



DEMAND FOR MONEY AND THE MACROECONOMIC VARIABLES NEXUS: A NON-LINEAR FREQUENCY DOMAIN APPROACH

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ABSTRACT

This paper offers an empirical evidence on the relationship between demand for money and the key macroeconomic variables in Nigeria. The empirical analysis is from the Nigerian data which covers the period 1980 to 2019; through the use of threshold autoregressive asymmetric co-integration, and a test of causality via the frequency domain was conducted to distinguish between a temporal and the permanent causality. In the analysis we ascertain whether the influence of demand for money is by exchange rate appreciation or depreciation. We found a one-way permanent causality from the demand for money to inflation, while interest rate and money demand appear to have a bidirectional causal relationship. The paper appeal to the Nigerian government to acknowledge the worth of money demand as a crucial monetary policy instrument as well as the real exchange rate fluctuation in order to avoid the pressures of inflation emanating from an increase in the demand for money.

KEYWORDS: real exchange rate, money demand, frequency domain, inflation, interest rate

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1. INTRODUCTION

Money demand plays an important role in the macro-economic discourse as it influences the choice of the intermediary monetary policy goal. Monetary policy decisions conducted by central

banks have an immediate impact on the supply of currency, which is always the intermediate goal in developing nations. Under the balanced presumption of the money markets, a steady demand for money guarantees the handling of



money supply in such a way that stability in price, economic growth and exchange rate volatility are attained within the economy (Farouq, Sulong and Sambo, 2020). With rising trade liberalization, globalization of capital markets, the introduction of a floating exchange rate system, innovation and technical developments, central banks across the world are well over concerned with defining influencing factors of money demand (Farouq, Sulong and Umar, 2020).

The assessment of the threshold autoregressive asymmetric co-integration between the real exchange rate, inflation, interest rate and the demand for money remains one of the innovative contributions of this paper. In conjunction, from the current empiric literature, a test of causality via the frequency domain was conducted to distinguish between a temporal and the permanent causality among money demand and the scrutinized macroeconomic variables. This is following the reviewed literature and found out that most of the previous studies were mainly concerned with the estimation part, with no or little attention to the causal effect.

The basic argument follows that real exchange rate is a key contributing factor influencing demand for money. The chosen independent variables are consistent with previous literature. Attempting to draw evidence from the research of Mundell (1963). Investigating the money demand in Nigeria could provide an important case study for other developing countries. The case of Nigeria was considered in our analysis for the following purposes: firstly, foreign direct investment and the remittance of employees hold a substantial portion in the country's foreign reserve. The country's reserves are vulnerable to capital movements due to over-reliance on FDIs and remittances inflows (Dabachi et al., 2020). Second, with the current unpredictable macroeconomic conditions and the exchange-rate mechanism, money demand stability is a key concern. Under flexible exchange rates, the currency value sensitivity of money demand indicates the strength of monetary policy (Bahmani-Oskooee and Pourheydarian, 1990).

The presented findings of this research indicate that the Nigerian naira/dollar exchange rate is influenced by the Nigerian demand for money. Thus, the Nigerian government should acknowledge the worth of money demand as a crucial monetary policy instrument in order to avoid the pressures of inflation emanating from an increase in the demand for money. Meanwhile, the naira/dollar stability exchange rate, all things been equal, requires that this demand for money in Nigeria remains in a stable manner under the current flexible exchange rate system. In addition, the stability in the Nigeria's money demand is required in order to avoid excess naira/dollar exchange rate variability

2. LITERATURE REVIEW

Demand for money has been shown to respond unevenly to macroeconomic factors such as interest rate, inflation and exchange rate. These involve asymmetric price reactions to positive and negative monetary supply for a limited free market (Dobrynska, 2008); Important asymmetrical impact of exchange rate shifts on price inflation (Amoah and Aziakpono, 2018), circular economic spikes but severe economic recession suggesting that real economic activity shifts differently in various market cycles (McQueen and Thorley, 1993; De Long and Summers, 1988); asymmetric adjustment of financial shocks to real production and inflation where these are more likely to react to positive capital flows compared to negative uncertainties (Wooheon, 1995); non-linear relationship between demand for money and the exchange rates (Bahmani-Oskooee and Bahmani, 2015; Dreger and Roffia, 2007; Bahmani-Oskooee et al., 2016; Arghyrou and Pourpourides, 2016).

