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Impact of Exchange Rate Regimes on Inflation in Nigeria

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Abstract
The study empirically investigates the impact of exchange rate regimes on inflation in Nigeria from 1981Q1 to 2018Q4, 152 observations. The variables used in the study were Consumer Price Index (cpi) that captured Inflation, Normal Exchange Rate (nexrt), Money Supply Per Real Gross Domestic Product (M2/rgdp), Dummy (D1) Captured the shift from fixed (Pre-SAP) to flexible (Post-SAP) Exchange Rate Regimes, Real Gross Domestic Product (rgdp), and Real Interest Rate (rintrt). The variables were tested for the unit root test, both the ADF and PP unit root tests established that all the variables were stationary at both level (I(0)) and after first differencing (I(1)). The ARDL Bounds test was employed to determine the existence of long run relationship among the variables, it implies that there exist a long run relationship among the variables, they were co-integrated. ARDL was employed; the results indicate that current exchange rate has a positive and significant on inflation. Dummy co-efficient has a negative (-20.10) and significant (Prob. 0.000000) at 5% relationship with inflation in Nigeria. This suggests that the floating exchange rate regime policy is preferable for controlling rising inflation compared to the fixed exchange rate. Finds shows that impact of flexible exchange rate regime (post-SAP) has positive and more significant in affecting inflation than fixed exchange rate regime in Nigeria. The study recommends: that government of Nigeria must continue to ensure that it achieves flexible exchange rate stability in order to stem inflationary.

Keywords: Inflation, Exchange Rate, Dummy

1. Introduction

Inflation is a commonly used but often misconstrued economic term and has remained quite topical at various academic fora (Lawrence, et al 2019). As a macroeconomic phenomenon, its impact pervades all segments of the economy. In spite of its macroeconomic importance, its nature and causes remain largely debatable (Musibau, 2018). Inflation refers to an economic condition characterized by a sustained or continuous rise in the general price level. This implies that for a price rise to qualify as inflation, it should not be an isolated case of increase in one or a few items in a particular location but should be operative at the aggregate level. It must have economy-wide impact. It should also not be a

momentary increase in price but must be sustained or continuous in nature. During periods of inflation, prices are unstable with adverse implications for planning, budgeting, production and other forms of economic activities. Maintenance of price stability is a major objective of monetary policy and it is a condition for attainment of sustainable economic growth (Sanam & Fetullah, 2017).

The Central Bank's monetary autonomy in making important policy decisions vary between regimes. For example, in the flexible exchange rate regime, the Central Bank usually adopts discretionary monetary policy in order to soften the effects of increases in prices, which automatically lead to the persistence of inflation. In contrast, the Central Bank is devoted to guard the exchange rate parity in the fixed exchange rate regime. The pegging of the exchange rate results in a lower degree of monetary policy autonomy, and subsequently, lower inflation persistence through the discipline effect and the confidence effect (Akinbobola, 2012).

Few studies have been done on exchange rate regimes on inflation in Nigeria. Among them were Musibau, (2018); Folawewo and Olakojo (2012); Akinbobola (2012). Annual data were used in their studies. Thus, the objective of this study is to examine the impact of exchange rate regimes on inflation using quarterly data from 1981Q1 to 2018Q4, 152 Observations. Two exchange rate regimes have been identified in this study: i) Fixed Exchange rate (Pre-SAP), from 1981 to 1986 and ii) Flexible exchange rate (Post-SAP), from 1987 to 2018.

2. Empirical Review

Several researchers have empirically examined the impact of exchange rate regimes on inflation in both developed and underdeveloped countries including Nigeria.

David, Koye, and Adebowale, (2019) re-examine the effect of exchange rate regimes on inflation in Nigeria from 1970 to 2015. They used the Autoregressive Distributed Lag (ARDL) approach for their analysis. The result shows that the past one year value of exchange rate has a negative and significant impact on the current inflation rate. Inflation rate increased more during the fixed exchange regime compared to the floating exchange rate regime. They recommend that government of Nigeria must continue to ensure that it achieves exchange and interest rates stability in order to stem inflationary tendencies.

