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THE IMPACT OF BUDGET DEFICIT ON NIGERIA ECONOMIC GROWTH (1980-2017)

NWACHUKWU ATHANASIUS C.,
Department of Social Sciences,
Federal Polytechnic Nekede, Owerri.
athanchukspoly@gmail.com
+2348037739386

&

CHIKEZIE ADANNA O.,
Department of Social Sciences,
Federal Polytechnic Nekede, Owerri.

&

UZOMA KELECHI P.
Michael Okpara University of Agriculture,
Umudike, Umuahia.

ABSTRACT
This research study attempt to econometrically investigate the impact of budget deficit on the economic growth of Nigeria. It was carried out to determine the long-run effect of deficit budgeting and the inflationary pressure in Nigeria, it adopted OLS method of analysis where RGDP was chosen as the dependent variable and external debt, domestic credit, lending interest rate and inflation served as the explanatory variables.Further, ADF was used to test for the stationarity of the variables while cointegration test was conducted to determine the long-run relationship among the variables The study covered 37 years ranging from 1980-2017. The work therefore recommend that external source of financing deficit should be contracted for economic stability.

Keywords: Economic growth, external debt, budget deficit

BACKGROUND OF THE STUDY
Incessant government budget deficits and poor macroeconomic performance generate concerns in both industrialized and unindustrialized countries. Part of the worry arises from general perception that high real interest rates are fuelled by large scale budget deficits, which also crowd out private investment, hamper capital formation and adversely affect economic growth and productivity. Another cause of worry relates to the competence of monetary authorities to control the level of inflation in the event of large scale deficits, mainly because inflation erodes confidence in the system, retards growth and exacerbates social tensions on fixed income earners. Nevertheless, most governments employ deficit financing as veritable mechanism for achieving their economic goal (Antwi, Zhao & Atta Mills, 2013). However, Eminer (2015) ascribes manifestation of budget deficit to large government spending or inability to harvest tax revenue or both of them arguing that budget deficits or increased government spending does not usually influence the economy negatively. He argues further that increased government expenditure could affect the economy positively if the resources are channeled to productive ventures rather than to pursue political interests. Generally, in the

event of limited resources, governments usually incur deficits to finance economic and social infrastructures. When countries prepare their budget, one out of three types of budget concepts must be witnessed, namely: balance budget, surplus budget and deficit budget. The balance budget signifies that government revenue and expenditure are equal; the surplus budget denotes that government revenue is greater than expenditure, and if government revenue is surpassed by expenditure, the outcome is referred to as deficit budget. Recourse to huge budget deficits may be an unavoidable policy objective if such deficits are effectively used to promote healthy macro economy (Aslam, 2016). Thus governments try to achieve this feat through the instrumentality of fiscal policy. This policy examines the way a government manages the totality of its incomes and expenditures over a known period. A deficit policy makes a significant contribution by ensuring that countries gain macroeconomic stability in the areas of inflation (price stability), full employment (in order to reduce poverty level), income redistribution and sustainable output growth, which form the most common objectives of macroeconomic policy of governments globally (Bawa & Abdullahi,). In the course of ensuring realization of aforementioned economic targets, political or military leaders occasionally are inclined to spend more money than they have budgeted or earned as income. This incidence is referred to as "budget deficit". Ezeamama, Anyanwaokoro & Mgbodille (2015) and Awe & Shina (2012) trace evolution of budget deficit to the Keynesian proposition of the 1930s, which assumes that economic growth positively and significantly responds to budget deficit.

STATEMENT OF PROBLEM

The existence and persistent growth of the budget deficit in Nigeria exposes the economy to various vulnerabilities from both within and outside the economy. In spite of the numerous austerity measures and the various attempts to widen the tax base over the years, the budget deficits continues to grow with the 2016/2017 fiscal year budget deficit hitting 12.9 per cent of the GDP (BPS , 2014). A high deficit implies that the government will continue to increase its borrowing and hence the debt levels will continue to grow. Nigeria's public indebtedness as at end-December 2016 is estimated at 78.8 percent of GDP, the highest level seen since independence (Annual debt report, 2017). The main driver for public debt accumulation in the past has been the primary deficit, which has contributed to 8.8 percent of GDP increase in the public debt level (Medium Term Debt Strategy, 2016). Accumulation of public debt levels leads to the widening of the current account deficits. As the current account deficit worsens, it turns to the depreciation of the domestic currency which may impact the economy negatively due to the inflationary pressures and thus increase in interest rates. As a consequence, the cost of borrowing goes up for the government and this exerts pressure on the government budget due to high debt service and thus high deficit levels. The vicious cycles will continue again and again and the potential spiral effects are creating anxieties in the Nigerian economy. Government budget deficit apparently is viewed as a major cause of macroeconomic instability, but most empirical findings do not entirely support this assumption as findings from various studies are mixed and contentious across countries. In light of this, researchers seem to focus more on budget deficit-economic growth.