The relationship between demand for money and exchange rate was first pointed out by Mundell (1963). He acknowledged that the free flow of capital and the liberalisation of trade have resulted in an insecure money demand. Later, McKinnon (1982) endorsed the "monetary substitution effect" in his report, suggesting that countries operating under flexible exchange-rate regimes undergo foreign monetary disturbances that propagate through global capital markets. Various perspectives have resulted in the emergence of studies (Bahmani-Oskooee and Pourheydarian, 1990; Arango and Nadiri, 1981; Ibrahim, 2001; Bahmani-Oskooee and Rehman, 2005) conducted across the last two decades concerning the effects of the real exchange rate on money demand. One view is that decrease in exchange rate negatively affects domestic demand for capital. As local currency depreciates, individuals expect more depreciation in the future. Thus, they tend to keep more hard currency and less national currency (Bahmani-Oskooee and Pourheydarian, 1990). On the opposite, currency depreciation could have a positive impact on domestic demand for currency. When country's currency loses value towards foreign currency, the domestic price of overseas currencies increases the wealth of the person. As a result, demand for actual cash holdings within the economy grew (Arango and Nadiri, 1981).

Throughout various asian markets, Ajmi et al. (2015) offers supporting studies of bi-directional causality between the real supply of money and the RRSP, as they show superiority of the substitutability, in which foreign exchange is replaced by national currency. In yet another trend of literature on asian nations, Bahmani-



Oskooee et al. (2019) find asymmetrical long-term and short-term effects of currency exchange on money demand. Research by Folarin and Asongu (2019) on the Nigerian economy uses quarterly data set and uses a co-integration bound testing methods that shows a long-term relationship between money demand and their factors. Both narrow and wide monetary aggregates have been found to be stable. The effect of the REER on the demand for money was shown to be significant and negative. The results of the analysis by Shokr et al. (2019) show a major impact of money supply on production, inflation and exchange rates in Egypt. Khan (1980) uses annual dataset from 1959 to 1978 and concludes that 99 per cent of the variation in money demand for Pakistan during that period was due to wages, the interest rates on time deposits, the monetization and the projected inflation rate.

Another research conducted by Khan (1994) used quarterly dataset from 1971 to 1993 and applied the ECM model. The study explores the relationship between financial sector reforms and the money demand. Results confirm the presence of a stable equilibrium vector between money demand and real income, nominal interest rates, inflation and the real interest rates. A further research performed by Anwar and Asghar (2012) on the Pakistan's stability for money demand, shows that demand for money co-integrates with the deciding factors (real wages, inflation rate and the real exchange rate). However, the measured elasticity of M2 is consistent over time, while the long-term matching relationship of M1 is unstable. Qayyum (2005) indicate that achieving M2 under monetary strategic goals is a challenge as it is significantly influenced by inflation.

These previous empirical studies also investigate either the factors of money demand or the stability of demand for money (Mangla, 1979; Hossain, 1994; Khan, 1980; Qayyum, 2005; Anwar and Asghar, 2012). The empirical analysis used are

under the presumption of linearity approach. There are therefore advantageous reasons for pursuing yet another empiric step. The originality and the relevance of this study is exclusive on how it contributes to the literature as it utilises a non-linear cointegration approach that allows the analysis of possible asymmetrical effects, as well as the corresponding non-linear frequency domain causality to distinguish between a temporal and the permanent causality in Nigeria, which to the very best of our reach, there has not been a study of this kind before.

3. METHODOLOGY

3.1 Theoretical framework

There are different theories regarding money demand that answer a broad variety of hypotheses, mostly built on the premise that demand for money is not the same need to borrow additional money, but rather the need to remain liquid. The demand for money from the public is attributable to a need for daily transactions (Das and Wong, 2014). The long-term demand for money as described by Zehra *et al.* (2020) in its purest term as:

$$MD = f(S, OC) \quad (1)$$

where MD represents the money demand, S denotes the scale, which represents the selected macroeconomic variables to explain the behavior for money demand and OC is the opportunity cost linked to holding money. We consider inflation and interest rate as the opportunity cost. We therefore, following Zehra *et al.* (2020) and Ghumro and Karim (2017) specify the model as:

$$M_d = f(REXR, INF, INR) \quad (2)$$

where REXR is the real exchange rate, INF is the inflation rates proxied by CPI, INR is the interest rate. We specify the econometrics model as:

$$LMD_t = \beta_0 + \gamma_{1i} LREXR_t + \gamma_{2i} INF_t + \gamma_{3i} INR_{t-1} + u_{it} \quad (3)$$

