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Empirical Analysis of the Impact of Interest Rate Deregulation on the Performance of Deposit Money Banks in Nigeria from 1989-2018

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ABSTRACT

The research empirically analyzed the impact of interest rate deregulation on the performance of deposit money banks in Nigeria for the period from 1989-2018. The objective of the study is to analyze the impact of interest rate deregulation on the performance of deposit money banks in Nigeria. While the null hypothesis is that interest rate deregulation has no positive impact on performance of deposit money banks in Nigeria. The research employed Ordinary Least Square (OLS) regression techniques. The research shows a long and short run relationship between the dependent variable (Total assets of Deposit money banks) and the independent variables (Interest rate on savings, Interest rate on Deposit and Interest rate on lending). The research concluded and recommended that Banks should embrace interest rate deregulation in such a way that they can generate more income on their assets and adequate efforts should be made by banks to increase their level of investments as that will help in generating reasonable returns on their assets.

INTRODUCTION

Background of the Study

Interest rate plays a vital role in any economy as the signal that affects the channeling of funds. Deposit money banks of an economy still remains the most heavily regulated and monitored sector due to the critical role the sector plays in national growth and development through the channeling of investible funds for productive purpose which has over reaching effect on the economy. As a result of this significant role played by deposit money banks, many regulatory and reforms framework have been initiated by developing countries in order to further strengthen their activities so as to be highly competitive in both domestic and foreign. The regulation of interest rate by monetary authority has been of great importance because interest rate serves as a major determinant of investment. An interest rate is the percentage of principal charged by the lender for the use of its money. The Principal is the amount of money lent. Interest rate differs from bank to bank in the nation and also differs in the same bank based on customers credit records, the prime rate are given to the most preferred customers who have positive track record with the banks while maximum lending rate are open to all which can meet the criteria. Such has also made access to the benefits of the deregulation policy difficult for the Nigerian people.

Financial Deregulation and liberalization is a matter of degree, and does not imply a shift to total laissez faire. It entails the removal or relaxation of regulations affecting the type of business financial firms may undertake, the type of firms permitted to deal in the particular markets, or the terms on which dealing is allowed. Regulations which have been relaxed include controls on interest rates at which banks can lend or borrow, controls on operations by banks outside their country of registration and restrictions on the types of business particular financial institutions can transact, direct credit abolition and exchange rate deregulation. Deregulation has been favored as it leads to more competition and efficiency gains, causing both developed and developing economies to incorporate such policies into their Structural Adjustment Programs(SAP, 1986 for Nigeria) as opposed to its opposite; financial regulation or repression. Financial sector was highly

regulated before the adoption of Structural Adjusted Programme (SAP) in Nigeria. During this period interest rate was fixed by monetary authorities in line with the prevailing economic conditions. However, the adoption of Structural Adjusted Programme (SAP) brought the market based determinants of interest rate by the demand and supply for loanable funds in order to foster the growth and development of developing countries. In 1986, the Structural Adjusted Programme (SAP) was introduced in Nigeria to deregulate interest rate and exchange rate. Interest rate was allowed to be determined by the interaction between the force of demand and supply and the players in the financial market were lenders and borrowers are allowed to negotiate the rate of deposits and lending with the purpose of promoting effectiveness and efficiency in intermediation process, ensure healthy competition and greater participation (Abogan, Olajide & Oloba, 2014). The Nigerian financial sector is undoubtedly the most important in the political economic system because it provides the necessary lubricant that keeps the wheel of the economy turning and it is an engine for economic growth. The sector provides fund for investment and also allocates these funds for investment as efficiently as possible to those projects that offer best returns to fund owners. The well-being of the sector to a very large extent determines a growing economy. However, if the sector happens to be weak, the economy suffers for it. This research will use empirical method to analyze the impact of interest rate deregulation policy on the performance of deposit money banks in Nigeria, so as to help direct the monetary policy authority in Nigeria on how best to approach interest rate policies in Nigeria. Such will reposition the banking sector for a greater economic benefit to the economy in General

Research Questions

The following research questions will guide this research;

1. What is the impact of interest rate deregulation on the performance of deposit money banks in Nigeria?
2. What is the causality relationship between interest rate deregulation and performance of deposit money banks in Nigeria?

Objectives of the Study

In line with the basic objective of promoting rapid economic growth and development through financial sector enhancement, the main objective of this study is to analyze the impact of interest rate deregulation on the performance of deposit money banks in Nigeria. The specific objectives of the study are:

1. To examine the impact of interest rate deregulation on the performance of deposit money banks in Nigeria
2. To examine the causality relationship between interest rate deregulation and performance of deposit money banks in Nigeria.

