

Impact of Macroeconomic Shocks on the Growth of Nigeria Economy

Oguntuase Adeniyi

Department of Liberal Studies, School of Business Studies, Federal Polytechnic, Ado-Ekiti

doi: <https://doi.org/10.37745/ejbir.2013/vol11n54254>

Published September 6, 2023

Citation: Adeniyi O. (2023) Impact of Macroeconomic Shocks on the Growth of Nigeria Economy, *European Journal of Business and Innovation Research*, Vol.11, No.5, pp.,42-54,

ABSTRACT: *Policy redirection has been supported as the way out of the display development challenges confronting the nation. The objective of the paper is to survey the effect of macroeconomic stuns on the development of Nigeria economy. The theory appears the whether macroeconomic stuns have critical effect on the Nigeria financial development. This think about embraced Akaike Data Model (AIC) to decide the ideal slack combination for the ARDL. The slack combination with the slightest esteem of the chosen basis among the competing slack orders is considered the ideal slack. Discoveries uncovered the impacts of monetary arrangement factors on financial development of Nigeria are found to be noteworthy both within the long run and brief run particularly the center financial approach factors like government expenditure and government income conjointly affirmed the defenselessness of the Nigerian economy to outside stuns. The paper concludes that out of the two major financial arrangement factors, government income has more critical relationship with Nigerian financial development. The development rate of Nigeria is more connected to government income than expenditure. Suggestion appears that Nigerian government ought to input approaches that will upgrade nearby yield, this will diminish the helplessness of the economy to outside stuns.*

KEYWORDS: macroeconomic shocks, growth, Nigeria, economy

INTRODUCTION

The development and improvement of the Nigerian economy has not been steady over the a long time, as a result, the country's economy has seen so numerous stuns and unsettling influences both inside and remotely over the decades. Inside, the unsteady venture and utilization designs as well as the dishonorable usage of open arrangements, changes in future desires and the quickening agent are a few of the components dependable for it. Essentially, the outside variables recognized are wars, transformations, populace development rate and relocation, innovative exchange and changes as well as the openness of the Nigerian economy are a few of the components dependable for these stuns and unsettling influences. The patterned variances within the country's financial exercises have driven to the periodical increment within the country's unemployment and swelling rate as well the outside division disequilibria (Gbosi, 2001).

As a nostrum to these previously mentioned unsettling influences, financial approach is seen as a major financial stabilization weapon that includes degree taken to control and control the volume, taken a toll, accessibility as well as course of cash in an economy to realize a few indicated macroeconomic arrangement goals such as full work, financial development and financial improvement and neutralize the undesirable patterns within the Nigerian economy which can relieve the impacts of these unsettling influences (Gbosi,1998). However monetary approach organization, cannot be cleared out to advertise powers of request and supply additionally other rebellious of stabilization such as financial and trade rate approaches among others in other to neutralize the issues recognized (Ndiyo and Udah,2003). This may either incorporate an increment or a diminish in charges as well as government consumptions which constitute the bedrock of financial arrangement.

In any case, separated from oil related factors, a few other components which are for the most part macroeconomic factors which might shift from nation to nation have been distinguished by very a number of analysts as stuns that might likely cause irritation of the financial approach factors and which can affect fiscal arrangement adequacy in a specific nation (Kinnunen, Sulla, & Merotto, 2013). Concurring to them, A few of these factors such as trade rate, intrigued rate, open obligation among others can be termed inside that's controllable by the Nigerian government whereas a few factors such as oil cost instability, product cost volatility, exchange rate volatility among others are absolutely outside, that's exterior the control of the Nigerian government. The objective of the think about is to evaluate the effect of macroeconomic stuns on the development of Nigeria economy.

Hypothesis II

H₀: Macroeconomic shocks do not have significant impact on the Nigeria economic growth.

H₁: Macroeconomic shocks have significant impact on the Nigeria economic growth.