3.2 Data and variables

The research seeks time-series dataset. Data on variables such as monetary demand is extracted from the SBP website, while data on inflation rates and real exchange rate are extracted from the World Development Indicators on the World Bank website. In order to avoid the problem of statistical harmonization, it was ensured that the base year considered in the calculation of the CPI corresponds to the constant basic prices being used by SBP. Annual data has been obtained for the past 40 years from 1980 to 2019. For

meaningful research, all variables except inflation and interest rates have been converted into logarithms (Ahmad et al., 2020; Jakada et al., 2020; Jakada and Mahmood, 2020;). Monetary demand is considered to be contingent variables to calculate the influence of different variables on money demand, while three other variables were taken as independent variables, REER, interest rates and inflation rate. For various economies, the concept of money is unique (Boughton, 1992), various consolidates and components are being used to quantify money demand. Last but not the



least, money supply data has been used since data on money demand in Nigeria is not observable. REER is expressed as effective real exchange rate from WDI, call money rate is taken as the index for national interest rates, while inflation rate is measured as the annual percentage change in consumer prices. Extant money demand literature considers call rates to be a suitable proxy for interest rate (Khan, 1980, 1992; Mangla, 1979; Ahmad and Khan, 1990; Hossein, 1994; Arize, 1994).

3.3 BDS Test

The BDS test was first created in 1987 by Brock Dechert and Scheinkman. BDS is one of the most important time series strategies for detecting serial dependence. The BDS test is being used in the residual series calculated after the fitness of the ARIMA model has been developed to verify the existence of nonlinear dependence (Chu, 2001). Asymptotically, test figures are accompanied by the standard curve. The null hypothesis implies the independent distribution of the residuals and also that the instances expect several variations that make their dependence nonlinear towards the alternative hypothesis. The BDS experiment 's fundamental theory is based on the principle of integral interaction, which measures the rate at which the spatial pattern is reinforced by the series. The study of the BDS relies only on signs of a simultaneous return, with no concern in its measurements, and does not involve any conclusions as to the existence of the returns. A collection of slightly less or more runs suggests that the research is often not random (Chu, 2001).

The BDS assumption follows:

$$H_0: f_n = f_1^n$$

$$H_1: f_n \neq f_1^n$$

the null hypothesis is commonly rejected at 5 percent P-value when the $f_n > 1.96$

3.4 Unit Root

The advanced ESTAR unit root put forward by Kapetanios et al. (2003) and the DF-GLS unit root were used in this study. Elliott et al. (2006) developed a set of effective unit root tests based on GLS-distended results with regard to an effort to overcome the popular low-power problem of unit root tests. In their paper, ERS proposed a simple improvement to the GLS-detrending ADF test and showed that the proposed test, known as the DF-GLS test, was more successful than the ADF test. The nonlinear unit root testing by KSS is based on the fraying of a unit root against the elective principle 's nonlinear and large fixed exponential STAR (ESTAR) philosophy.

3.5 Threshold Autoregressive Model

Via the use of the Enders and Granger (1998) threshold cointegration method, we will examine the long-run relationship between demand for money, exchange rate, interest rate, and inflation rate in this section. The two stages of the residual-dependent procedures are based on this cointegration technique.

When evaluating a non-linear model, the pertinent issue that arises is the choice of an elusive limit. In order to identify the ideal edge, strong econometric methodologies have been proposed. It is important to choose the optimal edge value so that the baseline RSS of the fitted model can be derived from the plot Chan (1993). Enders and Granger (1998) used the technique of Chan to calculate the advantage of the knowledge limit. To choose the appropriate model best fit between the TAR and the M-TAR models, the AIC and BIC criteria measures will be used.