Statement of the Hypotheses

$H_0$1: interest rate deregulation has no positive impact on performance of deposit money banks in Nigeria.

$H_0$2: There is no causality relationship between interest rate deregulation and performance of deposit money banks in Nigeria.

Literature Review

Theoretical Review

The Classical Theory of Interest Rate

This theory is propounded by David Ricardo in 1946 and was developed by Marshall, Piggon, Cassels, Walras, Tansing and Knight in 1956. According to the classical theory, rate of interest is determined by the interaction of demand and supply of capital, hence by the intersection of the investment demand schedule and the savings schedule. It could also be stated that the interest rate is determined by the equality of savings and investment under the condition of perfect competition. The rate of interest is constructed be the balancing factor, which equates the volume of savings with the volume of investment. There is an inverse relationship between the rate of interest rises, the demand for capital declines. In the same manner, if the rate of interest falls, the demand curves for capital rises. That is why the demand curve for capital slopes downward from left to the right. The theory is a real theory of interest because it is based on real forces of demand and supply side. It regards productivity on the demand side and thrift on the side of supply and completely neglects monetary influences on interest rate. The weakness of this theory flows from its assertion that money is merely a veil, a passive factor influencing the rate of interest. This theory also completely ignores the effect of investment on income as it is based on the

unrealistic assumption of full employment of resources.

Neo-Classical Theory of Interest Rate Called Loan Able Funds Theory

This is a type of theory of interest rate developed by Ohlin Myrdal and Robertson in 1954. The theory stated that interest rate is determined by the forces of demand and supply of loan able funds. The theory further explained the purpose of demand or loan able funds which are (i) investment (ii) Hoarding and (iii) dissaving. For investment, the theory explained the inverse relationship between demand for loanable funds and interest rate. An investor desire for funds to invest in making of new capital goods. But such demand can only be actualized if the interest rate is less to the expected return on investment. If the interest rate is less, the demand will be high and if the interest rate is high, the demand will be low. For hoarding, the theory explained that the desire for liquidity triggers hoarding by some people but such still has inverse relationship with interest rate. Same inverse relationship still exists in dissaving. For supply of loanable funds, the theory explained it under savings, dishoarding, disinvestment and bank credit. For savings, the theory explains that people will save more with high interest rate and less with low interest rate. Such positive relationship was also utilized to explain dishoarding and disinvestment. Bank credit was also explained as it affects loanable funds. Since the banks also create credit when they lend money out. The theory concluded that interest rate is determined by the point of equilibrium between demand for and supply of loanable funds.(b) Structure, conduct, performance paradigm explained relationship between market structure, market conduct and market performance. This theory is generally considered to be a superior theory to classical theory because of its inclusion of real as well as monetary factors, recognition of the role of bank credits as a constituent of money supply and its regard of money as an active factor in the determination of interest rate.

The Keynesian Theory of Interest Rate

This is a theory propounded by David Ricardo in 1956. This theory assumes equilibrium with less than full employment where both employment and income are fluctuating. The theory views interest as reward for parting with liquidity. It provides that interest rate is determined by the demand and supply of money. The theory opined that supply of money is usually determined by monetary authorities while the demand for money is a function of income and interest rate. The theory further explained that transactionary and precautionary motive of liquidity is dependent on income while speculative motive is dependent on interest rate, it is interest elastic. The Keynesian theory implies that low interest rate as a component of cost administered is detrimental to increase savings and hence investment demand. This theory introduced the concept of liquidity trap, a situation where low interest rates discourage savings and consequently reduces investments due to lack of investable fund. Anyingang and Udoka (2012), in their study observed that the Keynesian liquidity preference theory interest rate is a stock theory. It is a stock analysis because it takes the supply of money as given during the short run and determines the interest rate by liquidity preference or demand for money. This theory alludes to the Nigerian situation under the regulated interest era, where the monetary interest rate set by government authorities was low and the real interest rate was even lower because of inflation. The low interest rate encouraged inefficiency in the use of capital and resultant negative growth trend in investment. The negative trend was also because of lack of investable fund as people preferred to hold liquid cash as there was no adequate inducement to part with liquidity.

