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IMPACT OF ASYMMETRIC GOVERNMENT SPENDING ON REAL BALANCES DEMAND

Tersoo Shimonkabir SHITILE[1+]
Gylych JELILOV[2]

[1]*Economics Department, Nile University of Nigeria and Central Bank of Nigeria.*
Email: shimonkabir@gmail.com Tel: (+234) 0803 525 4079
[2]*Economics Department, Nile University of Nigeria.*
Email: jelilov@nileuniversity.edu.ng Tel: (+234) 0805 211 6666

(+ Corresponding author)

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ABSTRACT

This paper uses time series technique on Nigeria's data spanning over 20 years, 1995Q1 to 2018Q1 in order to examine the impact of asymmetric government spending on money demand. Taking into account the recent empirics and methodological approach in money demand function such as income decomposition in public and private sectors, an augmented empirical model of real balances demand was applied which underscores the positive and negative changes in government. The empirical results show a positive value of real government spending accounting for 30 per cent changes in long-term demand for real balances. However, the negative value of real government spending influence accounts for 20 per cent real balances demand in the long-term. This inquiry, thus contributes to the literature on the demand for real balances by focusing on the cyclical behavior of fiscal policy in Nigeria that has not so far been systematically tested. The findings on real government spending effect also suggest that *bureau de change* exchange rate and financial innovation have a negative and significant impact on money demand, which is consistent with findings of existing literature. The degree and direction of asymmetry provide a novel dimension to fiscal policy shock toward improving the outcome of stabilization policies.

Contribution/Originality: This study is one of very few investigations to consider the influence of the cyclical behaviour of government expenditure on demand for real balances using the ARDL model in Nigeria from 1995 to 2018.

1. INTRODUCTION

In the economics literature demand for real balances is also referred to as demand for money. Due to its importance in macroeconomic management, demand for real balances has a great historical value amongst economists and policy makers. In Nigeria, the debate about the significance of demand function for real balances and its determining factors can be traced back to Tomori (1972); Ajayi (1974); Teriba (1974); Ojo (1974) and Odama (1974) also known as 'TATOO' debate. Like in other countries, the debate has continued to strive in Nigeria with researchers contributing to the existing knowledge about improving the conduct of monetary policy and its transmission as well as its proper stabilization functions.

Nigeria provides a motivating case study of the Central Bank of Nigeria (CBN), termed as a money targeter, which implies that for monetary targeting to be efficacious, the stability of real balances demand must be met (Tule *et al.*, 2018). Therefore, in spite of having a better and robust understanding of the demand for real balances, it was

more germane to CBN's objective to achieve operational excellence. . Moreover, considering the demand for real balances as a dynamic phenomenon due to the variation in the determinants of money demand (Tule *et al*., 2018) which is due to the transformational forces in structural, institutional, and regulatory domains, scholars have sought to re-examine the parameter stability of long-run function for real balances demand. This is in view of such forces like output expansion, financialization, development, financial innovation, financial globalization, and uncertainty that characterize a modern economy.

Nonetheless, the effect of government spending on real balances demand has not been completely elucidated despite rich empirical works on money demand function and its stability in developed and developing economies. Previous empirical studies relating to government sector has focused more on the nexus between budget deficit and real balances demand (Yellen, 1989; Aamir, 2015; Ibrahim, 2018). Increasing government spending associated with modern economy, and supported by Keynesian demand management ideas, however, causes a change in aggregate demand along with fiscal deterioration in the form of high budget deficits and public debt problem (Bank for International Settlements, 2012). Additionally, government spending is procyclical in developing countries (Culha, 2017) as a result of which monetary authorities face a challenging task of managing destabilizing effects of government spending (Ebadi, 2018). Thus, keeping in view that asymmetric government spending relates to cyclical behavior of fiscal policy or changes in government expenditure, this paper aims to investigate the effects of asymmetric government spending on real balances demand in Nigeria for monetary policy purposes.