Approach redirection has been supported as the way out of the display development challenges confronting the nation. Thus, approach creators within the nation can use on a few of the discoveries in this ponder to fine-tune fiscal arrangement organization within the nation. The service of budget and arranging, service of back and Central Bank of Nigeria which are government offices saddled with the duties of planning the financial system for the nation through government budget yearly will advantage from the discoveries of this investigate work as this will offer assistance them to come up with fiscal approach system that will be able to resist the impact of these stun factors positively.

LITERATURE REVIEW

Conceptual Literature

Macroeconomic Shocks

Macroeconomic shock is an unpredicted alter in macroeconomic factors. Tragically, there's no such thing as a shock "per se". Monetary arrangement includes a wide variety of arrangements; there's an unending list of sorts of incomes, for which the assess rules may well be changed, or categories of government, where alter may happen (Mounford & Uhlig, 2002). Financial writing has recognized very a number of macroeconomic factors that constitute outside unsettling influence to financial arrangement system (Bakare, 2010). The transmission component of fiscal policy has been recognized as being inclined to a few outside impacts that irritate the entire monetary approach organization (Obinyeluaku & Viegi 2009). Regardless, the structure and the level of improvement of an economy has been distinguished as the major determinants of what constitute outside shock to financial arrangement organization in a specific economy (Aremo, Orisadare & Ekperiware, 2012).

Government Expenditure Shocks

Military build-up coming about from wars or war dangers and normal catastrophes are appropriate disobedient to recognize exogenous variety in government investing. As of late, in arrange to invigorate financial development, numerous government have increment their investing in reaction to monetary emergency, while other governments, stricken by monetary and obligation emergency, were constrained to cut their strongly.

Military Build-up as an instrument of Government Expenditure shocks

Researchers accepted that the story approach to examination of financial impacts of financial shocks depends on utilizing military build-up coming about from wars, or war dangers to recognize exogenous financial shocks. Ramey (2015) appears that the defense news captures the desires of future government investing shocks by the private operators. A major portion of add up to investing and government government investing is the defense investing.

Ramey & Shapiro (1998), contended that military build-ups have the points of interest that they don't expel private assets but for fabricating division. Ramey (2015), clarified that the military investing was financed generally by issuing obligation amid the world war II and by charges amid the Korean war. Assignments to other segments of government investing such as non-defense, state and nearby governments investing will be diminished so that the increment of defense investing can be financed. It implies that the military build-ups cause a exchange of assets inside government divisions.

A potential shortcoming of military build-ups relates to the presumption that they are exogenous and startling. In spite of the fact that, wars can happen abruptly and out of the blue, in numerous

cases a military strife follows after weeks or months of rising pressures. For occurrence, the Japanese assault on the US strengths within the pacific in 1941 was unforeseen as it were to the degree that the US anticipated the Japanese to assault the Philippines (held by the US at the time) instead of Hawaii. In expansion, once the war has begun, it can take several years so that the proceeded expanded investing now not constitutes a financial stun.

Natural Disasters as an instrument of Government Expenditure Shocks

Another outstanding instrument of government investing stuns is common catastrophe. Characteristic catastrophes are generally common and, being “act of God”, are by definition startling. A part of assets from Government, State and Nearby Governments are went through when they happen on catastrophe administration such as reaction and recuperation endeavors, which influence lodging, civilian security, instruction, transportation and other regions of non-defense investing. Altogether, governments react to common catastrophe by investing on help and repair as well as on safeguard against future calamities. Government investing stuns are cause in this way by characteristic fiascos, and those stuns are unforeseen or sudden, making them exogenous with regard to the state economy.

Agreeing to Usman (2010) normal fiasco causes a critical decrease in yield. Littler and poorer nations are more defenseless, particularly to climate calamities which the level of outside obligation has no connection to the yield affect of any sort of fiasco. Noy (2009) opined that countries with a better proficiency rate, superior teach, higher capita pay, higher degree of openness to exchange, higher level of government investing, more remote trade saves and higher levels of residential credit, but with less open capital accounts are able to resist the beginning stun and maintain a strategic distance from spillovers into the more extensive economy.