Musibau (2018) examined the influence of different exchange rate regimes on the Nigeria's inflation performance between 1970 and 2012. Estimates of the cointegrating regression was employed. He finds deeds to be the relevant dimension for inflation in the context of crawling pegs, only hard pegs seem to be important in the context of words. The results hold even after controlling for the growth in money supply and interest rate. The hollowing out hypothesis in the case of Nigeria is therefore not confirmed. The results shows that pegged exchange rate

regime plays a significant role in anchoring expectation, improve credibility and consequently reduce inflation when it is backed by de facto consistent behavior.

Monfared and Akın (2017) analyze the relationship between Exchange rate and inflation based on time series data, using Hendry General to Specific Modeling method and Vector Autoregression (VAR) model. They used annual data for the period 1976-2012 for Hendry method using Exchange rate and inflation as variables. They also used the quarterly data from 1997: 3 - 2011: 4 to estimate VAR model, using exchange rate, inflation rate and money supply as variables. As a result of the Hendry model, it was obtained that there was a direct relationship between Exchange rate and inflation. An increase in foreign exchange rates makes the inflation goes up. By including the money supply variable to VAR model the effects of money supply and the exchange rate on inflation has been investigated as well. According to the results, both the money supply and the exchange rate affect the inflation in the positive direction. Contribution of the money supply on inflation is greater than the exchange rate. They recommended that the Central Bank must be transparent in the application of foreign exchange policy, thus avoiding the inflation stems from inflationary expectations and protecting the exchange rate from excessive fluctuations by means of a more managed exchange rate policy.

Folawewo and Olakojo (2012) examined the linkage between exchange rate regimes inflation persistence in Nigeria in the context of an accommodating monetary policy framework between 1970 and 2008. The study include money supply, nominal effective exchange rate, past values of inflation and a dummy variable that takes the value one fc the floating regime and zero in the fixed regime. The Engle Granger error correction model was employed by the study: Empirical analysis revealed that the current level of inflation is significantly affected by its past levels and real interest rate, while the nominal effective exchange rate, imported inflation (measured by US inflation) and real GDP have little effect on inflation. In addition, the study found out that inflation persistence it Nigeria is more pronounced under the floating exchange rate regime than the fixed regime.

. Uduakobong (2015) empirically investigates the relationship between exchange rate and inflation in Nigeria using data for the period of 1970 to 2011. The following variable were used, Inflation, Real Exchange rate, Fiscal deficit, Interest Rate, Gross domestic product, and change in the value of import. Specifically, it sought to analyse the influence of exchange rate volatility on inflation in Nigeria; and to determine the nature and direction of causality between exchange rate and inflation in Nigeria. Employing Ordinary Least Squares (OLS) techniques and Granger causality tests, the results indicate that Exchange rate (ER) has an insignificant negative influence on Inflation rate (INF). Furthermore, there was no causality between inflation rate (INF) and exchange rate (ER) in Nigeria.

The study recommends that, policy makers and relevant monetary authorities should employ measures that will stabilize the exchange rate in order to ensure that the inflation rate is maintained at a reasonably low level.

Akinbobola (2015) investigated the impact of exchange rate pass-through to import prices, inflation, and monetary policy in Nigeria. Secondary data were used. The data covered the period of 1986-2012. They used annual data on nominal effective exchange rate index, import prices, interest rate, money supply and inflation were sourced from the publication of the Central Bank of Nigeria (CBN) and oil price index were sourced from the World Development Indicators published by the World Bank. The study applied Six-Variable vector autoregressive model to estimate the impulse response function and variance decomposition. In their study, they found out that exchange rate pass-through in Nigeria during the period they reviewed was moderate, significant and persistent in the case of import prices and low and short lived in the case of inflation. In addition, they equally found that exchange rate pass-through was incomplete and has useful implication to policymakers, especially in the design and implementation of exchange rate and monetary policy. Thus, they recommended that policy makers should take into account the incomplete response of import prices when they decide to devalue the currency so as to improve trade balance irrespective of several other factors which might determine the effectiveness of exchange rate policy.