Theoretically, economists view income or real GDP, representing an economic activity, as a scale variable in the real balances demand function (Laidler, 1993). Using Barro (1990) spending model, real GDP is decomposed into the government and private sectors to properly measure the influence of government spending on real balances demand (Ebadi, 2018). In accordance with what is generally done in literature involving variable selection and the framework choice to estimate the demand for real balances, this paper has introduced two scale variables in the model namely public spending and capital stock., This is combined with financial innovation and opportunity costs determinants of holding real balances and includes interest rate, inflation, and exchange rate (Groessl and Tarassow, 2015; Berentsen *et al*., 2017; El-Rasheed *et al*., 2017; Ebadi, 2018; Gerlach and Kugler, 2018; Kayongo and Guloba, 2018; Tule *et al*., 2018). In light of the intuition from empirics, this paper will apply the Autoregressive Distributed Lag (ARDL) cointegration technique to estimate the long-run relationship between variables in the model. While the stability of demand for real balances function in Nigeria will be discussed using the CUSUM and CUSUMSQ tests.

The rest of the paper is structured as follows: Section two presents a review of literature on real balances demand. Section three discusses the model and the estimation strategy while the empirical results are presented in Section four. Finally, section five summarizes the conclusion of the study.

2. REVIEW OF LITERATURE

The central goal of growing literature on demand for money is to extend the Keynesian, Neo-Keynesian and Neoclassical analysis of money demand dynamics in the light of observable developments in an economy and methodological innovations. To this end, Folarin and Asongu (2017) have investigated the stability of Nigeria's money demand function in the aftermath of financial sector deregulation using CUSUM and CUSUMSQ tests. The results confirm stable demand for money during the period of 1992Q1 to 2015Q4, while their findings from ARDL co-integration test support the views of Bahmani-Oskooee and Bahmani (2015) about inflation rate being a more suitable measure of an opportunity risk for less developed financial environment. Aliha *et al*. (2018) have studied the influence of financial innovation on the United States' money demand. Adopting GARCH approach, the paper finds that financial innovation, specified as external shock, does not have impact on volatility of money demand in the US during 1990 to 2016.

Séraphin (2018) considered the relationship between financial market development and liberalization on money demand in Central African Economic and Monetary Community (CEMAC) economies[1] using a generalized method of moments (GMM) framework for panel data of six-member countries over the period 1981 to 2015. The study found negative relationship between financial liberalization and money demand. Bassey *et al.* (2017) using error correction modeling technique as well as the Chow (1960) test of stability, revealed that increase in return to other money assets such as Savings deposit, Equity and Treasury bill reduces economic agent's desire to hold money. In part, the stability test result shows stability of money demand for Nigeria during 1986 to 2013. Gerlach and Kugler (2018) assess the Swiss money demand under free banking during the period before the institutionalization of the Swiss National Bank. They found the banking activity as an important determinant of the long-run money demand during the reviewed period.

Akinlo and Emmanuel (2017) examined the role of stocks in the Nigeria's money function using co-integration approach with structural break and tests for the stability of the function. The findings confirm that stock prices have a significant positive influence on long run narrow and broad money demand whilst the test suggests absence of stability in the demand for money function from 1986Q1 to 2012Q4. Based on the findings, the study affirms the argument by Baharumshah *et al.* (2009) that if the effects of asset prices (stock) are ignored, the stabilizing policy of monetary authorities can cause uncertainty in the domestic economy. Tule *et al.* (2018) re-assessed money demand and its stability in Nigeria using the Autoregressive Distributed Lag (ARDL) bounds testing approach. They found a significant and positive effect of stock prices on the long-run broad money demand, which according to the authors is suggestive of financialization and integration of domestic economy into the global economic system. The results also confirm a stable money demand function during the period 1985Q1 to 2016Q4.