Loayza, Olaberria, Rigolini & Christiaensen, (2015) expressed that whereas little fiascos may have a positive impact due to the reproduction endeavors, expansive calamities have extreme negative affect on the economy instantly. Skidmore &Toya (2013), in differentiate, propose that a better recurrence of normal fiasco are associated with higher development rate within the long-run in a handle associated to 'creative destructions' more seasoned physical resources and advances tend to be less vigorous and in this way are more vulnerable to normal catastrophes. In this manner, they are supplanted cultivate within the wake of characteristic catastrophes than they would have been something else.

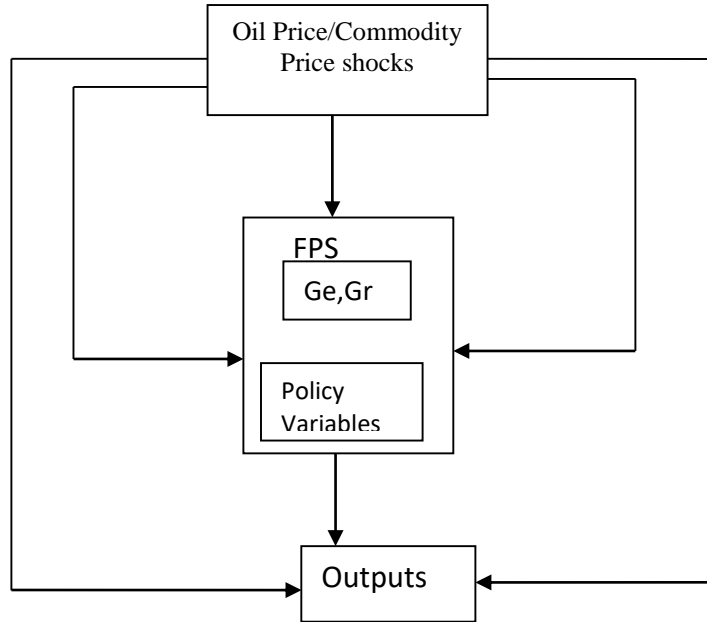


Figure 1: Flow Chart for Fiscal Policy Shocks and Economic Growth

The stream chart for the framework is clarified in figure 1. The FPS is the monetary approach stuns which includes the center financial factors such as the government income (charge income and others) and the government consumption. It moreover incorporates the approach factors which are the trade rates and the expansion rates. And the yield variable is the GDP development rate.

The stream chart appears a schematic graph that depicts the intuitive between the monetary arrangement stuns (FPS) and other factors that are respected as exogenous stuns (oil cost and product cost volatilities) and the resultant impact on development. Concurring to Demachi (2012) product cost variances constitute imperative stun to the monetary arrangement particularly in Nigeria which is an consequence subordinate nation and the sends out are majorly essential items. Firstly, there are coordinate impacts of the oil cost and product cost volatilities stuns on FPS,. Besides, the chart appears how these exogenous stuns pass through each of the components as they are orchestrated. Thirdly, we center on the coordinate impact of the financial approach stuns which comprises of the center monetary factors and arrangement factors.