Emmanuel and Zacharia (2015) study was intended to establish the relationship between exchange rate and inflation measured by CPI in South Sudan using time series monthly data for the period August 2011 to November 2014, Using Granger-causality approach. The study reveals that there exists a unidirectional causality from exchange rate to CPI without feedback. This means depreciation of South Sudanese currency is detrimental to the economy of South Sudan. Although CPI failed to cause changes in exchange rate, there is no way to conclude with greater confidence that the results are true. The effect of the pressure of an increase in price level on exchange rate could have been from the response of monetary authorities in bridging the gap between the price level and the purchasing power of people in the economy. In South Sudan, with no response from the monetary authorities to increase money supply, the effect of increase in prices on exchange rate has been suppressed and only manifests itself in terms of suffering encountered by the economic actors with consumers and mainly the low-income consumers hit hard. Given the results, there is a need for the authorities to manage the exchange rate and save the domestic currency from depreciation. In search of more information, the study recommends further research to be conducted with the aim of establishing the weaknesses and strengths of South Sudan Central Bank management in carrying out effective monetary policies in the country.

Mandizha (2014) conducted a study on the linkage between inflation and exchange rate depreciation in Zimbabwe employing time series monthly data (without specifying the range of data) using Granger causality approach. The results showed that in the first two months the causality ran from exchange rate depreciation to inflation (prices). This means from lag one to lag two, the Granger causality was unidirectional. However, in lag three (the third month), there was a feedback Granger-causality between inflation and exchange rate depreciation up to lag twelve.

Imrana et al (2012) the study was to investigate the impact of real effective exchange rate on inflation in Pakistan. The time series data of real GDP, nominal GDP, real effective exchange rate, prices and money supply for the period of 1973 to 2007 was used in the study. It was concluded that the real effective exchange rate has impact upon inflation in Pakistan. The correlation matrix of the explanatory variables was calculated to establish the relationship among real effective exchange rate and with other variables. A positive and strong relationship between the real effective exchange rate and inflation was found.

Ghanem (2010) empirically tested the relevance of the fixed exchange rate regime in achieving price stability in 17 MENA countries between 1980 and 2007. Estimate dynamic panel data models for different classification schemas, the finding provided evidence of a strong relationship between the choice of exchange rate regime and inflation. However, the disjunction between de jure and de facto policies produces different results. For example, the de jure fixed exchange rate was not successful in assuring lower and stable inflation rate in line with theory because monetary policy commitment was lacking credibility. In contrast, inflation rate was found to be much lower under the de facto pegged regimes than under de facto flexible regimes. The robustness test showed that a credible fixed exchange regime and the fear of floating behaviour contribute significantly to lower inflation rate.

This study examines the impact of exchange rate regimes on inflation using quarterly data from 1981 to 2018, 152 observations.

