



Macro-economic Variable and Its Behavioural Effect on Government Spending in Nigeria (a) (VECM Analysis)

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Abstract: The gross objective of this research work is to ascertain the behavioural effect of some key macro-economic variables to increase in government spending over a period of 1981 to 2014 using vector error correction model and ganger causality test as an estimation tools for justification. From the output of the major estimate, we found that the behavioural effect of macro-economic variables to increase in government spending are multidimensional such that some macro-economic variables such as (BOT and INTR) are a significant but inversely related to total government spending while others maintain a direct flow. The economic implication of negative balance of trade is unfavourable balance of trade which signifies that Nigerians import more in monetary term than it's export while the negative value of the interest rate is in line with our apriori expectation. Consumer price index is positive and statistically significant which suggest double jeopardy. That is, consumers are confident to buy more when the purchasing power of naira has declined and finally, we observe significant level of unemployment. One major factor that could be responsible for this abnormalities is not far from the fact that larger quantum of government spending in Nigeria is massively allocated toward recurrent expenditure while few percentage is injected into capital expenditure which amount to highly and ever teaming unemployment rate over the years. Sequel to the above findings, the study recommends that emphasis be made on productive and manufacturing sectors of the economy for massive output and encourage exportation as it is a symbol of favorable balance of trade which will further showcase government effort and help reducing the ever teaming unemployment rate in Nigeria.

Keywords: Government Spending, Macro-economic Variables, VECM

1. Introduction

In the early 50s, the Nigeria economy was characterised with relative and sustainable rate of real growth, substantial level of stable macro-economic environment and an encouraging resources balance. It has usually been an expression of shock on the face of every Nigerian in the recent time why the government should spend more than it earn. Starting from 1970 till date, Nigerian government has been operating on deficit except for 1995 and 1996 that there was a record of surplus. Mine while, despite high governmental spending on the economy, the expected level of sustainable development is not been attained and this place a notion of boo on the expectation of the Nigerians.

Mine while, the traditional Keynesian theory proposed that increase in government spending is a key to sustainable economic growth. This notwithstanding since 1970, the Nigerian government total expenditure has been increasing overtime, the speed of increment between 2004 to 2014 was double. In 2004 the total government expenditure stood at 1,426.20 billion (CBN Statistical bulletin 2014). from 2005 to 2013, there was a tremendous increment but in 2014, there was a drop from 5,185.32 (2013) to 4,578.06 (2014) which suggest that huge quantum of funds has been allocated into Nigeria economy over the years yet expected level of development is not been achieved. Obviously, the consecutive increase in the speed of government expenditure in Nigeria does not portray the proportional positive improvement in

some vital macro-economic variables like GDP, inflation rate, employment and unemployment rate, exchange rate consumer price index and so on. In more recent time, Ajibola Arewa and Prince Nwakahma (2013) examine the dynamic effect of government expenditure and macro-economic variable in Nigeria and discovered that there is a long run nexus between government spending and some macro-economic variable. Secondly, they found that growth in capital expenditure promote economic bliss while recurrent expenditure deteriorate growth. Hence the study recommends that government should improve on capital expenditure as it is a key to better economic growth.

Sequentially, instability of macro-economic variable in Nigeria can be attributed to the oil boom of 1970 which led to complete diversification of the entire nation from agricultural output to crude oil. The government attitude toward crude oil has rendered all other natural resources hollowness and this has however trigger the level of instability on macro-economic variables which has amounted to Dutch diseases. Mine while, instability of macro-economic variable in an economy passes a negative signal to investor within and outside the country and hence reduces across the border transaction overtime which however lead to downsizing the level of growth in a given country.