Theories

(a) Keynesian Theory of Aggregate Demand

Keynesian hypothesis was created by the British financial specialist John Maynard Keynes amid 1930s. The hypothesis advocates for dynamic arrangement reactions, counting financial arrangement activities by the central bank and financial arrangement activities by government to stabilize yield over the trade cycle is Keynesian financial matters. Concurring to Keynesian hypothesis, a few microeconomic-level actions—if taken collectively by a huge extent of people and firms—can lead to wasteful total macroeconomic results, where the economy works underneath its potential yield and development rate. Such a circumstance had already been alluded to by classical financial analysts as a common overabundance. There was difference among classical financial specialists (a few of whom accepted in Say's Law—that “supply makes its claim demand”), on whether a common overabundance was conceivable. Keynes fought that a common excess would happen when total request for merchandise was inadequately, driving to an financial downturn with superfluously tall unemployment and misfortunes of potential yield. In such a circumstance, government approaches may well be utilized to extend total request, in this way expanding financial action and diminishing unemployment and collapse. Most Keynesians advocate an dissident stabilization arrangement to reduce the plentifulness of the trade cycle, which they rank among the foremost genuine of financial issues. Presently, this does not essentially cruel fine-tuning, but it does cruel what can be called 'coarse-tuning.' For case, when the unemployment rate is exceptionally tall, a government can utilize a dosage of expansionary money related arrangement.

(b) Endogenous Growth Theory

Endogenous development hypothesis or unused development the or was created within the 1980s by Paul Romer and others. Endogenous development hypothesis holds that financial development is essentially the result of endogenous and not outside strengths. This hypothesis holds that speculation in human capital, advancement and information are noteworthy contributors to financial development. Within the neo-classical show, mechanical advance is an exogenous variable. The neo-classical development demonstrate makes no endeavor to clarify how, when and why mechanical advance takes put. The most quality of the endogenous development hypothesis is that it made the innovative advance an endogenous variable to be clarified inside the models, consequently the title endogenous development hypothesis.

c. The Keynesian Fiscal Balance Model

From the perspective of Keynes, in an effort to understand Depression, GDP is reasonably thought of as being determined by aggregate demand. When the unemployment rate is 20%, there is plenty of aggregate supply, so it seems reasonable to assume that firms will supply as much as it is demanded. To put it another way, GDP in that situation is determined not by limitations on the supply of goods and services but rather by the limited demand for them. The components of

aggregate demand are consumption, investment, government purchases, and net exports. Let's denote aggregate demand by AD. Thus we have,

$$AD = C + I + G + X \quad 1$$

where X stands for net exports. In the Keynesian model, aggregate supply, denoted AS, is just equal to the actual value of GDP that we observe. Thus:

$$AS = GDP \quad 2$$

Setting aggregate supply equal to aggregate demand, we have,

$$GDP = C + I + G + X \quad 3$$

This equation is the accounting identity for GDP. But in the context of the Keynesian model, it is also a statement about how GDP is determined. It says that GDP is determined by the sum of demand from the four sectors of the economy. Economists sometimes characterize the Keynesian model by saying that in it GDP is "demand determined."

For instance consumption as a component of aggregate demand can, in turn, be expressed as a function of disposable income which we called Y. Let's

write disposable income as,

$$Y = GDP - T \quad 4$$

Where we can think of T as taxes or government revenue.. In the simplest version of the Keynesian model presented here, we treat T as a lump sum amount, not as a function of GDP. A more sophisticated model would allow T to be a function of GDP, so that we could study the effect of a change in the tax rate. The consumption function is then,

$$C = a + b \cdot Y = a + b \cdot (GDP - T) \quad 5$$

Substituting for C in the expression for GDP we get

$$GDP = a + b \cdot (GDP - T) + I + G + X \quad 6$$

According to Keynes, the behaviour of fiscal policy is shown through the fiscal balance multiplier which can be derived as follows:

By rearranging equation 2.6 we have

$$GDP = \frac{a + I + X - b(G - T)}{1 - b} \quad 7$$

The fiscal balance multiplier is thus: $\frac{-b}{1-b}$ this shows the behaviour of fiscal policy, which could either be deficit or surplus depending on the magnitude of government expenditure G to government revenue T.

Ebrahim, Mohamed and Ala (2012) adopted this model in equation 7 to empirically assess the relationship between current account and government budget balance in Kuwait. In their model, current account equation was expressed as :

$$CA = (I - SP) + BB \quad 8$$

Where CA is the current account, I is investment, SP represents private savings and BB is the government budget balance which is defined by the following equation:

$$BB = G + Tr - T$$

9

G is the government consumption, Tr is the government exchanges and T is charges. Agreeing to the BB which is depicted as the financial adjust as well as the behavior of monetary approach within the economy because it appears the degree to which the government is borrowing to back her budget.