2.1 Theoretical Framework

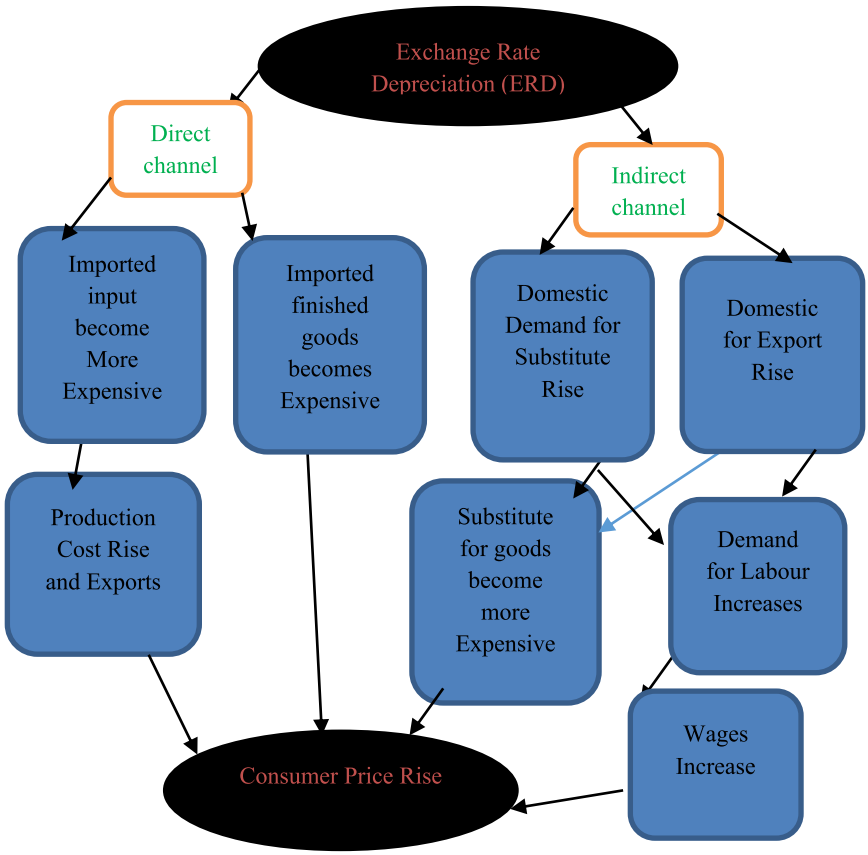

Figure 1: Transmission Mechanism of Exchange Rate Pass-through
Source: Laflechell (1996).

Figure 1 explains transmission mechanism of exchange rate pass-through. In a small open economy (an international price taker), a depreciation of the domestic currency will result in higher import prices (both for finished goods and intermediate inputs), which will ultimately be transmitted to higher domestic prices.

Exchange rate movements can impact on domestic prices through direct and indirect channels, via their effect on aggregate supply and demand. The direct channel is due to operation of law of one price based on purchasing power parity theory (PPP). Exchange rate variations can also affect domestic prices through its indirect effect on aggregate demand. Depreciation of the domestic exchange rate

reduces the foreign price of domestic goods and services, and thereby increases foreign demand, resulting to an increase in net exports and hence aggregate demand and real output. The increase in domestic demand and real income may bid up input prices and hence causing workers to agitate for higher wages to maintain a real wage. The nominal wage increase may result to further price increases. Furthermore, depreciation may increase the domestic price of imported goods and services and thereby lead to expenditure switching in favour of domestic goods and services, which will increase their demands and raising domestic prices.

3. Methodology

3.1 Model Specification

The impact of exchange rate regimes on inflation rate in Nigeria, this study estimates both long-run and short-run model to determine the likely impact of both the fixed and flexible exchange rates on inflation in Nigeria during the period of study.

The model could be expressed in functional form:

$$cpi = f(lognexrt, logm2\_rgdp, logrgdp, rintrt, D1)\_ - - - - - 1$$

Where:

cpi = consumer price index (inflation)

nexrt = nominal exchange rate

m2_rgdp = financial deepening

D1 = dummy variable that captures the policy change. D1=0 if it's fixed exchange rate regime (pre-SAP) and D1=1 if it is flexible exchange rate regime (post-SAP).

rgdp = Real gross domestic product

rintrt=real interest rate

Log= logarithmic function

Equation 1 can be re-specify into Linear Model

$$cpi = \beta_1 lognexrt_t + \beta_2 logm2\_rgdp_t + \beta_3 logrgdp_t + \beta_4 rintrt_t + \beta_5 D1_t + \alpha_0 + \varepsilon_t \text{----------} \quad 2$$

Where:

β_0-β_5 = Parameter to be estimated

ε_t = Disturbance Error term

Auto-regressive Distributed Lag Model

$$(\text{cpi}_t) = \sum_{i=1}^{N1} \delta_i (\text{cpi}_{t-i}) + \sum_{j=0}^{N2} \beta_{2j} \Delta\log(nexrt_{t-j}) + \sum_{j=0}^{N3} \beta_{1j} \Delta\log(m2/rgdp_{t-j}) + \sum_{j=0}^{N4} \beta_{3j} \Delta\log(rgdp_{t-j}) + \sum_{j=0}^{N5} \beta_{4j} (rintrt_{t-j}) + \sum_{j=0}^{N6} \beta_{5j} \Delta\log(D1_{t-j}) + \alpha_0 + \varepsilon_t \text{.....} 3$$

4. Results and Discussion

Table 1 Summary of Unit root test

	ADF			PP			KPSS		
	Level	**First Diff**	**I(d)**	**Level**	**First Diff**	**I(d)**	**level**	**First Diff**	**I(d)**
Log(rgdp)	0.136[a]	-4.212[a**]	I(1)	0.657[a]	-13.642[a**]	I(1)	1.438[a]	0.307[a**]	I(1)
Log(M2/rgdp)	-0.769[a]	-12.301[a**]	I(1)	-0.217[a]	-16.038[a**]	I(1)	2.041[a]	0.137[a**]	I(1)
Log(nextr)	-2.205[a]	-6.858[a**]	I(1)	-2.418[a]	-17.094[a**]	I(1)	1.065[a]	0.042[a**]	I(1)
(cpi)	-3.023[a**]		I(0)	-3.055[a**]		I(0)	0.427[a**]		I(0)
Rintrt	-2.606[a***]		I(0)	-13.088[a**]		I(0)	0.737[a*]		I(0)

Note: *, ** and *** imply statistical significance at 1%, 5% and 10% levels respectively. Also, a denotes model with constant, b model with constant and trend and n is model without constant and trend.

Source: Source: Author's computation using E-views 10

Impact of exchange rate regimes on inflation in Nigeria, stationarity of the time series data (Real Gross domestic product, Money supply per real gross domestic product, Consumer Price Index, Real Interest rate, and Nominal exchange rate) was examined using the Augmented Dickey Fuller (ADF) Unit Root Test and Phillip Peron (PP) unit root test while Kwiatkowski-Phillips-Schmidt-Shin (KPSS) is employed to authenticate the correctness of ADF and PP unit root test. In this study, 5% critical value is used.

Table 1 shows that having tested for the unit root test, both the ADF and PP unit root test established that all the variables are stationary at both level(I(0)) and after first differencing(I(1)). Similarly, the KPSS unit root test confirm the result found under the ADF and PP indicating that the variables are combination of I(0) and I(1).

Table 2: Correlation matrix

Correlation	Cpi	Log(m2/rgdp)	Log(nexrt)	Log(rgdp)	Rintrt
Cpi	1.000000				
Log(m2/rgdp)	-0.424204	1.000000			
Log(nexrt)	-0.263127	0.728030	1.000000		
Log(rgdp)	-0.349104	0.890678	0.883199	1.000000	
Rintrt	0.129968	0.332283	0.703523	0.483569	1.000000

Source: Author's computation using E-views 10

It is imperative to determine whether the model is suffering from serial autocorrelation problem. From table 2, since all the variables have values greater than 5%, it implies absence of correlation among the variables. Therefore, our model is free from serial correlation problem.

Table 3: Lag Length Criteria Selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-455.6994	NA	2.161316	6.446471	6.488102	6.463388
1	25.36544	941.8030	0.002610	-0.272753	-0.147859	-0.222001
2	36.21903	20.94286	0.002370	-0.369282	-0.161125*	-0.284696*
3	39.13149	5.537766	0.002407	-0.353965	-0.062545	-0.235544
4	41.91783	5.219480	0.002448	-0.336871	0.037811	-0.184615
5	52.65631	19.81325*	0.002227*	-0.431779*	0.026166	-0.245689
6	54.67602	3.669616	0.002291	-0.403888	0.137320	-0.183963

Source: Author's computation using E-views 10

It becomes pertinent to determine the optimal lag length. The Optimal lag length is determined by both the Akaike Information Criterion (AIC) and the Schwarz Information Criterion (SC). The table below shows the lag length structure.