Empirical Review

Omankhanlen, Okorie and Taiwo (2015) examined A Dynamic Analysis of The Relationship Between Monetary Policies and Loan Risk Exposures in Nigerian Deposit Money Banks.The data analysis was carried out with ordinary least square multivariate regression perspective within the confinement of a vector error correction model (VECM) framework. The result of the study reveals that lending rate does not play significant role in support of loans and advances. However, monetary policy rate reveal the most significant effect on commercial banks loans and advance confirmed by its efficient estimate. This means that monetary policy rate is a competent parameter in measuring the performance of banks in the allocation of their credit facilities. Based on the findings, it is was recommended that the monetary authorities give opportunity for the full interplay of the market forces of supply and demand in the allocation of credit

.This interplay should be closely monitored to prevent banks from creating artificial scarcity of funds in order to hike their lending rate.

Dare, Funso David , Okeya, Isaac Olaitan (2017) seeks to assess empirically the impact of monetary policy on the performance of commercial banks in Nigeria. The paper specifically adopts United Bank for Africa (UBA) Plc as a case study. The study made use of a panel cross sectional data covering the period from 2009 to 2014. Multiple linear regression technique was employed to test the relationships inherent in the explanatory and dependent variables with the aid of Statistical Package for Social Sciences (SPSS), Version 20. The estimated model expresses banks' operating performance as a function of monetary policy represented by Monetary Policy Rate (MPR), Cash Reserve Requirement (CRR) and Liquidity Ratio (LR) while Return on Assets (ROA) is used as a proxy for banks' credit performance. The study found out that there is a positive but statistically insignificant relationship between MPR and ROA in the chosen bank. The analysis further indicated negative and statistically insignificant relationships between CRR, LR and ROA. The study concluded that the rationale for the statistically insignificant relationships observed might not be far from the commercial banks low rate of compliance with monetary policy guidelines.

Olalere and Sobhani (2019) examined Exploring Liquidity Risk and Interest-Rate Risk: Implications for Profitability and Firm Value in Nigerian Banks. The study employs a panel data estimation technique and a sample of 16 banks operating in Nigeria over the period from 2009 to 2017 making up to 144 observations. The findings of the study reveal that liquidity risk (loan to deposit ratio and liquid asset ratio) have a significant negative effect on firm value, the net interest margin and GDP have a negative significant impact on firm value for Nigerian banks. The loan to deposit ratio have a negative significant effect on firm value while the liquid asset ratio have a positive effect on firm value. The net interest margin have a negative significant effect on firm value while the asset interest margin have a positive significant impact on firm value. The GDP and inflation both have a positive significant relationship with firm value. The liquidity risk (loan to deposit ratio and liquid asset ratio) have a significant negative impact on return on equity of Nigerian banks. The GDP growth rate have a positive significant effect on the value of firm. The study suggests that further study can explore a comparative study between Nigeria and financial firms in developed economy.

Jegede (2014) empirically examines the effect of monetary policy on commercial bank lending in Nigeria between 1988 and 2008, using macroeconomic time series variables of exchange rate, interest rate, liquidity ratio, money supply, and commercial bank loan and Advances. Using Vector Error Correction Mechanism of Ordinary Least Square econometric technique as the estimation method. The findings indicate that there exists a long run relationship among the variables in the model. Specifically, the findings revealed that exchange rate and interest significantly influenced commercial banks lending, while liquidity ratio and money supply exert negative effect on commercial banks' loan and advances. The study concluded that monetary policy instruments are not effective to stimulate commercial bank loans and advances in the long-run, while banks' total credit is more responsive to cash reserve ratio. Thus, monetary authority should make efforts to develop indirect monetary instruments and exercise appropriate control over the monetary sector.

Aduralere and Olufemi (2016) examined the impact of the bank reforms on banking sector performance in Nigeria during 1986 - 2013. Econometric model and regression analysis were employed to analyse the data. This study however made use of co-integration, error correction modeling approaches and Pair-wise Granger Causality test to determine the long-run dynamics equilibrium relationship among the variables employed in the study. Empirical investigations showed that the Number of banks (branches) shows a long-run positive relationship with Credit to Private sector(CPS) while other independent variables(Bank Asset(BA),Non-Performing Loan To Total Loans(NPLTTL) and Liquidity Ratio(LR) indicates negative impact on CPS which is attributed to the Apex bank to extend credit to the growth enhancing sector of the economy. However, the findings also showed that as the LR, BA and NPLTTL rises, it further causes decline in the availability of credit to private sector. The econometric results suggested the need for the government and Monetary Authorities to ensure consistency, a more systematic approach to banking operations and

distress resolution which are essential to maintain overall stability in the banking sector such as: capital requirements, improved earnings and assets quality, resolved liquidity problem and Sustained growth and development among others. The study further concluded by recommending appropriate and specific guidelines in addition to those stipulated in the bank reforms relevant sections to develop their own contingency plans and to mitigate those unethical practices within the banking sector.