In an economy where the capitalist lead, the private sector will drives the economy and the doctrine of invisible hand will dominate the system. If that happened, private individual will operate a free market and the invisible hand mechanism will determine price in the market. In that case, the responsibility and role of the government will be limited to provision of security, provision of justice and provision of basic social and administrative services. Basically, to achieve a sustainable level of development, it is expected that the government participate in the provision of some basic public infrastructures that are fundamental to the economy due to market failure and considering the fact that there are commercially unprofitable. This public goods includes road, bridges, security, health, water, electricity and so on. the large quantum of fund injected into the economy by the Nigeria government to finance the recurrent and capital expenditure as thereby lead to increase in aggregate money supply without the corresponding increase in the output, instability and increase in price level, increase in the level of unemployment and reduction in the output level of goods and service in the economy, Ajibola Arewa and Prince Nwakahma (2013). One of the major fundamental problems we have being encountering in Nigeria from the hedges while has reported by (monogbe, et al 2015) is mismanagement and misappropriation of borrowed funds which happens to be a major challenge in the Nigeria economy and hence, debars growth. "Moshi and Kilindo, (1999)" investigated the impact of government policy on macro-economic variables in Tanzania and found that the instability of macro-economic variable was as a result of priority given to private investment. Sequel to the above observation, this research work is a fresh one which tend to investigate the behaviour of macro-economic variable to increasing government spending

in Nigeria. In an attempt to actualise the gross objective of this study, these research work tends to provide answer to this research question: what is the rationale behind the inverse nexus between total government spending and some key macro-economic variables in Nigeria? The remaining part of this paper is stratified into five different section. Section two takes care of the literature and empirical review, section three comprises of the methodology used in the process of research while section four covers data analysis and presentation. Section five and six comprises of discussion of finding, conclusion and recommendation of findings and author's contribution to knowledge.

2. Theoretical Issues and Review of Empirical Literature

2.1. Theoretical Issues

In an attempt to analysis the Ricardian equivalence preposition, let consider this illustration, assume that government increases is spending and reduces tax, Ricardian hypothesis states that overall change in tax revenue will not influence the quantum of total consumption of the household and some key macro-economic variable such as real interest rate, total savings, employment rate, even the future national income and so on. That is, increase in government spending has no significant influence on some key macro-economic variable. The rationale behind this is that the accumulated private savings during increase in government spending will be used in setting off the borrowed fund in the future. On this premises he argues that government attempt to influence demand using fiscal policy will prove fruitless. Hence, no positive nor negative relationship exist between government spending and macro-economic variable Baro (1974).

On the contrary, the Keynesian traditional theory postulate that increase in government expenditure has a positive effect on some key macro-economic variable and stimulates the domestic economic activity, increases aggregate demand, increases savings and private investment at any given level of interest rate and hence crowds-in private investment. On this premises, it is assumed that the economic is experiencing persistence increase unemployment and that interest rate has little or no sensitivity to investment. On this note, attempt to stimulate aggregate demand using fiscal policy will proof fruitful.

Finally, the neoclassical economist propose negative nexus between fiscal deficit and macro-economic variables. They argue that increase in government spending stimulate aggregate demand and hence bring about high level of competition between government and private investor in demanding for loan resulting into higher interest rates, discouraging the issue of private bonds, private investments and private spending, increases inflation level, and cause a similar increase in the current account deficits and finally slows the growth rate of the economy through resources crowding out. However, Musgrave theory of public expenditure growth opted that per capital income is a major determinant of demand for public services. According to him,

increase in the level of per capital income stimulate the demand for public good. The economic implication of this is that increase in government spending will stimulate per capital income which will bring about increase in the demand for public good and shows a positive nexus on private consumption. However, Wagner's law (1835-1917) postulated that an extension of the function of state will always lead to increase in government recurrent expenditure and that the level of modern industrial development society in a given country will stimulate the government capital expenditure and finally he concluded that the rise in the government total expenditure, i.e. capital and recurrent expenditure will be greater than proportional increase in the national income.

2.2. Past Empirical Studies

As earlier stated, this is a fresh attempt which tends to investigate the behaviour of the macro-economic variables to increase in total government expenditure in Nigeria.