Bahmani-Oskooee and Maki-Nayeri (2018) suggest an asymmetric relationship between policy uncertainty and money demand. Using Korea, Australia and U.S. data, respectively, they demonstrated that people relatively hold more cash during periods of decreased uncertainty as compared to times of increased uncertainty, indicating buffer activity against an uncertain future. Aworinde (2018) explores the non-linearity and uncertainties in the stability for demand for money in Nigeria during 1960-2015 with the inclusion of output uncertainty and monetary uncertainty measures, consistent with the findings of Bahmani-Oskooee and Baek (2016). This study adopts a nonlinear autoregressive distributed lag (NARDL) approach and the results of the analysis show that unlike monetary volatility, output volatility have no significant effect on demand for money in Nigeria both in short-run and long run. Also, the tests establish stability of the demand for money function. Using Nigeria's data covering 1980 to 2014, El-Rasheed *et al.* (2017) examined the influence of monetary uncertainty on the stability of money demand function. The results from the ARDL bound testing shows co-integration between broad money and monetary uncertainty as well as a unidirectional causality running from former to later.

Employing a micro-founded model of money demand under uncertainty within an intertemporal optimizing risk-averse households' context, Groessl and Tarassow (2015) showed that increased demand for money of households can be explained by positive changes in inflation risk and capital market risk based on U.S. data covering 1986M1 to 2007M12. Specifically, this study found a positive reaction of households' money demand to a positive capital market risk change and a higher inflation risk. This demonstrates how uncertainty transmits to macroeconomic developments. Kayongo and Guloba (2018) tested the influence of generalized autoregressive conditional based economic uncertainty on the stability of money demand function in Uganda during 2001Q4 to 2017Q2, a period described as financial liberalization. Using ARDL, the study discovered money demand stability and found that economic uncertainty does not impact M1 in the short-run but negatively affects all money demand balances including base money, , indicating effect of portfolio diversification in M1 and M2 after one quarter..

[1]Member states of the *Communautéeconomique et monétaired'Afrique Centrale* (in English translation: Economic and Monetary Community of Central Africa) are Cameroon, the Central African Republic, Chad, Equatorial Guinea, Gabon and the Republic of the Congo.

Nyumuah (2018) examines interest and exchange rates volatilities making an impact on money demand in developing economies using data of Equatorial Guinea, Gambia, Nigeria and Uganda. The paper found no significant effects of interest rate and exchange rate volatilities on money demand in these economies. Nwude *et al.* (2018), narrowing on Nigerian data during the period 1991Q1 to 2014Q4 and employing the ARDL-ECM approach, confirmed a cointegrating association between the real broad money demand, real income, domestic interest rate, inflation rate, exchange rate and foreign interest rate. They also found stable long-run money demand function using the CUSUM and CUSUMSQ test. In another study, based on Masters and Rodríguez-Reyes (2005) framework of precautionary demand for money, Rodríguez-Reyes (2018) developed a search model that explains the companies and criminal clients trade relationship in order to investigate how the interaction between the firm's demand for private security and crime indirectly affects the demand for money. The study found that companies' demand for private security makes an impact on the aggregate demand for money, but remotely and further demonstrated the indirect channel between crime and money arising from market externality.

Berentsen *et al.* (2016) strengthened the money demand in a micro-founded monetary model by introducing limited commitment to repay loan factor. They posit that depending on monetary policy, limited commitment will create endogenous borrowing constraint thereby influencing the shape of the money demand curve. Thus, using model calibration approach and the money demand data for the UK, Australia and Canada, they revealed that limited commitment significantly enhances the robustness of the money demand function. Tweneboah and Alagidede (2018) employed a long-run money demand function within the portfolio balance framework, by distinguishing between currency substitution and capital mobility as well as taking account for the pre and post inflation targeting monetary policy regime to investigate the effect of currency substitution on demand for money in Ghana. Based on the results from ARDL-ECM approach, the study reported empirical evidence suggesting no significant influence of currency substitution, exchange rates and foreign interest rates on the domestic money demand dynamics during the period 1960 to 2013.

