant variables and the misspecification of the model, inflation rate (IFR), exchange rate (ECR) and interest rate (ITR) were included in the model as other components of macroeconomic variables that influence economic growth. The model for the long-term relationship between the variables was given explicitly as:

$$\ln EG_t = a_0 + a_1 \ln BBA_t + a_2 \ln IFR_t + a_3 \ln ECR_t + a_4 \ln ITR_t + u_t \dots \dots \dots (3)$$

In order to estimate the short-term relationship between the variables, the corresponding error-correction equation was estimated as:

$$\begin{aligned} \Delta \ln EG_t = & a_0 + \sum_{i=1}^p a_1 \Delta \ln BBA_{t-1} + \sum_{i=1}^p a_2 \Delta \ln IFR_{t-1} + \sum_{i=1}^p a_3 \Delta \ln ECR_{t-1} \\ & + \sum_{i=1}^p a_4 \Delta \ln ITR_{t-1} \\ & + \psi ECM_{t-1} + u_t \dots \dots \dots (4) \end{aligned}$$

*EG* = Economic Growth Proxied By Real GDP (N Million).

*ABA* = Agricultural Budgetary Allocation (N Million)

*IFR* = Inflation Rate (%)

*ECR* = Exchange Rate (N/US Dollar)

*ITR* = Interest Rate (%)

*ECM* = Error Correction Term

*ln* = Natural Logarithm

$\Delta$  = Difference Operator

The a priori expectations are  $a_1 > 0$ ,  $a_2 < 0$ ,  $a_3 < 0$ ,  $a_4 < 0$

## 4. Results and Discussion

### 4.1 Augmented Dickey Fuller Unit Root Test

The results of the ADF test as reported in table 1 show that EG, ABA, ECR and ITR were non stationary (integrated of order one) at their respective level forms, which substantiates the null hypothesis. However, the first difference of the variables was established to be stationary. IFR was found to be stationary (integrated of order zero) at level form, which invalidates the null hypothesis and substantiates the alternative. It was necessary that the properties of the time series variables under study be explored in order to overcome the problem of spurious regression – i.e. regression that tends to accept a false relationship or reject a true relation by flawed regression schemes.

Variables Length	ADF Statistic	Lag	Remark
<b>Level</b>			
lnEG	-1.661097	1	Nonstationary
lnABA	-3.339909	0	Nonstationary
lnIFR	-3.587055	1	Stationary
lnECR	-1.049483	0	Nonstationary
lnITR	-2.406661	0	Nonstationary
<b>First Difference</b>			
$\Delta$ lnEG	-38.37279	0	Stationary
$\Delta$ lnABA	-7.402476	1	Stationary
$\Delta$ lnECR	-4.923490	0	Stationary
$\Delta$ lnITR	-6.987179	0	Stationary

NB: Test critical value at 5 % significant level(-3.574244)

Lag selection is automatic based on Schwartz Bayesian Criterion (SBC)

Figure 1: Augmented Dickey Fuller (ADF) Test Result

### 4.2 Johansen Cointegration Test

The results of the Johansen cointegration Test (Trace and Max-Eigen) as shown in Tables 3 and 4 respectively indicate that there is one cointegrating equation at the 5% level, which rejects the null hypothesis of not having a cointegrating equation ( $r = 0$ ) and accepts the alternative hypothesis of having one co-integrating equation ( $r = 1$ ). This result indicates that there is a long-term relationship between EG, ABA, ECR, IFR and ITR; therefore, a vector error correction estimation can be carried out to examine the short-term relationship between the variables under study.

CE(s)	Eigenvalue	Trace Statisti	0.05 critical value	Prob.
None *	0.802783	86.89961	69.81889	0.0012
At most 1	0.512962	39.81959	47.85613	0.2290
At most 2	0.347679	18.95663	29.79707	0.4960
At most 3	0.190476	6.567275	15.49471	0.6284
At most 4	0.015035	0.439326	3.841466	0.5074

Figure 2: Johansen Cointegration Test Result (Trace Test)

CE(s) Statistic	Eigenvalue	Max-Eige	0.05 critical value	Prob.
None *	0.802783	47.08002	33.87687	0.0008
At most 1	0.512962	20.86296	27.58434	0.2846
At most 2	0.347679	12.38936	21.13162	0.5097
At most 3	0.190476	6.127947	14.26460	0.5968
At most 4	0.015035	0.439327	3.841466	0.5074

Figure 3: Johansen Cointegration Test Result(Max-Eigen Test)

### 4.3 Vector Error Correction Estimates

The existence of a cointegrating relationship between the dependent and independent variables as indicated by the Johansen Cointegration Test necessitated examining the short-term dynamics between the variables in the cointegrating equation by estimating the error correction model. The results of the vector error correction as shown in table 5 contain long-term estimates, short-term estimates and diagnostic statistics. The R square value of 0.62 implies that 62% of the variation in economic growth was due to the influence of explanatory variables (EG, ABA, ECR, IFR and ITR) that were included in the model. The F statistic value was significant at the 5% probability level, indicating the joint significance of the explanatory variables of the model (goodness of fit of the model).