OBJECTIVES OF THE STUDY

The study aims at investigating the econometric impact of budget deficit on the economic growth of Nigeria. Specifically, the study intends;

1. To analyze the relationship between budget deficit and economic growth in Nigeria
2. To provide policy implications for managing the budget deficit.

RESEARCH QUESTIONS

1. How does the budget deficit influence the economic growth of Nigeria?
2. What are the policies that the Government of Nigeria can adopt to manage budget deficits

RESEARCH HYPOTHESIS

H_0: There exists no significant relationship between budget deficit and economic growth in Nigeria
H_0: There exists no significant relationship between inflation and economic growth in Nigeria

THEORETICAL FRAMEWORK

A number of theories have been developed in an attempt to explain the implications of budget deficit financing on economic performance worldwide. Some of them include the Keynesian economics theory, neoclassical economics theory and Ricardian equivalence approach. However, Keynesian theory forms the theoretical underpinning of our study.

Keynesian Theory

The basic assumption of Keynesianism is that government expenditure can positively influence economic growth by increasing government consumption through increase in investment, employment and profitability (Eze & Nwambeke, 2015). This means that government expenditure programmes ought to correct perceived insufficient private investments in an economy in a time of budget deficit. In other words, deficit financing can lead to improved private investment since this financing option promotes government expenditure and money supply. Another assumption of the Keynesian thought is that government can turn recession around by raising funds from private sources (e.g. commercial bank, capital market, etc) and make repayments via its diverse spending channel.

The Neoclassical theory

The Neoclassical economists assume that each consumer belongs to a specific generation and the life span of succeeding generations overlap. This school of thought also assumes that the market will always be at equilibrium in all periods. Based on these assumptions, they argue that budget deficits have detrimental effects on the economy and thus advocate for a balanced budget at all times (Bernheim, 1989). This is because, in the case of a closed economy with under employment of resources, the budget deficit will lead to an increase in expenditure which translates to high interest rates, reduction in national savings and thus reduced future investments

EXPLAINING BUDGET DEFICIT

A budget is a summary of intended expenditures along with proposals on how to meet them (Peterson, 2007). It provides a plan about the earning and spending of a country for a period of time. A budget can be balanced, surplus or deficit. In circumstances in which inflows equals outflows, the budget is said to be balanced. For a sustainable economic growth of a country, balanced budget is decisive. When a budget surplus is witnessed, revenue becomes more than current expenditures and results in an excess of funds that can be appropriated as desired. However, in circumstances in which a budget deficit is identified, current expenses exceed the amount of income being received through standard operations. In order to correct a budget deficit, a nation may need to cut back on certain expenditures or increase revenue-generating activities, or employ a combination of the two. Antwi, et al. (2013) affirms that a robust fiscal policy is a sine qua non for macroeconomic stability and sustainable growth is a cardinal target of nearly all emerging market economies

Causes of Budget deficit

Cyclical reasons

For many countries a rising budget deficit is the inevitable result of experiencing a recession or a sustained period of slow growth.

In a downturn, revenue flows fall from direct and indirect taxes whilst at the same time, the government is required to pay more out in welfare benefits such as the means-tested income support, unemployment benefits and other welfare handouts.So part of a fiscal deficit may be the consequence of the automatic stabilizers at work. These are the tax and government spending changes that happen automatically at different stages of the business cycle. The governments of most developed countries are prepared to allow the automatic stabilizers to work through because, when their economy recovers, the cyclical component of a fiscal deficit will diminish, indeed in an economic boom, the government may run a budget surplus.

Structural reasons

For some countries, fiscal deficits seem an almost permanent feature, rarely is the government able to find enough tax revenue to cover the annual spending budgets. What structural problems / issues might lead to persistent budget deficits?