Taofik (2017) turned a searchlight on short and long-run implications of budget deficit on aggregate money demand or the money market equilibrium in general using cointegration analysis and ECM approach. The results established a positive and significant relationship between money demand and budget deficit in the short- and long-term horizon for the period 1980 to 2015. The findings of the study indicated the validity of the Keynesian and Neoclassical propositions for Nigeria. Ebadi (2018) offered a complementary view of the government spending effect on money demand. The study suggested income disaggregation in the public and the private sectors, which was hinged on Barro (1990) spending model. Using U.S. data and ARDL approach, the results established a positive significant effect of government spending on money demand.

How valid is this supposition in Nigeria? Therefore, the main aim of this paper is to investigate the effect of government spending on the demand for money in Nigeria. However, unlike the Ebadi (2018) ARDL specification, the current study introduced asymmetric analysis of government spending to the model and also considered the impact of financial innovation and expected inflation instead of actual CPI in the system. It will be motivating and valuable to gain some insight on the money demand channel of government spending measure in Nigeria.

3. METHODOLOGY

Model specification:

Standard demand for money function comprises interest rate and inflation to denote opportunity costs. The inclusion of nominal exchange rate account for currency substitution (Bahmani-Oskooee *et al.*, 2015) of which an estimate of γ in Equation 1 could be either positive or negative. Financial innovation measure is used to capture the financial sector liberalization and fintech advances while national income or gross domestic product (GDP) is a scale variable representing activity in the real economy and the model specification, as shown in Equation 1:

$$\text{Ln}RM_t = c + \alpha \ln Y_t + \text{pNTB}_t + \pi \text{Infex}_t + \gamma \text{lnBDCExr}_t + \delta \text{FinInno}_t + \varepsilon_t \quad (1)$$

Where ln*RM* is the logarithm of real M2 (broad money supply), ln*Y* is the logarithm of GDP, NTB is the 91-day Nigeria Treasury bill rate, Infex is the expected inflation rate, BDCExr is the logarithm of *Bureau de Change* exchange rate, FinInno is the financial innovation ratio, c is the constant term, and ε is the error term.

Borrowing Ebadi (2018) specification, the study decomposes national income in public sector and private sector and rearranges the demand for money in Equation 2 shown as thus:

$$\text{Ln}RM_t = c + \alpha \text{lnRGE}_t + \beta \text{lnRKS}_t + \text{pNTB}_t + \pi \text{Infex}_t + \gamma \text{lnBDCExr}_t + \delta \text{FinInno}_t + \varepsilon_t \quad (2)$$

Where lnRGe is the logarithm of government spending and lnRKS is the logarithm of capital stock. Since government spending could have positive or negative effect on the demand for real balance, an estimate of α could be negative or positive.

To extend the above symmetric analysis to asymmetric analysis, this paper followed (Bahmani-Oskooee and Maki-Nayeri, 2018) and decomposed the *ln*RGE variable into two new time-series variables shown in Equation 3 as thus:

$$POS_t = \sum_{j=1}^{t} \max(\Delta lnRGE_j, 0); \; Neg_t = \sum_{j=1}^{t} \min(\Delta lnRGE_j, 0) \quad (3)$$

Where POS_t, which is the partial sum of positive changes, reflects only growth in government spending, and NEG_t indicates the partial sum of negative changes in government spending which captures only reductions in government spending. Therefore, by replacing *ln*RGE in ARDL model (2) by *POS* and *NEG* variables, we get the following specifications shown as in Equation 4:

$$LnRM_t = c + \alpha^{+} \Delta POS_t + \alpha^{-} \Delta PNeg_t + \beta \text{lnRKS}_t + \text{pNTB}_t + \pi \text{Infex}_t + \gamma \text{lnBDCExr}_t + \delta \text{FinInno}_t + \varepsilon_t \quad (4)$$

4. EMPIRICAL ANALYSIS

Using Phillip-Perron unit root test at its constant, constant and trend and without constant and trend form in testing the stationarity of variables in the model, the result is presented in Table 4.1:

Table-4.1. Philip-Perron (PP) Unit Root Test Result.