Ajibola Arewa and Prince Nwakahma (2013) carried out a study on the macro-economic variable and the dynamic effect of public expenditure in Nigeria applying long trend analysis from 1981 to 2011 using four variables. Finding reveals that there exist a long-run nexus between government expenditure and some key macro-economic variable used in the process of research. Secondly findings shows that there is no causality flow between all the variable used in the research work and finally the output of the research work reveals that growth in capital spending stimulate economic growth while recurrent expenditure deteriorate growth hence, there advice that government should implement policies that will reduce the ever increasing recurrent expenditure so as to give room for move capital expenditure which is a stimuli to economic growth. (U.S. Treasury department, 1984) carried out a study to ascertain the effect of government spending on interest rate and found that there exist a very minute nexus between interest rate and government spending. In the same vein, Evans (1987 a) using monthly data from 1908 to 1984 in U.S found that there is no significant nexus between growth in government expenditure and nominal real interest rate on commercial paper and corporate bonds over a long period of time. In a dual country analysis investigated by Chris Carroll and Lawrence Summers (1987) trying to compare the response of saving to increase in government spending between Canada and the United State, they found a positive effect of government spending on aggregate savings. They however concluded that increase in private saving brings about increase in government budget deficit which implies that the Ricardian hypothesis holds. In Tanzania, "Moshi and Kilindo (1999)" investigated the impact of government policy on macro-economic variable using time series data spanning from 1970 to 1992. Findings reveals that increase in government spending on capital expenditure is positive and significantly influence private investment.

"Folster and Henrekson (2001)" investigated the nexus between economic growth and government spending between the periods of 1950 to 1995 using different statistical tools. Finding reveals that there is a causal link between government

expenditure and economic growth with causality flowing from GDP to government expenditure while there also exist a feedback effect between government expenditure and economic growth from four countries out of the countries examined in the process of research. Using panel data of 115 countries in investigating the nexus between government expenditure and economic growth, Ram (1986) discovered a direct effect of government spending on economic growth which implies that increase in government spending triggers the growth of the economy under study. Chung-fu Lai (2008) studied the effect of government spending on macro-economic variable, in his findings, he discovered that increase in government spending stimulate domestic output, local and international exchange rate, and domestic price flexibility which generate crowd out effect on private consumption. Furthermore, he also found that government spending shock skyrocket consumer index and exchange rate in the long-run equilibrium.

Liu, Hsu and Younis (2008) assert that Keynesian proposition has more influence than Wagner's law in the U.S. They have carried out an empirical study on the causal link between GDP and government spending in the U.S between the periods of 1947 to 2002. Output of their findings reveals that increase in government total expenditure stimulate the U.S economy while the result of the granger causality test report a causal link between government expenditure and economic growth with causality flowing from government expenditure to economic growth which implies that growth in government expenditure stimulate the growth of the U.S.

Growth rate in different countries varies depending on the nature and spending ability of the government. Countries with large government spending is likely to experience more growth compare to countries where government spending is little. Gregoriou and Ghosh (2007). The empirical findings of Peter (2003) in Sweden reveals that the government spend excessively on her recurrent expenditure which could be detrimental to economic growth over time. Findings from Devarajan, Swaroop and Zou (1996) reveals that government capital expenditure has a negative significant nexus with economic growth which suggest an inverse relationship while there exist a positive relationship between economic growth and government recurrent expenditure. The result of Alexandra (1990) while investigating the effect of government spending on economic growth using panel data for sample of 13 Organization for Economic Cooperation and Development (OECD) countries, he found that there is an insignificant negative nexus between the growth in government spending and the economic. Gemmell and Kneller (2001) investigated the relationship between fiscal policy and growth of the European economy in the long run using time series and panel data, findings reveals that non-productive government expenditure does not stimulate economic growth in the Europe while productive expenditure of the government stimulate economic growth. In the Nigeria context has investigated by Chude Nkiru and Chude Daniel (2013), they investigated how government spending impacted on economic growth using time series data from 1977 to 2012, output of their finding reveals that economic growth massively impact on

government expenditure which implies that the growth of the economic determine the quantum of government spending hence there advice that the quantum of government spending on recurrent expenditure like education should be reduce in other to give room for more allocation of funds into the capital expenditure. Olorunfemi (2008) also contribute to literature by studying the direction and link between public investment and growth of the Nigeria economic. prior to the outcome of is empirical investigation, he discovered that about 63% of government total spending goes to recurrent expenditure while capital expenditure only has 37%. The empirical investigation of Abu and Abdullah (2010) shows that total capital expenditure of the government and recurrent expenditure on education has a negative impact on the growth of the Nigeria economy while government spending on telecommunication, transportation and health reflect a positive link towards economic growth in Nigeria.