This think about embraces the system of endogenous development models. The novel highlight of these models is that, not at all like the neo classical development models which suggest that government arrangement can influence as it were the yield level but not the development rate, endogenous development models consolidate channels through which monetary arrangement can influence long run development (Barro & Sala-i-martin,1991).

METHODOLOGY

This consider embraced Akaike Data Model (AIC) to decide the ideal slack combination for the ARDL. The appropriation of this strategy is educated by its most elevated informative control which makes it to be the foremost commonly utilized among analysts. The slack combination with the slightest esteem of the chosen measure among the competing slack orders is considered the ideal slack. The targets of this consider is to look at the affect of macroeconomic stuns on the development of Nigerian economy, (subordinate variable) is the development rate and G speaks to the monetary factors. Thus, a altered show that clarifies the relationship between macroeconomic stuns and financial development is indicated in this way:

$$\ln y = f(\ln(K, GR, GE, ER, EXR, DEBT, INF, OILPVOL, COMPVOL)) \quad 3.10$$

Where ln is log, y is the growth rate of the GDP (economics growth), K is capital and all other variables are as defined before. It should be noted here that DUMR is excluded because regime of administration has been identified as more of a determinant of fiscal policy behavior than shock (Ravnik & Zilic, 2010). All the data used for the study were sourced from World Bank Tables 2015 edition as well as International Financial Statistics (IFS) 2015. However, the Mundi Index and the Global Economics data are other sources for data collection used for the study. T

Presentation of Results**Table 1. ARDL Short run and long run forms for macroeconomic shocks and Nigerian economic growth**

Selected Model: ARDL(2, 1, 2, 2, 1, 2, 2, 0, 2, 2)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDPGR(-1))	-0.238495	0.123104	-1.937340	0.0887
D(GR)	0.000041	0.000025	1.622155	0.1434
D(GE)	-0.000114	0.000028	-4.137178	0.0033
D(GE(-1))	-0.000065	0.000022	-3.000153	0.0171
D(ER)	0.000012	0.000006	2.253710	0.0543
D(ER(-1))	-0.000195	0.000045	-4.386937	0.0023
D(ED)	-0.000021	0.000010	-2.217734	0.0574
D(EXR)	-0.177331	0.045520	-1.856476	0.0405
D(EXR(-1))	-0.163756	0.107770	-1.519495	0.1671
D(INF)	-0.111420	0.070396	-1.582770	0.1521
D(INF)	-1.703788	0.495547	-3.438196	0.0088
D(K)	-0.161237	0.290215	-0.555578	0.5937
D(OILPVOL)	-1.673951	0.472904	-3.539726	0.0076
D(OILPVOL(-1))	0.035276	0.200172	0.176227	0.8645
D(COMPVOL)	1.343867	0.319145	4.210841	0.0030
D(COMPVOL(-1))	-0.626129	0.134973	-4.638915	0.0017
Long Run Coefficients				
GR	0.000085	0.000013	0.747599	0.0761
GE	-0.000223	0.000077	-1.263549	0.0420
ER	0.000186	0.000109	1.708086	0.1260
ED	-0.000000	0.000024	-0.009340	0.9928
EXR	0.029198	0.158477	0.184240	0.8584
INF	-0.132150	0.191841	-0.688852	0.5104
K	-2.836954	1.845374	-1.537333	0.1628
OILPVOL	3.032444	1.414125	1.256125	0.0445
COMPVOL	-1.888978	0.766267	-1.069475	0.0161
C	18.053335	13.362340	1.351061	0.2136