The result in table 3, portrays different lag length criterions and the respective lag length chosen. From the results, LR test statistics, the Final Prediction Error, Akaike Information Criterion, Schwarz information criterion, and Hannan-Quinn information criterion obtained lag length structure for rintrt, Logrgdp, LogM2_rgdp, Lognexrt and cpi. According to the econometrics analysis/techniques, AIC and SC is always the main focus in the lag length criteria,

but in a situation whereby the two possesses the same lag length or a situation whereby the SC is greater than the AIC, it's always advisable to go for the SC. This study made use of the SC as the lag order selected by the criterion. After establishing the lag order length, which is lag one (Lag 5), the Co-integration and long-run equation results has to be estimated.

Table 4: Cointegration Test (ARDL Bounds test)

Test Statistic	Value	K	Significant	I0(Lower Bound)	I1(Upper Bound)
F-Statistic	5.153619	5	10%	2.08	3
			5%	2.39	3.38
			2.5%	2.7	3.73
			1%	3.06	4.15

Source: Author's computation using Eviews 10

Having established that the variables are integrated of different order, it is very important to determine whether there exists a long-run equilibrium relationship amongst them. Co-integration describes the existence of an equilibrium or stationarity relationship between two or more times series each of which is individually non stationary. Therefore, since our variables are of I(0) and I(1) respectively, to test for the co-integration, the ARDL Bounds test will be employed to determine the existence of long run relationship among the variables.

From the table 4, the F-Statistic value (5.15) is greater than both the lower and the upper bound, it implies that there exist a long run relationship among the variables. This result, means that in Nigeria's case, the hypothesis of no co-Integration among the variables should be rejected. It therefore necessitated the estimation of both the short run and long run model.

Table 5: Auto-regressive distributed Lag Model Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
cpi(-1)	1.412930	0.067570	20.91061	0.0000
cpi(-2)	-0.304295	0.105826	-2.875421	0.0048
cpi(-3)	-0.071530	0.099581	-0.718307	0.4740
cpi(-4)	-0.295449	0.112857	-2.617909	0.0100
cpi(-5)	0.236567	0.078511	3.013151	0.0032
Lognexrt	17.41503	7.896705	2.205355	0.0294
lognexrt(-1)	-16.35204	7.596839	-2.152480	0.0334
logm2_rgdp	49.73057	8.455194	5.881659	0.0000
logm2_rgdp(-1)	-78.19975	15.81722	-4.943964	0.0000
logm2_rgdp(-2)	31.49025	8.915116	3.532231	0.0006

Logrgdp	-22.27539	2.756763	-8.080269	0.0000
logrgdp(-1)	32.71225	4.940586	6.621128	0.0000
logrgdp(-2)	-11.89914	2.994690	-3.973414	0.0001
Rintrt	-0.318289	0.054684	-5.820484	0.0000
rintrt(-1)	0.482350	0.091391	5.277875	0.0000
rintrt(-2)	-0.180795	0.052015	-3.475817	0.0007
D1	-20.09718 -	4.503645	4.462426	0.0000
D1(-1)	26.77591	5.025484	5.328027	0.0000
D1(-2)	-2.048222	4.412655	-0.464170	0.6434
D1(-3)	2.387310	4.146545	0.575735	0.5659
D1(-4)	23.95828	4.369974	5.482475	0.0000
D1(-5)	-31.08266	3.499614	-8.881739	0.0000
C	1.635780	3.800386	0.430425	0.6677

R-squared	0.979584	Mean dependent var	21.21509
Adjusted R-squared	0.975778	S.D. dependent var	18.54561
S.E. of regression	2.886328	Akaike info criterion	5.106013
Sum squared resid	983.0446	Schwarz criterion	5.587016
Log likelihood	-336.9739	Hannan-Quinn criter.	5.301476
F-statistic	257.3584	Durbin-Watson stat	1.842358
Prob(F-statistic)	0.000000		

Source: Author's computation using E-views 10

4.1 Diagnostic Test

To check the adequacy of the model, this study carried out series of diagnostic test in order to get a valid result and inference.