PP Test Statistics (At Level)									
Variables	**With Constant**			**With Constant & Trend**			**Without Constant & Trend**		
	t-statistic	**Prob.**	**Level**	**t-statistic**	**Prob.**	**Level**	**t-statistic**	**Prob.**	**Level**
LRM	-2.04	0.27	NS	-0.47	0.98	NS	6.94	1.00	NS
LRGE	-1.16	0.69	NS	-2.76	0.22	NS	-3.79	0.99	NS
LRKS	-0.45	0.90	NS	-1.98	0.60	NS	2.54	0.99	NS
NTB	-2.34	0.16	NS	-2.51	0.32	NS	-0.64	0.44	NS
INFex	-8.59***	0.00	I(0)	-6.94***	0.00	I(0)	-5.79***	0.00	I(0)
BDCExr	-0.07	0.99	NS	-1.47	0.83	NS	1.27	0.95	NS
FinInno	-2.19	0.21	NS	-5.49***	0.00	I(0)	-2.99***	0.00	I(0)
PP Statistics (At First Difference)									
	t-statistic	**Prob.**	**Level**	**t-statistic**	**Prob.**	**Level**	**t-statistic**	**Prob.**	**Level**
D(LRM)	-10.28***	0.00	I(1)	-10.58***	0.00	I(1)	-7.20***	0.00	I(1)
D(LRGE)	-5.78***	0.00	I(1)	-5.74***	0.00	I(1)	-4.82***	0.00	I(1)
D(LRKS)	-9.82***	0.00	I(1)	-9.77***	0.00	I(1)	-9.21***	0.00	I(1)
D(NTB)	-9.10***	0.00	I(1)	-9.06***	0.00	I(1)	-9.18***	0.00	I(1)
D(INFex)	-5.79***	0.00	I(0)	-6.07***	0.00	I(0)	-5.76***	0.00	I(0)
D(BDCExr)	-6.78***	0.00	I(1)	-6.87***	0.00	I(1)	-6.66***	0.00	I(1)
D(FinInno)	-22.46***	0.00	I(1)	-24.99***	0.00	I(1)	-15.63***	0.00	I(0)

Notes: (1) D denotes the first difference operator; (2) *** indicates significance at the 1% level.

Using PP test, Table 4.1 reveals that INFex is stationary at level with constant, constant and trend and without constant and trend; while FinInno is also stationary at level with and without constant and trend. Hence, it is sufficient to conclude that INFex and FinInno are integrated in order zero I(0). After taking the first difference, all other variables LM, LGE, LKS, NTB and BDCExr are stationary at first difference and are therefore said to be integrated in order one I(1).

Table-4.2. Bounds test for Linear Cointegration.

F-statistics	95% lower bound	95% upper bound	Conclusion
6.34	2.17	3.21	Cointegrated

Source: Extract from Results.

Table 4.2 reports the results of cointegration / F-statistic at the 5% level of significance. This confirms the presence of a long run relationship between real balances demand as the dependent variable in the model and explanatory variables for the period under consideration in Nigeria. This is because the calculated F statistic at 6.34 is greater than upper and lower bound values of 2.17 and 3.21, respectively, at 5% significance level (Pesaran *et al.*, 2001) and thus, infers that there exists a co-integrating relationship among the time series in the level form, without considering whether they are I(0) or I(1). In other words, the Null hypothesis of no cointegration can be rejected at 5% significance level because F test statistic is greater than critical upper bounds value I(1). We can proceed for the ARDL model estimation.

Table-4.3. Estimated long-run coefficients of real balances demand model from asymmetric government spending effect.