1. High levels of tax avoidance and tax evasion
2. High levels of income and wealth inequality.
3. Demographic pressures
4. Government inefficiency.
5. High levels of government subsidy / financial support

EMPIRICAL LITERATURE

Abubakar (2016) assessed the effects of fiscal policy shocks on output and unemployment rate in Nigeria in line with the Keynesian principles by adopting the Structural Vector Autoregression (SVAR) methodology to analyze annualized data for the period 1981 – 2015. ADF test for unit root result indicated that all variables were integrated of order one, and that Johansen Cointegration test affirmed long-run association among the variables. Results of the SVAR model indicated shock in public expenditure as having a long-lasting positive influence on output. Revenue shock was discovered to exert a positive impact (lower than that of public expenditure shock) on output. In contrast, the impact of revenue shock on unemployment was seen to be short-lived but negative.

Okoye, Evbuomwan, Modebe & Ezeji (2016) used annualized Nigeria"s data spanning 1981 – 2014 obtained from publications of the Central Bank of Nigeria (CBN) and National Bureau of Statistics (NBS) to investigate impact of key macroeconomic indicators on fiscal deficits in Nigeria. Exchange rate, inflation rate, unemployment rate and gross fixed capital formation made up the independent variables, while fiscal deficit was used as dependent variable. Vector error correction model (VECM) served as the technique of analysis. Results revealed significant positive effect of gross fixed capital formation, and significant negative impact of inflation rate including unemployment rate on fiscal deficits in Nigeria within the period under review. Finally, the exchange rate showed negative and non-significant effect on fiscal deficits. The results aforementioned mean that existing policies targeting at uplifting the infrastructure level of the country seem to engender deficit budgeting. Likewise, economic policies that seem to control inflation (such as increasing GDP level) and unemployment result in increased budget deficits. The causality tests indicate proof of causal effect of government budget deficits on exchange rate, inflation rate and unemployment rate, but failed to display sign of causation between fiscal deficit and gross fixed capital formation.

Nkalu (2015) examined the effects of budget deficits on selected macroeconomic variables in Nigeria and Ghana employing annual time-series data of the two countries spanning from 1970 to 2013. The specific objectives of the study include: to determine the impact of budget deficits on inflation rate, interest rate and economic growth in Nigeria and Ghana based on the methodological framework of Seemingly Unrelated Regression (SUR) model and Two-Stage Least Squares (2SLS). The paper adopted Engle-Granger Co-integration test, Augmented Dickey Fuller (ADF) and PhillipsPerron (PP) tests in estimating the model equations. Data retrieved from World Bank, IMF - World Economic Outlook, Central Bank of Nigeria, Bank of Ghana and other sources were analyzed using SUR technique with various diagnostic and specification tests to determine objectives of the study. The findings showed that budget deficit impacted negatively on inflation rate, interest rate and economic growth thereby affirming the neoclassical position in the literature that budget deficit impedes growth of the economy through resources crowding-out.

Osuji and Ozurumba (2013) investigated the impact of external debt financing on economic development in Nigeria using stationarity test, co-integration test and vector error correction model. The study shows that London debt financing possessed positive impact on economic growth while Paris Club debt and Promissory Note were inversely related to economic development in Nigeria. The study recommended that debt services should be cancelled to encourage survival of SMEs in Nigeria.

Ojong and Hycenth (2013) examined the effect of budget deficit financing on the development of the Nigerian economy using ordinary least square (OLS) regression techniques. It was found that there is a significant relationship between economic growth and government expenditure and there is no significant relationship between government revenue and economic growth in Nigeria. The study recommends that the

government should maintain a high level of transparency in governance so as to bring to the barest minimum the level of deficit financing.

Akinmulegun (2014) in a study of deficit financing and its effect on economic growth in Nigeria employing the econometric technique of Vector Auto Regression (VAR) Model, the relevance variables used are as follows: real gross domestic product (RGDP), the gross capital formation (GCF), the real interest rate (RINTR), inflation rate (INFR) and budget deficit. It was discovered that deficit financing has not contributed significantly to economic growth in Nigeria. This is because of the negative impact of deficit financing on economic growth during the period under review. The study recommends that government should reduce unnecessary public spending, ensure greater budget discipline and adopt a financial structural transformation that can help to reduce wastage in public spending.

Osuka & Achinihu (2014) investigated impact of budget deficits on macroeconomic variables in Nigeria stretching the period 1981 – 2012. The researchers conducted preliminary test using ADF method to ascertain stationarity of the variables, which were stationary (absence of unit root) at first differencing. They equally employed Johansen Co-integration test to check for the co-integration of the variables and discovered that the variables in the study were all co-integrated of order one denoting the existence of long-run link between budget deficits and designated macroeconomic indices (GDP, interest rate, nominal exchange rate and inflation rate). The Granger Causality results indicated a unidirectional causal relationship between Budget deficits and GDP with GDP granger causing budget deficit. Conversely, the test for causality further revealed absence of causality between deficits and interest rate, budget deficits and inflation and budget deficit and nominal exchange rate. Based on the results, the study concluded that budget deficits impacted significantly on the macroeconomic behaviour of the Nigerian economy within the period studied.