Table 6: Linearity Test

	Value	**Df**	**Probability**
t-statistic	1.553237	102	0.1235
F-statistic	2.412547	(1,102)	0.1235

Source: Author's computation using E-views 10

Output from the Ramsey reset test reports the test regression, the F-statistic and t-statistic for testing the hypothesis that the coefficients on the powers of fitted values from the regression are jointly zero, that is, the model is correctly specified. The null cannot be rejected since the p-value is more than 0.1. Hence, the model is correctly specified.

Table 7: Breusch-Godfrey Serial Correlation LM Test

	Value	Df	Probability
F-statistic	1.698689	Prob. F(2,101)	0.1881
Obs*R-squared	4.783784	Prob. Chi-square(2)	0.0915

Source: Author's computation using E-views 10

To ascertain the validity or otherwise of the estimates, the null hypothesis of the test is that there is no serial correlation in the residuals up to the specified lag order. Given the results from "F-statistic" and "Obs*R-squared" statistic, it shows that the null hypothesis cannot be rejected since the p-value is greater than 5%. Therefore, there is absence of serial correlation in the model.

4.2 Stability Test

Another important test carried out centered on the stability of the model using the AR characteristic root as well as the CUSUM residual test. The model is considered stable if the values of the root are less than one or lie inside the unit circle for AR characteristic polynomial while it is said to be stable if the green line lie within the red line using the CUSUM residual test. Based on Eigen-value, the result of the model is stable as all the values of the root of the model lie inside the unit circle. Therefore, VAR satisfies the stability condition. Similarly, the CUSUM test also satisfies the stability condition because the line falls within the graph. The graph is shown in figure 2 and 3 respectively.