3.6 Asymmetric Error Correction Model

Constructing a non-linear interface with the M-TAR model threshold helps us to estimate with an asymmetric ecm, the reactions of exchange rate fluctuations to demand for money movements. The redress of asymmetrical errors in this study can be described as

$$\Delta LMD_t = v_1 + v_2 Zplus_{t-1} + v_3 Zminus_{t-1} + \sum_{i=1}^k \Omega_i lrexr_{t-1} + \sum_{i=1}^k \pi_i inf_{t-1} + \sum_{i=1}^k \mu_i int_{t-1} + z_t$$

3.7 Frequency domain causality

The causality of occurrence space offers a comprehensive point-by - point representation of causality across multiple recurrence positions for conventional causality tests carried out in prose,

by measuring the distribution of causality with recurrence groups varying from low to high. This approach 's fundamental intervention includes the inefficiency of the causal influence over the various classes of recurrence, is relevant and can



explain how the causal force varies. In order to determine the association between the neural data, the frequency-domain causality was widely used (Zhou et al., 2016). Empirical research in finance and economics have expanded its application to include economics (Ozer, and Kamisli, 2016; Gül and Özer, 2018).

4. RESULTS AND DISCUSSION

The descriptive statistical analysis together with the correlation analysis are shown in Table 1 below. The results demonstrate that among the variables, the exchange rate has the maximum

variability, and money demand tends to be less unstable than the interest rate and the rate of inflation. In all the metrics, besides that, the standard deviation, which explains much about the data set, surfaces the mean. In addition, the kurtosis and the skewness value indicate the possible non-linear distribution of the dataset. Thus, in statistical analyses, we consider the asymmetric nature of the variables. In view of the correlation coefficient results, neither of the variables tend to have a multicollinearity problem.

Table 1: Descriptive Statistics

	LMD	LEXR	INF	INTR
Mean	2.323	14.853	11.725	3.024
Std. Dev.	1.317	13.546	6.208	2.612
Skewness	-3.192	2.810	1.400	0.205
Kurtosis	9.431	5.015	2.819	1.121
	LGDP	LEXR	LFD	LFGU
LMD	1.000			
LEXR	0.228*	1.000		
	(0.000)			
LINF	0.205*	0.214*	1.000	
	(0.000)	(0.000)		
LINTR	0.023*	0.031*	0.357*	1.000
	(0.000)	(0.000)	(0.000)	

4.1 Diagnostic Tests

Table 5.3 Diagnostic Tests

	χ^2_{NT}	χ^2_{SERIAL}	χ^2_{ARCH}
MD=F(EXR, INF, INTR)	0.627 (0.413)	0.816 (0.538)	1.912 (0.304)

All of the P values are insignificant according to the above three diagnostics. The data is thus said to be free of serial correlation and heteroscedasticity; the normality result also tells us that the data is normally distributed.

4.2 BDS Test

The test of BDS is used to assess the asymmetric nature of time series results. In specific, the test was used for the residual data series generated from ARIMA models (Dorina

and Simina, 2007). The test was named after prominent economists, Brock, Dechert, and Schneinkman. The test is premised on the idea that the series exhibits randomness within the sequence against the alternative presumption that the sequence is asymmetric within the model. And for the findings of the BDS test, see Table 2 below. The table indicates that the null hypothesis is dismissed at a significance level of 1% in all the proportions. This indicates a nonparametric structure.



Table 2: BDS Linearity Test

Series	D2	D3	D4	D5	D6
LMD	0.286*	0.323*	0.262*	0.295*	0.934*
LEXR	0.520*	0.487*	0.142*	0.397*	0.530*
INF	0.078*	0.122*	0.168*	0.642*	0.451*
INTR	0.057*	0.059*	0.096*	0.067*	0.074*

4.3 Unit Root

The findings of the conventional unit root test, the DF-GLS, are shown in table 4 below, showing that the unit root null hypothesis for all the variables analyzed at level could not have been rejected at 5 percent. But we reject the null hypothesis of no stationary after first differentiation, thus I(1). It is very well-founded that, when non-linear effects represent the process of producing series outcomes, traditional linear unit root tests have lower power. We would

also perform a new advanced unit root testing technique in this analysis that integrates non-linearity into the system to measure the nonlinear stationary properties of the sequence parameters. Furthermore, the findings of the KSS root unit experiments are shown in Table 3, which shows that the KSS test did not actually reject the null hypothesis also at level among all variables, but after first differencing, it was rejected. Thus, our variables become nonlinear stationary at first difference I (1).