Monogbe and Davies,(2016) investigated the monetary and fiscal policy in Nigeria with an intention to test the Keynesian and monetarist proposition in the Nigeria context using time series data spanning from 1981 to 2014. Finding of their studies reveals that total government expenditure (TGE) has a positive and a significant influence in promoting economic growth which canvass support for the Keynesian that increase in government expenditure is a key instrument in promoting economic growth and hence crowd in private investors in Nigeria. While on the other hand, increase in total money supply (TMSS) is negatively significant to economic growth which contradict the opinion of the monetarist. "Devarajan et al, (1996)" investigated the nexus between the government spending and real gross domestic product using the LDCs as there sample size and finally concluded that increase in recurrent expenditure is a stimuli to economic growth.

Conclusively, from the above empirical reviewed literature with respect to the relationship between increase in government expenditure and some key macro-economic variable, one can envisage that there are little research work done on this topic and the few work report separate opinion as some authors contend that increase in government spending has a positive and significant influence on growth while some research opted that there is an existence of inverse relationship between government spending and macro-economic variable which shows that the controversy is far from been settled. In the view of all these, this research work is an attempt to juxtapose the behavioural effect of macro-economic variable on increased government spending from 1980 to 2014.

3. Methodology and Data

3.1. Research Design

This research work is design after ex-post facto method using time series data spanning from 1981 to 2014. Unemployment rate, price index, interest rate and investment rate are used as an indicator of macro-economic variable while Total government expenditure (TGE) which is a combination of recurrent expenditure and capital expenditure is used as an

indicator of fiscal policy. Data were sourced from the CBN statistical bulletin and international monetary fund, world economic outlook database.

3.2. The Model

Sequel to the above theoretical underpinning and reviewed empiric, we formulated that total government expenditure is a function of macro-economic variable indicators hence, their relationship is model in a functional form thus

$$TGS_t = f(UMPL_t, BOT_t, INTR_t, CPI_t) \quad (1)$$

We transform the model into econometrics form by introducing constant, estimation parameter and stochastic term.

$$TGSt = \epsilon_0 + \epsilon_1 UMLt + \epsilon_2 BOTt + \epsilon_3 INTRt + \epsilon_4 CPIt + \epsilon_t \quad (2)$$

Where

TGS = Total Government Spending

UMPL = Unemployment Rate

ITNR = Interest Rate

BOT = Balance of Trade

CPI = Consumer Price Index

ϵ_0 = constant

ϵ_1 to ϵ_4 = Estimation parameters

ϵ_t = stochastic term

On a priori $\epsilon_1, \epsilon_3 \leq 0, \epsilon_2, \epsilon_4 > 0$

4. Data Presentation and Interpretation

Phillips Perron stationality test

Considering the underlying shocks in the time series data and also some shock which could be found in the error terms, we therefore intend to capture the stationarity of the employed variable as this will help in forecasting and predicting a great possible effect of shock as non-stationary data are not suitable for empirical analysis. Phillips Perron stationality test is applied to ascertain the various level of stationality of the data in order to hedge against spurious result. Its output is presented below.

Table 1. Phillips Perron unit root test.

Variables	PP Stat	5%critical value	Order	Remark
D (TGS)	-4.9446	-2.9571	1 (1)	Stationary
D (UMPL)	-5.3324	-2.9571	1 (1)	stationary
D (INTR)	-9.1034	-2.9571	1 (1)	Stationary
D (BOT)	-2.996	-1.9516	1 (1)	stationary

Author's computation

The output of the unit root test above reveals that all the variable used in the process of research has unit root at level. Sequel to these, we proceed to test in first differencing and we discovered that all the variable became stationary after first differencing in the order of 1 (1) integration which suggest that our model is free from spurious result hence, we can proceed to test for long run nexus between the variable used in this research work using Johansson co-integration test.

Table 2. Presentation of Johansson co-integration test.