The comes about on table 1 is an sign that most of the factors are more critical within the short run than within the long run but however the person impacts of the factors on the financial development of Nigeria changes both within the long run and brief run periods. The center factors of monetary approach such as government income and consumption, at that point other stuns factors such as outside save, trade rate, expansion rate, outside obligation as well as the exogenous stuns like oil

price and product cost volatilities all have noteworthy effect on financial development within the brief run. This shows that Nigerian economy is vulnerable to outside stuns as well as monetary arrangement stuns for the most part within the short run. The comes about advance show that the effects of a few of the stun factors are diminished and they are now not noteworthy on Nigerian financial development within the long run. These factors are outside save, outside obligation, swelling rate and trade rate. But the impacts of factors like government income, government use, oil cost and product cost volatilities are all supported till the long run periods. In expansion the shortage of physical capital in Nigeria is encourage brought to the fore by the comes about as the coefficient of capital comes up short to have noteworthy effect on Nigerian financial growth both within the long and brief run periods.

Table 2 ARDL bound test for the impact of macroeconomic shocks on Nigeria economic growth
Null Hypothesis: No long-run relationships exist

Test Statistic	Value	K
F-statistic	4.054147	9

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	1.8	2.8
5%	2.04	2.08
2.5%	2.24	3.35
1%	2.5	3.68

Table 2 shows F value of 4.05 this value is greater than all the critical values at various significant levels from 1% to 10%. This implies that the hypothesis of no long run relationship is rejected hence we conclude that there exist a significant long run relationship between the shock variables and economic growth of Nigeria.

DISCUSSION OF FINDINGS

This consider examined the effect of macroeconomic stuns on the development of Nigeria economy and it created a few discoveries which can lead to a few critical inductions with respect to the relationship between macroeconomic stuns and Nigerian financial development.

Firstly, the impacts of financial approach factors on financial development of Nigeria are found to be critical both within the long run and brief run particularly the center financial arrangement factors like government consumption and government income. The comes about joins other thinks about like (Ravnik and Zilic, 2010) who have affirmed monetary approach as having long run impact on yield not at all like money related approach which the long run impact on yield is still subject of wrangle about due to super-neutrality of cash. Financial hypotheses particularly the

Keynesian hypotheses have introduced their conclusions on the truth that an economy can be protected from subsidence by monetary approach when financial approach comes up short due to liquidity trap marvel. Different theories have been tried to legitimize this, subsequently, discoveries from this ponder is contributing to existing literary works on the long run impact of financial arrangement on yield.

Furthermore, this think about has affirmed the powerlessness of the Nigerian economy to outside stuns. Both oil cost and product cost volatilities have appeared critical impacts on the Nigerian financial development. An vital deduction that can be drawn once more from this consider is the reality that there's a solid affiliation between monetary arrangement and Nigerian financial development since outside stuns are having for all intents and purposes comparable impacts on both monetary conduct and Nigerian financial development. Again, oil cost upward development will advance the Nigerian financial development essentially whereas product cost upward developments is bound to have negative impact on financial development. Concurring to Omolade and Ngalawa (2014) in most oil creating economies increment in product costs increments the household expansion weight since these economies have contract bases consequently numerous essential commodities which commonly would have been delivered locally are imported. The circumstance is more apparent in Nigeria with ever rising moment charge year after year. Omolade and Ngalawa (2014) advance trait the Nigerian and numerous oil sending out countries' swelling more to basic wonder than financial marvel.

CONCLUSION

The consider concludes that out of the two major monetary approach factors, government income has more critical relationship with Nigerian financial development. The development rate of Nigeria is more joined to government income than use. Typically the more reason why the development rate of Nigeria has been decreasing since the drastic fall in oil cost which is the most source of the government income. Government use falls flat to illustrate sustained significant positive affect on financial development of Nigeria since it isn't utilized to extend the beneficial capacity of the economy. Hence the genuine segment of the Nigerian economy shows up not to be getting a charge out of sufficient share from the government use that can quicken the residential yield development.

