

run multiplier between GDP_M and FTE is $0.092272/1.076514 = 0.09$, that is, in the long run, a one unit decrease in GDP will lead to a decrease of 0.09 units in government expenditure.

In order to validate the ARDL technique as a suitable method of data analysis in this study, it became imperative to conduct stationarity test to ensure that there is no I(2) variable, the ADF statistics in table 4.3 revealed that all variables are I(0) and I(1).

Table 4.1: OLS Result

Dependent Variable: DFTE				
Method: Least Squares				
Date: 07/30/15 Time: 13:07				
Sample (adjusted): 1974 2013				
Included observations: 40 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	38338.45	84383.01	0.454338	0.6529
FTE(-1)	1.076514	0.249754	4.310301	0.0002
GDP_M(-1)	0.092272	1.390294	0.066369	0.9475
DFTE(-1)	-4.150096	0.539408	-7.693799	0
DFTE(-2)	-2.398096	0.916988	-2.615187	0.0138
DFTE(-3)	0.067066	0.771165	0.086967	0.9313
DGDP_M	-0.71795	2.133132	-0.336571	0.7388
DGDP_M(-1)	-1.866932	2.381256	-0.784011	0.4392
DGDP_M(-2)	-3.80303	2.340114	-1.625147	0.1146
DGDP_M(-3)	1.905012	2.837676	0.671328	0.5071
R-squared	0.809216	Mean dependent var	243956.6	
Adjusted R-squared	0.751981	S.D. dependent var	826101	
S.E. of regression	411410.5	Akaike info criterion	28.90489	
Sum squared resid	5.08E+12	Schwarz criterion	29.32711	
Log likelihood	-568.0978	Hannan-Quinn criter.	29.05755	
F-statistic	14.13846	Durbin-Watson stat	1.882043	
Prob(F-statistic)	0			

Table 4.2: Wald Test

Wald Test:			
Equation: Untitled			
Test Statistic	Value	df	Probability
F-statistic	10.41221	(2, 30)	0.0004
Chi-square	20.82442	2	0

Table 4.3: Stationarity Test

Unit Root Tests			
Sample: 1970 2012			
Test Type: ADF			
	Level	First	Second
FTE	1.884632	3.898872	-0.932582
GDP_P	5.857435	6.817074	1.644623
GDP_M	0.000000	-6.324555	-7.449832
1% level	-2.621185	-2.622585	-2.625606
5% level	-1.948886	-1.949097	-1.949609
10% level	-1.611932	-1.611824	-1.611593

The residuals series were constructed and the restricted ECM was fitted. The ECM in table 4.4 revealed that depression in economic growth (GDP_M(-2)) at lag two significantly impact on government expenditure in Nigeria at ten percent level of significance, while government expenditure (DFTE) at lag one and two impacts significantly on current government expenditure at 1% critical value.

Table 4.4: Error Correction Model

Dependent Variable: DFTE				
Method: Least Squares				
Date: 07/30/15 Time: 14:42				
Sample (adjusted): 1974 2013				
Included observations: 40 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-453.5188	79940.47	-0.005673	0.9955
DFTE(-1)	-4.169585	0.465716	-8.953056	0
DFTE(-2)	-2.457915	0.5838	-4.210203	0.0002
DGDP_M	-0.743685	2.029104	-0.366509	0.7164
DGDP_M(-1)	-1.886765	2.026147	-0.931208	0.3587
DGDP_M(-2)	-3.812189	2.1551	-1.768916	0.0864
DGDP_M(-3)	1.83334	2.302616	0.796199	0.4318
ECM(-1)	1.094342	0.113642	9.629771	0
R-squared	0.809168	Mean dependent var	243956.6	
Adjusted R-squared	0.767424	S.D. dependent var	826101	
S.E. of regression	398396.9	Akaike info criterion	28.80514	
Sum squared resid	5.08E+12	Schwarz criterion	29.14292	
Log likelihood	-568.1028	Hannan-Quinn criter.	28.92727	
F-statistic	19.38383	Durbin-Watson stat	1.874472	
Prob(F-statistic)	0			

The error correction model was tested for serial correlation as shown in table 4.6 below, which revealed that the model is serially independent. Also to ensure that the model is dynamically stable, the cumulative sum of recursive residuals (CUSUM) test was conducted and the result revealed that the model is dynamically stable as shown in figure 4.1 below.

Table 4.6: Test for Serial Correlation

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.333294	Prob. F(2,30)	0.2788
Obs*R-squared	3.265219	Prob. Chi-Square(2)	0.1954

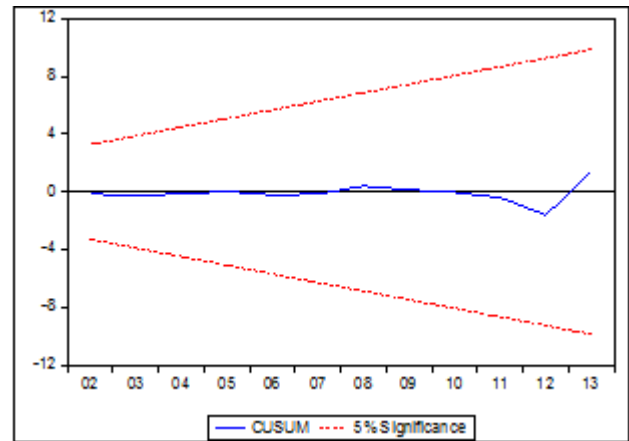


Figure 4.7: Stability Test of the Error Correction Model

Although there exist an evidence of short run causality from contracting economic growth (GDP_M) to government expenditure (FTE) in Nigeria as seen in tables 4.5. There is however no evidence of long run causality running from contracting economic growth to government expenditure as the error correction term (ecm (-1)) of the short run dynamics model is not rightly signed (that is, its coefficient is not negative).

Table 4.5: Short Run Causality Test

Equation: Untitled			
Test Statistic	Value	df	Probability
F-statistic	1.133164	(4, 32)	0.3585
Chi-square	4.532655	4	0.3387

7. Summary of Major Findings

The econometric investigation of this study offers evidence that there is indeed a significance relationship between contraction in economic growth and government expenditure in Nigeria. This study revealed that there exist short run causality running from contraction in economic growth to government expenditure, while providing no evidence of long run causality from contraction in economic growth to government expenditure in Nigeria.

8. Conclusion

The impact of contracting economic growth on government expenditure has been extensively investigated in this study. The application of asymmetric autoregressive distributed lag (ARDL) estimator to a set of dynamic time series data models in investigating the research problem have proved quite intuitive, robust and unequivocally suitable. This study focused mainly on the negative asymmetry in economic growth and its impact on government expenditure. Time series data covering the periods 1970 to 2013 were used for this study. The statistical properties of the data were properly investigated using appropriate econometric techniques. The findings of this study provided strong evidence of short run causality from depression in economic activities to government expenditure in Nigeria.

9. Recommendations

The researchers recommend that policy decisions on improving economic activities in the economy should be of priority as the findings in this study re-enforces the Peacock-Wiseman revenue-spending hypothesis. Governments in Nigeria should give more impetus to policies that will guarantee sustainable economic growth.

Finally, there is need to reverse governments priority on spending decision. Empirical evidence shows that government spending decision occurs prior to the decision to raise revenue in Nigeria (Dada and Adesina, 2013), this is responsible for the rising fiscal deficits in Nigeria, and hence a reversal will mean sustaining economic growth in order to generate more revenue through taxes to meet governments' fiscal obligations.

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