Hypothesized No. of CE (s)	Eigenvalue	Trace stat	0.05 Critical Value	Prob	Max-Eigen stat	0.05 critical Value	Prob
None *	0.88989	141.055	69.8188	0.0000	66.18984	33.87687	0.0000
At most 1 *	0.66298	74.8658	47.8561	0.0000	34.46369	27.58434	0.0056
At most 2 *	0.568717	40.40215	29.79707	0.0021	25.22972	21.13162	0.0125
At most 3	0.280184	15.17243	15.49471	0.0559	9.862793	14.2646	0.2211
At most 4 *	0.16221	5.309637	3.841466	0.0212	5.309637	3.841466	0.0212

Series: (TGS) (UMPI) (BOT) (CPI)

Trace test indicates 3 co-integrating eqn (s) at 0.05 level from the output above, we found a long run nexus among all the variables used in the process of research as the result justifies the fact that there are three co-integrating equation. The existence of the long run nexus depict that all the variable used in the process of research share mutual stochastic trend and are linked in common long-run equilibrium hence, we can proceed to vector error correction mechanism (VECM) to test the speed of adjustment from short run disequilibrium to long run equilibrium state.

The output of the error correction model incorporate three lagged value of the exogenous variables and one lagged value of the error correction term (ECM). The result is however presented below.

Table 3. Presentation of Vector Error Correction model output.

Dependent Variable: D(TGS)				
Method: Least Squares				
Sample (adjusted): 1985 2014				
Included observations: 30 after adjustments				
Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	23.6999	4.600372	5.15175	0.0003
D (TGS (-1))	-1.0878	0.174966	-6.2174	0.0001
D (TGS (-2))	-0.0987	0.179555	-0.5498	0.5934
D (TGS (-3))	-1.0126	0.193507	-5.2329	0.0003
D (BOT (-1))	-0.2436	0.081956	-2.9717	0.0127
D (BOT (-2))	-0.6266	0.074908	-8.3651	0.0000
D (BOT (-3))	0.05483	0.0767	0.7148	0.4896
D (INTR (-1))	-26.231	6.826967	-3.8422	0.0027
D (INTR (-2))	-22.628	7.76672	-2.9134	0.0141
D (INTR (-3))	-6.6958	6.147981	-1.0891	0.2994
D (CPI (-1))	5.23455	1.897124	2.7592	0.0186
D (CPI (-2))	2.47525	1.691113	1.4636	0.1713
D (CPI (-3))	3.80014	1.598948	2.3766	0.0367
D (UMPL (-1))	-16.237	15.83055	-1.0257	0.3271
D (UMPL (-2))	0.74033	11.15857	0.06635	0.9483
D (UMPL (-3))	-8.4433	10.17214	-0.8301	0.4242
ECM (-1)	-0.8797	0.1204	-7.3066	0.000
R-squared	0.94218	Mean dependent var	132.5312	
Adjusted R-squared	0.847565	S.D. dependent var	220.9325	
S.E. of regression	86.25865	Akaike info criterion	12.01594	
Sum squared resid	81846.1	Schwarz criterion	12.90337	
Log likelihood	-161.239	Hannan-Quinn criter.	12.29984	
F-statistic	9.958025	Durbin-Watson stat	2.738893	
Prob(F-statistic)	0.000207			

Author's computation

In other to ascertain the speed of adjustment among all the variables used in the process of research from short run