Variable	Coefficient	t-Statistic
LRM(-)	0.8091*** *(0.05)*	15.04847
LRGE_POS	0.3026*** *(0.11)*	2.709120
LRGE_POS(-1)	-0.2705** *(0.12)*	-2.267820
LRGE_NEG	-0.1987** *(0.08)*	-2.512877
RKS	1.7907 *(2.62)*	0.006845
RKS(-1)	-5.1905* *(2.88)*	-1.804363
RKS(-2)	5.5305** *(2.63)*	2.102975
NTB	0.0008 *(0.00)*	0.366334
INFEX	-0.0002 *(0.00)*	-0.116416
INFEX(-1)	-0.0005 *(0.00)*	-0.200868
INFEX(-2)	-0.0008 *(0.00)*	-0.345455
INFEX(-3)	0.0026** *(0.00)*	1.714424
BDCEXR	-0.0001 *(0.00)*	-1.028989
FININNO	-0.4768*** *(0.11)*	-4.249988
FININNO(-1)	0.1258 *(0.12)*	1.009492
FININNO(-2)	-0.2921*** *(0.10)*	-2.883916
FININNO(-3)	-0.2267** *(0.10)*	-2.195680
C	1.7093*** *(0.45)*	3.762686

Notes: ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

Table 4.3 presents the ARDL estimation results of the response of demand for money to positive and negative government expenditure, capital stock, treasury bills, inflation expectation, exchange rate, and financial innovation. The result reveal that, one period of real broad money supply or the dependent variable [LRM (-1)] shows a positive and significant impact on itself, while the positive value of real government spending (LRGE_POS) also shows a positive and significant impact. However, the negative value of real government spending (LRGE_NEG) depicts a negative and significant impact on the dependent variable. Effect of real capital stock (LRKS) is seen as mixed; it is positive and insignificant in its current value, but negative and significant in its one and two period lags. Treasury bills and inflation expectation have a positive and negative influence, respectively, but both are insignificant, while exchange rate shows a negative and significant impact. Financial innovation depicts a negative and significant impact in its current and various lags except lag one, which is positive and insignificant.

We now turn our attention to discuss the results of short-run coefficient estimates of the model. The result presented in Table 4.4 suggests that in the short run, the positive value of real government spending is positive and significant, while its negative value shows a positive but insignificant impact on real money supply. Exchange rate remains negative and insignificant, while financial innovation also depicts negative and significant impact on the dependent variable. The effect of NTB and INFEX is instantaneous; however, the dynamic responses will be controlled by dependent variable. Hence, the short run parameter is equivalent to the instantaneous parameter in the long run ARDL result. The coefficient of the error correction term suggests 14 per cent speed of adjustment to any disequilibrium in the short run. In other words, the estimated ECT (-1) is equal to 0.14 which states that the departure from the equilibrium is adjusted by 14%. It is negative, significant and less than one, which means that information from this, can be relied upon for policy decisions.

Table-4.4. Estimated short-run coefficients of real balances demand model from asymmetric government spending effect.

Variable	Coefficient	t-Statistic
D(DLRGE_POS)	0.2285* *(0.11)*	2.129442
D(DLRGE_POS(-1))	0.1998* *(0.10)*	1.985834
D(DLRGE_NEG)	0.0297 *(0.12)*	0.253803
D(BDCEXR(-1))	1.3305 *(0.00)*	0.038222
D(BDCEXR(-2))	-0.0010** *(0.00)*	-3.134958
D(FININNO)	-0.5781*** *(0.08)*	-7.297321
D(FININNO(-1))	0.4915*** *(0.12)*	4.266808
D(FININNO(-2))	0.2409* *(0.09)*	2.536340
ECT(-1)	-0.1371*** *(0.01)*	-10.12599

Notes: ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

However, the reliability of the model depends on the performance of the diagnostic tests as presented in Table 4.5.

Table 4.5. Diagnostic Statistics.

Autocorrelation LM	Ramsey RESET	Normality	Heteroscedasticity
0.093	0.005	21.419	0.456

Source: Extract from Results.