Recommendations

The study recommends that:

- (i) **(i) Development of residential profitable capacity:** The ponder has uncovered that Nigeria monetary approach system and the Nigerian economy at expansive are profoundly vulnerable to product cost instability due to the moo residential profitable capacity. Thus, it is prompted that Nigerian government must in put arrangements that

- will improve neighborhood yield, this will diminish the defenselessness of the economy to outside stuns.
- (ii) **Financial expansion:** Discoveries from the think about have moreover backed the current campaign for financial expansion in Nigeria. It is found from numerous of the comes about from the examination that contract send out base of the Nigerian economy is an critical calculate making it to be more import dependent. Being consequence subordinate could be a figure that uncovered macroeconomic polices like financial approach to outside stuns. Subsequently, this ponder joins other past empirical studies to suggest forceful endeavors toward differentiating Nigerian economy so that it'll move from oil dominance economy to genuine division prevailing economy.

REFERENCES

- Aremo, A.G., Orisadare, M.A. &Ekperiware, M.C (2012).Oil price shocks and fiscal policy management: Implications for Nigerian economic planning. *International Journal of Development and Sustainability* 1(3): 1121-1139.
- Bakare, A.S. (2010). Debt forgiveness and its impact in the growth of Nigeria economy: An empirical study. *Pakistan Journal of Social Sciences*, 7(2), 34-39, <http://dx.doc.org/10.3923/pjssci.2010>.
- Barro, R.G. &Sala-i-Martin, (1992) Public finance in models of economic growth, *Review of Economic Studies*, 59: 645-661.
- Barro, R.G. &Sala-i-Martin, (1995) *Economic growth*, McGraw-Hill, USA.
- Bekaert, G.C. (2005). Growth volatility and financial liberation. *Journal of International Money and Finance* 62(3):1081-1137.
- Dollar, B. & Suensson, R. (2000).“The twin deficit hypothesis: An empirical investigation” Middle East Technical University. M.Sc. Thesis, Turkey.
- Gbosi, A.N. (1998). *Banks, financial crisis and the Nigerian economy today*, Corporate Impression Publishers, Owerri.
- Gbosi, A.N. (2001). *Contemporary macroeconomic problems and stabilization policies in Nigeria*, Antovic Ventures, Port Harcourt.
- Kinnunen, J., Lofgren, H., Victor Sulla & Dino Merotto (2013) External shocks, fiscal policy and income distribution: alternative scenarios for Moldova. World Bank *Policy Research Working Paper* 6365.
- Loayza, N. Olaberria, E., Rigolini, J. &Christiaensen, L. (2015).Natural disaster and growth going beyond the averages. World Bank Policy Research Working Paper. 4980.
- Mountford, A. &Uhlig, H. (2014). What are the effects of fiscal policy shocks? CEPR Working Paper.
- Ndiyo, N.A. &Udah, E.B. (2003). Dynamics of monetary policy and poverty in a small open economy: The Nigerian experience, *Nigerian Journal Economics and Development Matters*, 2(4): 40-68.

- Obinyeluaku, M. &Viegi, N. (2009) Fiscal policy for managing oil revenues in Nigeria. *Economic Research of South Africa. Working paper No.2.*
- Ramey, V.A (2015). Identifying government spending shocks: it's all in the timing. *Quarterly Journal of Economics.* 126. 1-50.
- Ramey, V.A. & Shapiro, M.D (2013).Costly Capital reallocation and the effects of government spending, Carnegie-Rochester, Conference Series on Public Policy. 48. 145-194.
- Ravnik, R. & Zilic, I. (2010).The Use of SVAR analysis in determining the effect of fiscal shocks in Croatia. *Financial Theory and Practice* 35(1): 25-58.
- Skidmore, M. & Toya, H. (2013). The impact of government spending shocks: Evidence on the multiplier from state pension plan returns. Job Market Paper.
- Usman A (2010). Government expenditure and economic growth in Nigeria, 1970-2008; A disaggregated analysis. *Bus. Econ. J.* 4(1)12-32. Available at <http://astonjournals.com/bej>. Accessed March, 2013.