Table 3: Stationarity Test of Unit Root

VARIABLES	DF-GLS	KPSS
LMD	-1.804	-1.025
LEXR	-1.885	-2.014
INF	-2.014	-3.026
INTR	-2.040	-2.084
Δ LMD	-3.527**	-4.214*
Δ LEXR	-4.821*	-3.303**
Δ INF	-4.421*	-4.103*
Δ INTR	-3.061**	-6.732*

4.4 Co-integration Test

Table 4 below presents the MTAR and TAR models. We estimate the M-TAR through the adjustment speed differential variation. With the HQC vectors indicating the TAR and the M-TAR models having an optimal lag of 2. The BIC and AIC all show that the momentum model is the most appropriate for Nigeria. The results of the M-TAR and TAR reveals that we can reject the null hypothesis of $\rho_1 = \rho_2 = 0$ at the 1% significance level. This follows that exchange rate fluctuation, financial development, financial globalization uncertainty, and economic growth are cointegrated, the asymmetric. The study evaluates the null hypothesis through normal F-statistics (Enders and Granger, 1998).

The symmetric adjustment could not reject the null hypothesis in both the M-TAR and TAR estimates. The result reveals that in line with the M-TAR and TAR specifications, there is no

symmetric in the adjustment between exchange rate fluctuation, financial development, financial globalization uncertainty, and economic growth. However, the TAR threshold model rejects both the null hypothesis of no long-run relationship and the corresponding symmetric adjustment at a 1% significance level. This means that the aforementioned variables are cointegration with a significant asymmetric adjustment. This offers empirical evidence to the presence of an asymmetrical threshold for the long-run relationship between exchange rate fluctuation, financial development, financial globalization uncertainty, and economic growth in Nigeria. As such, these variables are asymmetrically interdependent, making it extremely hard for investors to achieve adequate diversification of portfolios.

**Table 4: Cointegration Asymmetric Results**

	TAR	T-Statistics	Momentum TAR	T- Statistics
ρ^1	-			
	0.862**	3.546	-0.791**	2.482
ρ^2	-			
	0.654**	3.712	-0.863**	2.191
γ^1	0.759*	4.486	0.817**	2.304
γ^2	0.563*	5.971	0.528**	0.174
<i>Tau</i>	0.000		0.000	
F-Joint $\rho^1 = \rho^2 = 0$				
$\Phi/\Phi M$	4.342*			
	*	11.052	4.639*	11.308
F-equal $\rho^1 \neq \rho^2 \neq 0$				
	0.184*	4.043	0.358*	1.573

In addition, we note that the pace of adjustment to the long-run appears to be statistically significant in the context of Table 5. Regarding that, the model follows the standards for convergence. This explains that in the moment of deviations from the lower regime, this would take just 38 percent (the coefficient of

Zminus-1) pace for the model to return to its equilibrium. Approximately 28 percent (coefficient. of Zplus-1) changes pace to return to its long-term equilibrium, though higher regime imbalance duration. Regarding the results below, we can infer that the level of change in the lower regime is higher.

Table 5: MTAR Error Correction Model

Dependent variable: $LGDP_t$			
Variables	Coefficien ts	Standard error	p-value
ΔLMD_t	0.843* [3.441]	0.245	0.000
$\Delta LEXR_t$	1.048* [5.664]	0.185	0.000
ΔINF_t	0.517* [4.517]	0.121	0.000
$\Delta INTR_t$	0.240* [5.106]	0.047	0.000
<i>ZPLUS</i>	-0.281* [-4.763]	0.059	0.000
<i>ZMINUS</i>	-0.384* [-4.085]	0.094	0.000

4.5 Causality

The spectrum causality strategy of Breitung and Candelon (2006) suggests that the responsiveness of a variable to transient high-frequency shocks in the other variable is indeed not equal to temporal, medium and permanent frequency shocks, unlike traditional causality tests, which define the relationship between variables by measuring a fixed coefficient in a general form. This method helps one to break down the statistical causality test into various frequencies. It is worth noting that the result of the frequency domain causality test is different

from those of other causality tests, because the results are presented at different frequencies. This reinforces the need for temporary, medium and permanent causality to be uncovered.

Following the results of the causality test in Table 6, there exist a bi-directional causal relationship between the real exchange rate and money demand in a temporary period that translates the fixed exchange rate regime of the Nigerian exchange rate system: the demand for money under the fixed regime induced the weakening of the exchange rate. The market exchange rate dropped below the pegged



exchange rate after rising money demand, this is because when exchange rate depreciates, it negatively affects the domestic money demand. As people would expect subsequent depreciation in the future. As such, they take the advantage of holding more foreign assets and less of local money (BahmaniOskooee and Pourhedrian, 1990; by Folarin and Asongu 2019; Farouq et al., 2020; Sulong et al., 2020; Ahmad et al., 2020; Sulong and Sanusi, 2020).