The outcome of the diagnostic tests such Breusch-Godfrey Serial Correlation LM Test, Ramsey's RESET test, Normality Test and Heteroscedasticity test reveal that, the model passed all diagnostic tests except the normality test as there was no evidence of serial correlation and heteroscedasticity. While the RESET test implies the correctly specified ARDL model and the Jarque-Bera based on normality test shows that the residuals are not normally distributed. The stability of the regression coefficients is tested using the cumulative sum (CUSUM) of the recursive residual test for structural stability. Plots of the CUSUM suggest that the regression equation are stable considering that the CUSUM test statistic does not go beyond the bounds of the 5% level of significance as presented in Figure 4.1 and Figure 4.2.

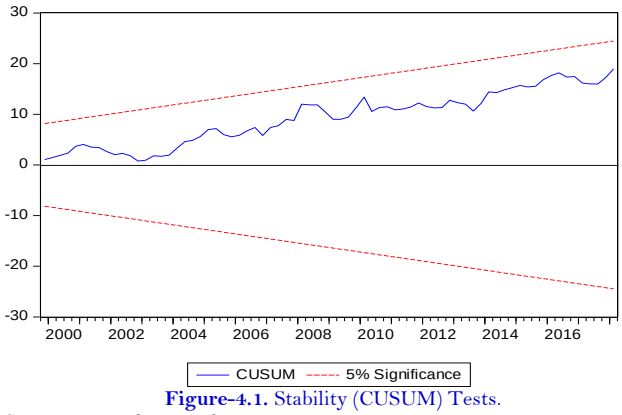

Figure-4.1. Stability (CUSUM) Tests.
Source: Extract from Results.

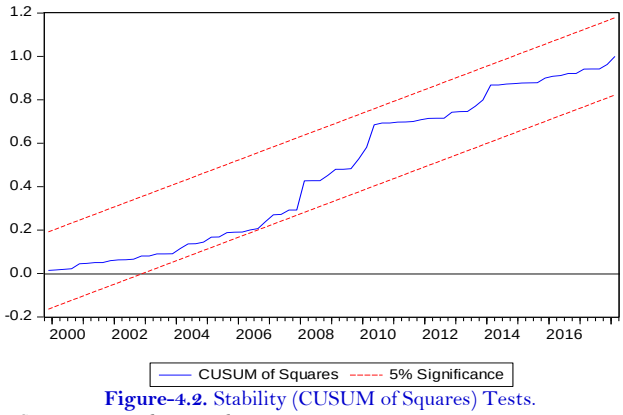

Figure-4.2. Stability (CUSUM of Squares) Tests.
Source: Extract from Results.

5. CONCLUSION

In this paper, we have contributed to the debate on the demand for real balances function due to changes in government spending. In the context of cyclical behavior of fiscal policy, and particularly pro-cyclical government spending in developing countries (Culha, 2017) the Barro (1990) spending model enabled this study to decompose real GDP into government and private sectors and properly measure the influence of asymmetric government spending on real balances demand (Ebadi, 2018). The result, using ARDL model for Nigeria, revealed that the positive value of real government spending has a positive and significant impact while the negative value of real government spending makes a negative and significant impact on the long-run real money supply. The findings suggest that positive and negative value of real government spending accounts for about 30 per cent while long-run changes in real money account for 20 percent . The other determinants of demand, particularly real balances in the long-run, exchange rate showed a negative and significant impact. The negative effect of exchange rate met the theoretical expectation that as domestic currency depreciates the demand for domestic currency also declines. Similarly, financial innovation depicted a negative and significant impact in its current and various lags except lag one, which is positive and insignificant. This supports the disposition that the growth in financial innovation induces a shift to less liquid assets from more liquid ones thus lowering the demand for real balances. Treasury bills rate and inflation expectation have a positive and negative influence on real balances demand, respectively, but both are insignificant. Both positive effect of Treasury bill rate and negative effect of inflation expectation (validating monetary policy short-term orientation) are in line with the view of Fisher's equation which states that increasing interest rates requires an increase in the rate of money growth and the responsiveness of inflationary expectations to monetary condition. The evidence on degree and direction of asymmetry offers a fresh dimension to policymakers to the need for efficient policy coordination to maximize the benefits of stabilization policies.

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