Musa & Mawejje (2014) in their study on macroeconomic effects of budget deficits in Uganda using Vector Error Correction Model (VECM) for the period 1999 to 2011 clearly showed that widening current account deficit and rising interest rates were due to budget deficits. The scholars argued that it was necessary for governments to intensify the crusade against corruption deals and tax, which weaken their efforts in tax collection.

GAP IN EMPIRICAL LITERATURE

From the above review of literature of empirical studies, it can be concluded that most of the existing study in Nigeria have examined the interrelationship between interest rate, debt, money supply, private investment and public investment in relation to the change in budget deficit/fiscal deficit. Studies in this context examining econometrically the impact of budget/fiscal deficit on economic growth are highly limited. However, a few studies have attempted to examine the econometric relationship between budget deficit and economic growth. The present study is another attempt to fill these gap that tries to arrive at appropriate fiscal policy implications.

MODEL SPECIFICATION

To analyze the econometric impact of budget deficit on the economy, this model was built.

Our linear model was built on the functional form:

RGDP=f (EXT, DC, LINT, EXR, INF)……. (1)

Where RGDP is Real Gross Domestic Product (a proxy for economic growth), EXT is the amount of budget deficits financed from foreign loans; DC is amount of budget deficits financed from the domestic Credit which comprises of the Central Bank of Nigeria and the deposit money banks. LINT is the rate at which loans are gotten to be repaid. INF is the constant rise that resulted to deficit.

The econometric model based on the above functional relation is.

$RGDP = \beta 0 + \beta 1EXT + \beta 2DC + \beta 3LINT + \beta 4INF + U$ ---------- (2)

Where RGDP is the dependent variable, and EXT, DC, LINT and INF are the independent variables. They are as earlier defined. The term $\beta 0$ is the regression constant; $\beta 1$, $\beta 2$, $\beta 3$ and $\beta 4$ are the regression coefficients of the explanatory variable while U is the error term.

DATA DISCUSSION

Real Gross Domestic Product: GDP is measured as total market value of goods and services produce in a country with in a given period of time. GDP growth rate measures the growth rate of a country output within a given period of time or a change in output from one period to another.

External debt: External debt (or foreign debt) is the total debt a country owes to foreign creditors, complemented by internal debt owed to domestic lenders.

Domestic credit: Domestic credit is lending or credit that a country or her central bank makes available to borrowers within the same territory. This may include commercial banks and even involve the government itself.

Lending Interest rate: This is the proportion of a loan that is charged as interest to the borrower, typically expressed as an annual percentage of the loan outstanding.

Inflation rate: This is the rate at which prices increase over time, resulting in a fall in the purchasing value of money

DECISION RULE

Reject Ho if unit root of ADF calculated value is greater than the critical value in absolute terms.

In the table the ADF statistics for each variable at level form were less than the critical values at 1%, 5% and 10% in absolute term; therefore we accept Ho and conclude that the variables have no unit roots in them and therefore we difference again.

At the first difference all the other variables were stationary and are thus integrated of order 1 (1(1)). Since the variables are integrated of the same order we therefore conclude that there is evidence of co-integration

INTERPRETATION

The result of the Co-integration test indicates four (4) co integration vectors. This means that the explanatory variables have long run relationship with the dependent variable (RGDP) since the trace statistics is greater than the critical value at 5% level of significant.

INTERPRETATION OF RESULT

The coefficient of EXT (B_1) is (-0.00). This indicates that there is an indirect relationship between the independent variable and the dependent variable and it statistically significant at 5% level given that the t-statistics (-4.2) is less than the t-table at 5% (38 d/f) which is 1.960. We therefore reject H0 and accept H1 and conclude that External debt did not impact positively on economic growth in Nigeria.

The coefficient of DC (B_2) is 1.990. This indicates that there is a direct relationship between the independent variable and the dependent variable and it statistically significant at 5% level given that the t-statistics 0.01is less than the t-table at 5% (38 d/f) which is 1.960. We therefore reject H0 and accept H1 and conclude that Domestic credit did not contribute to the growth of GDP in Nigeria.