Such disparity between the pegged exchange rate and the real exchange rate would cause arbitrage activities on the market. These activities would be forced to reduce the demand for money, resulting to a subsequent increase in the real exchange rate. Money demand eventually decreased to its early stage and the real exchange rate returned to its original level. Therefore, the fixed exchange rate mechanism is characterized by a bi-directional causal effect between the exchange rate and the demand for money.

There is a unidirectional causality flowing from the demand for money to the real exchange rate under the flexible exchange rate regime. the rise in the demand for money in the flexible scheme triggers a decrease in the exchange rate (i.e. Naira's depreciation). However, the floating scheme is distinguished by the lack of any arbitration activities following adjustments in the exchange rate. As a result, there would be no mitigating shift in money demand and thus the exchange rate failed to trigger changes in money

demand. Here, unidirectional causality exists from money demand to exchange rate, and this tends to be a particular function of the flexible exchange rate system.

While in the case of inflation, a one-way permanent causality exists from the demand for money to inflation, which is in line with the findings of Makinen & Woodward (1989); Chimobi (2010); Bhattarai (2011); Waingade (2011); Bakare (2011); Bello & Saulawa (2013). The finding indicates that monetary stability leads to stable prices in the Nigerian economy, considering the fact that price increases are often caused by the demand for money, and this makes inflation in Nigeria a very significant economic phenomenon.

On the other hand, interest rate and money demand appear to have a bidirectional causal relationship. The potential explanation for this is related to the fact that demand is likely to differ with the interest rates they could receive from alternative investments, such as bonds. As interest rates increase compared to the rates that can be paid on deposits of money, people keep less money. When interest rates decline, people keep more money. Thus, when interest rate increases, it causes the demand for money to decrease, thereby resorting to holding more assets than in its liquid form. While, increase in the money demand would force the interest rate to go up in order to attract more money holders to keep their wealth in assets than the liquid form.

Table 6: Frequency domain Causality Test

	Long-run		Medium-term		Short-run	
	0.01	0.05	1	1.5	2	2.5
$LEXR_t \rightarrow LMD_t$	0.375	0.243	0.752	0.733	6.058*	9.028*
$LMD_t \rightarrow LEXR_t$	7.051*	6.927*	5.721*	8.042*	1.029	0.248
$INF_t \rightarrow LMD_t$	0.827	0.931	0.021	0.608	0.724	0.354
$LMD_t \rightarrow INF_t$	8.729*	10.031*	0.121	0.587	6.497	6.043
$INTR_t \rightarrow LMD_t$	4.079*	5.128*	3.016*	3.163*	4.352*	4.260*
$LMD_t \rightarrow INTR_t$	5.052*	3.952*	3.013**	3.481**	5.421*	4.021*

5. CONCLUSION AND POLICY IMPLICATIONS

In this study, we offer an empirical evidence on the relationship between the demand for money, inflation rate, interest rate and the real exchange rate in Nigeria. The study analyzes the Nigerian data which covers the period 1980 to 2019, through the application of threshold autoregressive asymmetric co-integration, and a test of causality using the frequency domain to ascertain the nature of the

causal effect (whether temporary, medium or permanent). In the analysis we were able to observe a bi-directional causal relationship between the real exchange rate and money demand in a temporary period (the fixed exchange regime), while a unidirectional causal effect exists from money demand to real exchange rate in the permanent exchange rate regime. We further found a one-way permanent causality from the demand for money to inflation, while interest rate and money demand



appear to have a bidirectional causal relationship. The presented findings of this research indicate that the Nigerian naira/dollar exchange rate is influenced by the Nigerian demand for money. Thus, the Nigerian government should acknowledge the worth of money demand as a crucial monetary policy instrument in order to avoid the pressures of inflation emanating from an increase in the demand for money. Meanwhile, the naira/dollar stability exchange rate, all things been equal, requires that this demand for money in Nigeria remains in a stable manner under the current flexible exchange rate system. In addition, the stability in the Nigeria's money demand is required in order to avoid excess naira/dollar exchange rate variability. The paper, therefore, shows that the Nigerian monetary authority is required to put more effort in bringing back stability in the demand for money. The Friedman's k-percent rule might be considered.

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