Variable	Coefficient	Standard Error	t-statistic
<b>Long run</b>			
Constant	-14.00684		
lnEG(-1)	1.000000		
lnABA(-1)	0.037814	0.09805	0.38566
lnIFR(-1)	-0.560845	0.14652	-3.82783***
lnECR(-1)	-0.084827	0.11849	-0.71589
lnITR(-1)	-0.800698	0.34787	-2.30171**
<b>Short run</b>			
Constant	0.036422	0.01692	2.15217**
$\Delta$ lnEG(-1)	0.544936	0.18308	2.97656**
$\Delta$ lnEG(-2)	-0.040227	0.02830	-1.42126
$\Delta$ lnABA(-1)	-0.006259	0.01001	-0.62517
$\Delta$ lnABA(-2)	0.980467	0.49798	1.96887**
$\Delta$ lnIFR(-1)	-0.035436	0.01656	-2.13925**
$\Delta$ lnIFR(-2)	0.024057	0.01638	1.46889
$\Delta$ lnECR(-1)	0.001159	0.03807	0.03045
$\Delta$ lnECR(-2)	-0.015521	0.03445	-0.45052
$\Delta$ lnITR(-1)	-0.050215	0.05056	-0.99321
$\Delta$ lnITR(-2)	-0.056687	0.04561	-1.24288
ECM(-1)	-0.284820	0.14034	-2.02949**
<b>Diagnostic Statistics</b>			
R-squared	0.616216	Log likelihood	57.56807
Adj. R-squared	0.352365	Akaike AIC	-3.254862
Sum sq. resids	0.026845	Schwarz SC	-2.683918
S.E. equation	0.040961	Mean dependent	0.048457
F-statistic	2.335469	S.D. dependent	0.050899

NB: \* denotes  $p < 0.1$  \*\* denotes  $p < 0.05$ , \*\*\* denotes  $p < 0.01$

Figure 4: Vector Error Correction Estimates of Economic Growth in Nigeria

The long-term estimates show that ABA is positively related to EG in the long run and is therefore consistent with a priori expectation. However, ABA is not significant in influencing economic growth in the long run. In the short run, the first lagged value of ABA is negative and insignificant in influencing economic growth, but the second lagged value of ABA is positively related to economic growth and significant at the 5% probability level. ABA should have been positive and highly significant owing to the integral role of finance in agriculture, which is known to be the major contributor of gross domestic product in Nigeria. The observed short- and long-term relationships between ABA and EG can be attributed to poor budgetary allocation to agriculture relative to other sectors of the economy; and the poor implementation of the budget, as recent monitoring and evaluation reports indicate that the implementation of the 2007 and 2008 agricultural budget was below 25% (Ujah and Okoro, 2009). The error correction coefficient (-0.284820) of the model had the expected negative sign and was significant at the 5% probability level, confirming the existence of a long-term relationship between EG, ABA, ECR, IFR



and ITR. The error correction coefficient indicates a feedback of about 28% of the previous year's disequilibrium from the long-term values of the independent variables. ITF and ITR are in conformity with a priori expectation in the long run and significant at 1 and 5% respectively. This implies that a reduction in the inflationary trend of the economy would likely increase economic growth. There is also a tendency for economic growth to increase with a reduction in lending rate. ECR, meanwhile, is also consistent with a priori expectation but was found to be insignificant in influencing economic growth over the data period (1980-2010) of the study.

## **5. Conclusion**

This study has been able to establish that agricultural budgetary allocation is positively related to economic growth in the long run but not significant in the short run. It was also found to be negative and significant for a one-year lagged period, but positive and significant for a two years lagged period at a 5% probability level. This disparity is linked to the poor budgetary allocation to the agricultural sector, which is far below the 25% and 10% recommendation from the FAO and AU, respectively. It is therefore recommended that budgetary allocation to the agricultural sector should be increased significantly so that adequate funds can be available for driving the activities of the sector. Budgetary implementation in the agricultural sector should also be pursued for the latter so as to foster a higher level of budget implementation in other areas, such as for capital projects. This will ultimately ensure that the Agricultural Transformation Action Plan (ATAP), which is geared towards achieving food security, poverty reduction, employment generation and wealth creation, is realized in Nigeria.