The coefficient of Exchange rate (B_3) is 224.05. This indicates that there is a positive relationship between the independent variable and the dependent variable and it statistically significant at 5% level given that the t-statistics 8.68is more than the t-table at 5% (38 d/f) which is 1.960. We therefore reject H1and accept H0 and conclude that exchange rate contributed to the growth of GDP in Nigeria.

The coefficient of LINT (B_4) is 257.11. This indicates that there is a direct relationship between the independent variable and the dependent variable and it statistically significant at 5% level given that the t-statistics 0.92is less than the t-table at 5% (38 d/f) which is 1.960. We therefore reject H0 and accept H1 and conclude that lending interest rate did not contribute to the growth of GDP in Nigeria.

The coefficient of INF (B_5) is 74.54. This indicates that there is a direct relationship between the independent variable and the dependent variable and it statistically significant at 5% level given that the t-statistics 0.78is less than the t-table at 5% (38 d/f) which is 1.960. We therefore reject H0 and accept H1 and conclude that Inflation did not contribute to the growth of GDP in Nigeria.

The coefficient of determination (R^2) is 0.88. This indicates that the independent variables explained 88% of the total variation in the dependent variable while the remaining 12% is unexplained due to error term (E).

The value of Durbin-Watson (DW) is 0.76. This shows that there is presence of auto-correlation among the explanatory variables.

INTERPRETATION

The pair wise granger causality test revealed unilateral causality running from EXT to RGDP, EXR to RGDP, DC to EXT, and a unidirectional causality running from INF to RGDP, LINT to EXT.

CONCLUSION

Impact of budget deficits has been critically assessed theoretically and empirically. Usually, deficit budgeting can bring about improved private investment since this financing option promotes government expenditure and money supply. Most of the previous works in this regard mainly focused on impact of government budget deficits on economic growth. One of the cardinal objectives of government fiscal deficits is to increase government spending and positively grow the economy by ensuring that resources are channeled to productive ventures rather than to pursue political interests. But we found that low or stable inflation, low or reduction in unemployment and sustained economic growth are the main measures of economic stability in Nigeria. We also found that external source of deficit financing, ways and means source of deficit financing, banking system source of deficit financing and non-banking public source of deficit budgeting as the main sources of deficit financing in Nigeria.

In conclusion, deficit budget is positively related to economic stability indicating that sound policies are needed to achieve economic stability in Nigeria. Therefore, this study discovered that budget deficit had a positive but non-significant influence on economic growth within the period studied.

This paper therefore recommends that expansionary fiscal policy should be encouraged since it hastened development process of an economy. Moreover, it is recommended that appropriate policy combination should be pursued especially in the area of infrastructure improvement like power generation in the interest of the public so as to accomplish desirable national productivity and promote job creation.

RECOMMENDATIONS

Based on our findings and conclusions from our study, the following recommendations were made and they include:

1. The positive impact of exchange rate on economic growth implies that EXR in Nigeria is one of the factors affecting economic growth. Since an increasing level of EXR is an important source of deficit financing in Nigeria, external source of financing deficit should be contracted for economic stability reasons and not for political reasons and it should be properly channeled to productive sector of the economy that will enhance economic stability.

2. Since the result of deficit financing through ways and means source of deficit financing will sustain the economic growth and increase the level of inflation rate by fueling inflation. This means that ways and means source of deficit financing can only achieve its full potential on economic growth if government can come up with laws and regulation and strengthen the existing ones so as to enhance economic stability in Nigeria through maintaining low inflation and unemployment rate.

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UNIT ROOT TEST

ADF STATISTICS UNIT ROOT TEST

Values	Level form		Difference form		Order of integration
	ADF-STAT	Critical Values	ADF-STAT	Critical Values	
RGDP	1.45	-4.4226 1% -3.5366 5% -3.2003 10%	-3.70	-4.25 1% -3.54 5% -3.20 10%	1(2)
EXT	-2.42	-4.22 1% -3.53 5% -3.20 10%	-7.08	-4.24 1% -3.54 5% -3.20 10%	1(1)
DC	-2.727	-4.22 1% -3.53 5% -3.20 10%	-5.57	-4.25 1% -3.54 5% -3.20 10%	1(1)
EXR	-2.20	-4.22 1% -3.53 5% -3.20 10%	-5.57	-4.23 1% -3.54 5% -3.20 10%	1(1)
LINT	-2.58	-4.22 1% -3.53 5% -3.20 10%	-5.97	-4.24 1% -3.54 5% -3.20 10%	1(1)
INF	-2.77	-4.23 1% -3.54 5% -3.20 10%	-4.95	-4.23 1% -3.54 5% -3.20 10%	1(1)