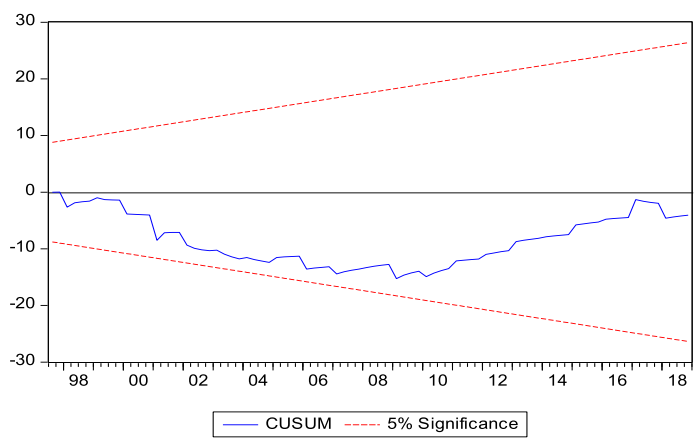

Figure 2: CUSUM Residual Test

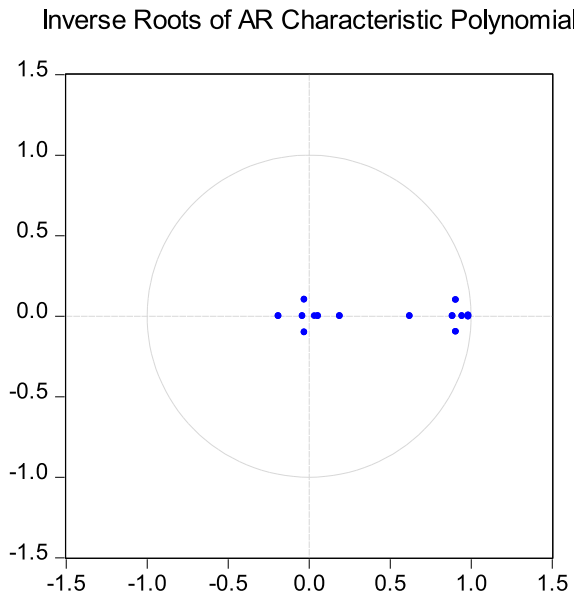

Figure 3: Inverse Roots of AR Characteristic Polynomial

4.3 Discussion of Results

Table 5 shows the model of the ARDL which is obtained after considering the appropriateness of lag based on the Akaike information criterion, Schwarz criterion and Hannan-Quinn criterion as well as correcting for serial correlation. Based on the model specification, shows that the past one year value of exchange rate has a negative and significant impact on inflation (cpi). This implies that a depreciation of the Naira leads to a reduction in the rate of inflation. Theoretically, depreciation of the currency is expected to boost net export if the country is a net export State thereby increases aggregate demand and fuels inflation if it is not controlled while the current exchange rate has a positive impact on inflation and significant at 5% level. The co-efficient of current Dummy Variable shows less than Zero, (- 20.10). Fixed exchange rate regime is 20.10% less to flexible exchange rate regime because fixed exchange rate regime takes the value of 0 and Flexible exchange rate regime takes the value 1. Moreover, within the floating exchange rate regime, as the exchange rate increases, the inflation decreases and vice versa. This finding is confirmed with David et al, (2019) this suggests that the floating exchange rate regime policy is preferable for controlling rising inflation compared to the fixed exchange rate. The past one, third and fourth years values of nexrt are positive and significant expect for the third year which is insignificant to

inflation. The second and fifth year values are negative and significant expect second year which is insignificant to inflation. The constant value is positive and insignificant to inflation.

The past one and fifth year values of inflation has positive and significant to itself while second, third and fourth years values has negative and insignificant to itself at 5% level, except second year value that is significant to inflation. The current and second year values of m2_rgdp are positive and significant to inflation while the past one year value is positive and significant to inflation. The value of rgdp for the current year and the value of the second year value are negatively and significantly to inflation while the past one year value is positive and significant to inflation. Rintrt value for the current and second year is negatively and significantly to inflation while the past one year value of rintrt is positive and significant to inflation.

The coefficient of determination (R^2) shows 0.979584 (98%) that the model is good or its explanatory power is in order. The Durbin-Watson (DW) value of 1.842358 suggests the model experience weak presence of serial correlation and the F-test shows there are no omissions of relevant variables in the model Prob(F-statistics) is 0.000000, it is significant at 5%. In essence, there is no mis-specification problem.

5. Conclusion and Recommendations

The study examined exchange rate regimes on inflation in Nigeria from 1981Q1 to 2018Q4 using quarterly data, 152 observations. The system of exchange rate in Nigeria has oscillated between the flexible and fixed counterpart. From the results using econometrics tools indicate that the co-efficient of current Dummy Variable, policy chance from fixed to flexible, shows less than Zero, (-20.10). It has re-established that flexible exchange system rate remains a better option for increasing the value of the Naira provided institutional challenges are holistically dealt with. However, the study supports the de jure type of the flexible exchange rate and is against the de facto type of fixed exchange rate. The Central Bank of Nigeria must be credible and the independence of the Bank must be achieved.

It is imperatives that future studies on Nigeria consider wider spectrum of the exchange rate regimes. This study recommends that the government of Nigeria must continue to ensure that it achieves exchange and interest rates stability in order to stem inflationary tendencies. To curb inflation, there is the need for high transparency in monetary policy implementations. The policy linkage between monetary policy instruments in the country should remain very strong in the short–run. Achievement of price stability can be enhanced if the exchange rate regimes are explicit and correctly identified by the public. In all, there should be effective

structural reforms in place in order to reap the benefits of right policies implemented in Nigeria.

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