## Bibliography

- Alexiou, C. (2007) Unraveling the 'Mystery' Between Public Expenditure and Growth: Empirical Evidence from Greece. *International Journal of Economics*, Vol. 1, no.1, pp. 21 – 31.
- Alexiou, C. (2009) Government Spending and Economic Growth: Econometric Evidence from the South Eastern Europe (SEE). *Journal of Economic and Social Research*, Vol. 11, no.1, pp. 1 – 16.
- Aktar, I. & L. Ozturk, (2009) Can unemployment be cured by economic growth and foreign direct investment in Turkey? *International Research Journal of Finance and Economics*, Vol. 27, pp. 203 – 211.
- Dandan, M.M.(2011) Government Expenditures and Economic Growth in Jordan, International Conference on Economics and Finance Research, Singapore, Vol. 4, pp. 467 – 471.
- Devarajan, S., Swaroop, V. & Zou, H. F. (1996) The Composition of Public Expenditure and Economic Growth. *Journal of Monetary Economics*, Vol. 37, pp. 313 – 344.
- Central Bank of Nigeria, (2009) Statistical Bulletin: Volume 18, December 2009, Section B, Public Finance Statistics.
- Central Bank of Nigeria, (2008) Annual Report and Statement of Accounts for the Year Ended 31st December 2008.
- Central Bank of Nigeria, (2011) Annual Report for the Year Ended 31st December 2011.
- Ghura, D. (1995) Macro Policies, External Forces, and Economic Growth in Sub-Saharan Africa. *Economic Development and Cultural Change*, Vol. 43, no.4, pp. 759 – 778.
- Guseh, J. S. (1997) Government Size and Economic Growth in Developing Countries: A Political-Economy Framework. *Journal of Macroeconomics*, Vol.19, no.1, pp. 175 –192.
- Hussain, M.I., Khan, M., Padda, I.U. Akram, M. & Haider, Z.(2011). Public Spending, Foreign Direct Investment and Economic Growth: A Time Series Analysis for Pakistan (1975-2008). *International Research Journal of Finance and Economics*, Vol. 61, pp. 21 – 28.
- Iganinga, B.O and Unemhili, D. O.(2011) The Impact of Federal Government Agricultural Expenditure on Agricultural Output in Nigeria, *Journal of Economics*, Vol. 2, no. 2, pp. 81 – 88.

- Irmen, K. & Kuehnel, J.(2008) Productive Government Expenditure and Economic Growth, Discussion Paper Series No. 464, pp. 1 – 46.
- Johansen, S. (1988) Statistical Analysis of Cointegration Vectors, *Journal of Economics Dynamics and Control*, Vol. 12, pp. 231 – 254.
- Kelly, T. (1997) Public Expenditures and Growth. *Journal of Development Studies*, Vol. 34, pp.60 – 84.
- Knoop, T. A. (1999) Growth, Welfare, and the Size of Government. *Journal of Economic Inquiry*, Vol. 37, no. 1, pp. 103 – 119.
- Loto, M.A. (2011) Impact of Government Sectoral Expenditure on Economic Growth, *Journal of Economics and International Finance*, Vol. 3, no.11, pp. 646 – 652.
- Maku, O.E.(2009) Does government spending spur economic growth in Nigeria? MPRA Paper No. 17941. [http://mpra.ub.uni-muenchen.de/17941/1/MPRA\\_paper\\_17941.pdf](http://mpra.ub.uni-muenchen.de/17941/1/MPRA_paper_17941.pdf). Accessed 1<sup>st</sup> September, 2012.
- Mogues, T., Morris, M., Freinkman, L., Adubi, A., Ehui, S., Nwoko, C., Taiwo, O., Nege, C., Okonji, P. & Chete, L.(2008) Agricultural Public Spending in Nigeria. IFPRI Discussion Paper 00789, pp. 1 – 108.
- Nasiru, I. (2012) Government Expenditure and Economic Growth in Nigeria: Cointegration Analysis and Causality Testing. *Academic Research International*, Vol. 2, no.3, pp. 718 – 723.
- National Bureau of Statistics, (2010) Social statistics in Nigeria.
- Nurudeen, A. and Usman, A.(2010). Government Expenditure and Economic Growth in Nigeria, 1970-2008: A Disaggregated Analysis. *Business and Economics Journal*, Vol. 4, pp. 1 – 11.
- Ochigbo, F.(2012) ‘Nigeria’s Agriculture Budget under 10%’. The Nation Newspaper, Nigeria. <http://www.thenationonlineng.net/2011/business/60002-%E2%80%98nigeria%E2%80%99s-agric-budget-under-10%25%E2%80%99.html> Accessed 1st September, 2012.
- Okoro, D. & Ujah, O.C.(2009) Agricultural Policy and Budget Analysis in Nigeria (1999-2007): Perspectives and Implications for SLISSFAN Project States. Report Submitted to OXFAM GB Nigeria.

Tijani, B.(2011) Federal Ministry of Agriculture and Rural Development Action Plan Towards the Attainment of a Sustainable Agricultural Transformation in Nigeria. Being a Lead Paper Delivered at the World Food Day Seminar, Agricultural Show Ground Keffi Road, Abuja, Nigeria. pp. 1 – 10.

Usman, A., Mobolaji, H. I., Kilishi, A. A., Yaru, M. A. & Yakubu, T. A.(2011) Public Expenditure and Economic Growth In Nigeria. *Asian Economic and Financial Review*, Vol. 1, no.3, pp. 104 – 113.