COINTEGRATION

Date: 04/10/19 Time: 22:38

Sample (adjusted): 1983 2017

Included observations: 35 after adjustments

Trend assumption: Linear deterministic trend (restricted)
Series: D(RGDP,1) D(EXT,1) D(DC,1) D(EXR,1) D(LINT,1) D(INF,1)
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.820575	168.7056	117.7082	0.0000
At most 1 *	0.653974	108.5757	88.80380	0.0009
At most 2 *	0.553380	71.43227	63.87610	0.0101
At most 3 *	0.418603	43.22064	42.91525	0.0466
At most 4	0.375076	24.23938	25.87211	0.0787
At most 5	0.199428	7.785009	12.51798	0.2697

Trace test indicates 4 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.820575	60.12985	44.49720	0.0005
At most 1	0.653974	37.14346	38.33101	0.0680
At most 2	0.553380	28.21162	32.11832	0.1394
At most 3	0.418603	18.98126	25.82321	0.3066
At most 4	0.375076	16.45438	19.38704	0.1268
At most 5	0.199428	7.785009	12.51798	0.2697

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

HYPOTHESIS TESTING
Dependent Variable: RGDP
Method: Least Squares
Date: 04/10/19 Time: 21:15
Sample: 1980 2017

Included observations: 38

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	23207.69	7943.233	2.921693	0.0063
EXT	-0.000591	0.000138	-4.288875	0.0002
DC	1.990376	144.1288	0.013810	0.9891
EXR	224.0564	25.80310	8.683312	0.0000
LINT	257.1193	277.4074	0.926865	0.3609
INF	74.54110	95.29922	0.782180	0.4399

R-squared	0.882492	Mean dependent var	32879.99
Adjusted R-squared	0.864131	S.D. dependent var	20117.90
S.E. of regression	7415.535	Akaike info criterion	20.80448
Sum squared resid	1.76E+09	Schwarz criterion	21.06305
Log likelihood	-389.2851	Hannan-Quinn criter.	20.89648
F-statistic	48.06429	Durbin-Watson stat	0.768605
Prob(F-statistic)	0.000000		

SOURCE: E-VIEW COMPUTATION

GRANGER CAUSALITY

Pairwise Granger Causality Tests
Date: 04/10/19 Time: 22:50
Sample: 1980 2017
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
EXT does not Granger Cause RGDP	36	2.13344	0.1355
RGDP does not Granger Cause EXT		4.26606	0.0231
DC does not Granger Cause RGDP	36	0.01170	0.9884
RGDP does not Granger Cause DC		0.84376	0.4397
EXR does not Granger Cause RGDP	36	0.93439	0.4036
RGDP does not Granger Cause EXR		0.16606	0.8477
LINT does not Granger Cause RGDP	36	0.09736	0.9075
RGDP does not Granger Cause LINT		0.51036	0.6052
INF does not Granger Cause RGDP	36	0.09103	0.9132
RGDP does not Granger Cause INF		0.47002	0.6294
DC does not Granger Cause EXT	36	1.27417	0.2939
EXT does not Granger Cause DC		0.28979	0.7504
EXR does not Granger Cause EXT	36	2.36466	0.1107
EXT does not Granger Cause EXR		1.01448	0.3743
LINT does not Granger Cause EXT	36	0.18203	0.8345

EXT does not Granger Cause LINT		0.86229	0.4321
INF does not Granger Cause EXT	36	0.23577	0.7914
EXT does not Granger Cause INF		0.44941	0.6421
EXR does not Granger Cause DC	36	3.63046	0.0383
DC does not Granger Cause EXR		1.27505	0.2937
LINT does not Granger Cause DC	36	6.27656	0.0051
DC does not Granger Cause LINT		0.28856	0.7513
INF does not Granger Cause DC	36	1.50279	0.2383
DC does not Granger Cause INF		3.59894	0.0393
LINT does not Granger Cause EXR	36	0.65730	0.5253
EXR does not Granger Cause LINT		1.40275	0.2611
INF does not Granger Cause EXR	36	0.63279	0.5378
EXR does not Granger Cause INF		0.28551	0.7536
INF does not Granger Cause LINT	36	0.72743	0.4912
LINT does not Granger Cause INF		7.15227	0.0028