disequilibrium to long run equilibrium state, error correction model is employed. The output of this result show that balance of trade (BOT) with the probability value of 0.0127 is significant but negatively related to total government spending. Negative balance of trade coefficient (-0.2436) reflect unfavourable balance of trade which shows that, Nigeria import more in monetary terms than they export. The economic implication of this is unfavourable balance of trade which is disastrous to naira exchange rate. One of the major reasons to the inverse relationship between total government spending (TGS) and balance of trade (BOT) could be attributed to the fact that larger percentage of government spending is allocated to consumption expenditure which give no room for productivity and exportation. Furthermore we observe an inverse relationship between increase in government spending and interest rate which is in line with our apriori expectation. However, we found a positive and significant nexus between consumer price index (CPI) with the probability value of (0.0186) and government spending (TGS). This implies that increase in government spending will further stimulate consumer price index in the economic. Mine while, Increase in consumer price index reflect increase in the consumers' confidence to spend in the economy which amount to double jeopardy. That is, consumers are buying more when purchasing power of naira has declined. Finally on the table, the output of the unemployment rate shows insignificant and inverse relationship to government spending, this passes a signal that larger percentage of government spending is channeled toward recurrent expenditure which does not give room for entrepreneur activities and hence crowd out employment rate. The output of this finding is in consonant with the work of Ajibola Arewa and Prince Nwakahma (2013). The negative coefficient and significant probability value of (BOT) and (INTR) shows that disequilibrium in balance of trade and interest rate will be adjust in the long run.

The speed of adjustment (ecm) is negative (-0.8797) and significant (0.0000) which suggest a long run causality running from BOT, UMPL, CPI and INTR to TGS suggest that our exogenous variable has an influence on the endogenous variable in the long run and that the disequilibrium in the short run will be adjusted in the long run to the tune of 87%

The value of the adjusted R^2 shows a high predictive ability of 0.87218 which suggest that 85% variation in the

endogenous variable is captured and explained by the independent variable while the value the F statistics and the corresponding probability value is significant and the value of the Durbin Watson (2.7388) shows absence of auto correlation suggesting that our research is not spurious and reliable for decision making.

Table 4. Granger causality Test.

Pairwise Granger Causality Tests			
Date: 06/02/16 Time: 22:17			
Sample: 1981 2014			
Lags: 1			
Null Hypothesis:	Obs	F-Statistic	Prob.
BOT does not Granger Cause TGS	33	2.67329	0.1125
TGS does not Granger Cause BOT		0.11280	0.7393
INTR does not Granger Cause TGS	33	0.44304	0.5107
TGS does not Granger Cause INTR		0.25232	0.6191
CPI does not Granger Cause TGS	33	1.28582	0.2658
TGS does not Granger Cause CPI		1.17215	0.2876
UMPL does not Granger Cause TGS	33	2.78439	0.1056
TGS does not Granger Cause UMLP		6.54875	0.0158

The output on table four reveals that there is no causality link between BOT, INTR and CPI while there exist a unilateral causality link between TGS and UMLP with causality flowing from TGS to UMLP. Thou we expect that increase in government spending would reduce level of unemployment, but the output of causality test shows that Total government spending granger cause unemployment suggesting that unemployment level depend on the level of government spending, if larger percentage of government spending is centered on capital expenditure which is capable of creating more jobs then, unemployment level will reduce overtime but the causality direction shows that larger quantum of the Nigeria government spending is allocated to recurrent expenditure which stimulate unemployment rate.

Table 5. Impulse Respond.

Period	TGS	BOT	INTR	CPI	UMPL
1	86.25865	0.000000	0.000000	0.000000	0.000000
2	22.32028	167.5042	13.96536	-60.40626	127.5001
3	-4.908525	50.61357	37.99417	-119.1979	123.0712
4	67.62797	173.4837	33.46745	-125.2751	119.4872
5	52.98131	284.5468	58.73857	-159.6555	184.1556
6	-3.335818	224.8408	131.9383	-237.0001	282.7369
7	-16.97379	201.2450	154.6752	-273.5339	290.6240
8	4.123500	201.3076	189.0687	-339.8522	295.8698
9	1.555386	294.1597	248.5585	-367.3652	351.0390
10	-25.45002	332.6081	291.2591	-438.1178	359.7739

The result of the impulse response estimate is represented to one standard deviation innovation in each of the variables (TGS), (BOT), (INTR), (CPI), and (UMPL) respectively in a period of 10 years into the future. From the above table, it is observe that the impulse response of TGS to own shock in the short run is 86.25865 unit while the impulse response of PCGDP to shock emanating from all the exogenous variables is 0.0000 in the 1st period regarded as short run. In the 2nd

period, the impulse respond of PCGDP to own shock decreases to about 22.3203 unit while impulse response of PCGDP to shock evolving from all the exogenous variables increases thus 167.5042, 13.9653, 127.500 and CPI which possess a negative value of -60.40626 respectively. In the long run, the impulse response to TGS own shock reduces to 1.5553 unit while that of the TGS to shock evolving from other variables BOT, INTR, INTR, and UMLP are 294.1597, 248.5585, -367.3652 and 351.039 respectively. Mine while, we observe that from period 2 to 10, the value of CPI is negative all through the forecast projected shock into the future which suggest that consumer confidence in the economy decreases which will equally amount to double jeopardy such that consumers are buying less at the time at the time when the purchasing power of naira increases.

Table 6. Variance decomposition.

Period	S. E.	TGS	BOT	INTR	CPI	UMPL
1	86.25865	100.0000	0.000000	0.000000	0.000000	0.000000
2	236.8473	14.15192	50.01667	0.34767	6.504699	28.97905
3	299.1332	8.898954	34.21901	1.83122	19.95633	35.09449
4	394.0075	8.075386	39.11057	1.777006	21.61201	29.42503
5	549.4262	5.082799	46.93519	2.056811	19.55839	26.36681
6	711.3021	3.034789	37.99506	4.667767	22.77096	31.53143
7	854.3687	2.142987	31.88398	6.512949	26.03352	33.42656
8	1004.626	1.551577	27.07499	8.252275	30.2723	32.84886
9	1189.862	1.106256	25.41302	10.24666	31.11287	32.1212
10	1390.419	0.843639	24.33286	11.89186	32.7133	30.21834

Variance decomposition estimator is used in this process of research so as to ascertain into the future the proportion of the forecast error allocated to own shock relationship and how the level of shock in each of the variables could be projecting into the future (monogbe 2016). The result of the variance decomposition estimate shows the output for five variable used in the process of research which include (TGS), (BOT), (INTR), (CPI) and (UMPL) respectively for 10 periods forecasting into the future. The output reveals that in the short run, that is period 3, innovation to TGS account for about 8.9% variation in the fluctuation of TGS (own shock) while shock to other exogenous variable can cause about 34.2%, 1.8%, 20% and 35% fluctuation in TGS.

While in the long run that is period 10, innovation to TGS decreases and account for about 1% fluctuation in own shock while shock to other exogenous variable account for about 24.3%, 11.8%, 32.7% and 305% fluctuation in TGS.

5. Discussion of Findings and Summary

The gross objective of this research work is to ascertain the behavioural effect of some key macro-economic variables to increase in government spending over a period of 1981 to 2014 using vector error correction model and ganger causality test as an estimation tools for justification. From the output of the major estimation, we found that the behavioural effect of macro-economic variables to increase in government spending is multidimensional in the sense that some

macro-economic variable such as (BOT and INTR) has a significant but inverse relationship to total government spending while others did not. The economic implication of negative balance of trade is unfavourable balance of trade which signifies that Nigerians import more in monetary term than it's export while the negative value of the interest rate is in line with our apriori expectation. Consumer price index is positive and significant which amount to double jeopardy. That is, consumers are confident to buy more when the purchasing power of naira has declined and finally, we observe that increase in government spending stimulate unemployment rate which is contrary to our apriori expectation and theory but, in consonant with the work of Ajibola Arewa and Prince Nwakahma (2013). One major factor that could be responsible for this abnormalities is not far from the fact that larger quantum of government spending in Nigeria is massively allocated to recurrent expenditure while few percentage is injected into capital expenditure which amount to highly and ever teaming unemployment rate in Nigeria overtime.

Recommendation

Prior to our empirical findings, we recommend thus, larger percentage of Government spending should be re-allocated toward productive capital expenditure such as agriculture, entrepreneur activities, and some other productive investment which is capable of stimulated economic bliss. More attention should be given to productive and manufacturing sectors of the economy for massive output and encourage Exportation as it is a symbol of favorable balance of trade which will further showcase government effort and help in reducing the ever teaming unemployment rate. Finally, having remove the subsidy on car spirit which is currently affecting prices of all commodities in the economy, effective monitoring term should be put in place to ensure price prudence.

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