Bhattarai (2015) examined the determinants of lending rate of Nepalese commercial banks. The analysis of data was based on a sample of 6 commercial banks observed over the period 6 years (2010 to 2015). The models used in the study were: pooled OLS model, fixed effects model and random effects model. The study used 'lending rate' as dependent variable, while the explanatory variables are: operating cost to total assets ratio, deposit interest rate, profitability (ROA) and default risk. The estimated results of these three regression models reveal that operating costs to total assets ratio, profitability (ROA) and default risk have significant positive impact on the commercial bank lending rate. However, deposit rate has negligible impact on lending interest rate. The study concludes that the major determinants of commercial banks' lending rate are: operating costs to total assets ratio, profitability (ROA) and default risk in Nepalese perspectives.

Nwandu (2016) examines the effect of rising interest rates on the performances of the Nigerian manufacturing sector. Data for the study spans thirty five (35) years covering 1981 to 2015. The models were analyzed using the ordinary least squares. Findings from the study shows that rising interest rate in Nigeria has a negative effect on the contribution of the manufacturing sector to GDP as well as on the average capacity utilization of the Nigerian manufacturing sector. This implies that the rising interest rate in Nigeria impedes the activities and the performances of the Nigerian manufacturing sector. Given these findings, the study recommends that aside from trying to manage interest rate for enhanced economic growth, the Nigerian Government should strive to provide infrastructural facilities particularly power and transportation to reduce the high cost of production.

Akomolafe, Danladi, Babalola, and Abah (2015) examined the impact of monetary policy on commercial banks' performance in Nigeria in a micro-panel analysis. Interest rate and money supply were used as proxies for monetary policy, while profit before tax (PBT) was used to represent commercial banks' performance. Pooled regression, Fixed effect regression, and random effect regression were all carried out in the analysis. However, Hausman test revealed that fixed effect regression is the most appropriate. The results show that there is a positive relationship between banks' profits and monetary policies as proxied by money supply and interest rate. The study recommended that interest rate policy should be looked into by the monetary authority in a way that is friendly to loan advancement in the country.

Samuila and Obute (2015) analyzed the effects of mergers and acquisitions on the performance of commercial banks in Nigeria with a particular interest in United Bank for Africa (UBA) Plc. Using the Capital, Asset, Management, Earnings, and Liquidity (CAMEL) criterion, the research made use of secondary data, obtained from the bank's annual reports and statements of accounts. Covering a period of 2000-2010, the work evaluated the performance of the bank before and after mergers and acquisitions, the using pair sample t-test. The results showed that mergers and acquisitions had positive, significant effects on the performance of commercial banks in Nigeria. Based on the findings, the study recommended among others, that the Central Bank of Nigeria (CBN) should set and enforce capital adequacy standards for commercial banks.

Odeke and Odongo (2014) studied Interest Rate Risk Exposure and Financial Performance Of Commercial Banks in Ugnada. The Ugandan banks still faced with challenges of non-performing assets based on in-accurate information on clients, wrong clients and weak controls within the financial system. Consequently, evidence of weak financial performance of many banks was seen in large provisions for bad loans being made, and subsequent write offs of delinquent loans when they went bad, thus affecting bank efficiency. A cross sectional survey and descriptive research design was used, a sample size of 9 commercial banks was analyzed and interpreted using financial ratios of DuPont analysis of commercial banks. Findings show that a combined variation of maturity gaps, basis risk and assets and liabilities margins for all the commercial banks accounted for up to 14.9%

variation in their banks performance. The variation explained 20.19% of the performance of the commercial banks, would predict maturity gaps, basis risk, and assets and liabilities margins. The overall analysis of interest rate risk exposure and bank performance showed generally a positive relationship except basis risk

METHODOLOGY

Research Design

Research design is a kind of blueprint that guides the researcher in his or her investigation and analyses. The research design that will be adopted for this research is the *ex-post facto* research design. The *expost-facto* research design is described as *after-the-fact research* (Onwumere, 2009). This is because the *ex-post facto* research design also called causal comparative research is used when the researcher intends to determine cause-effect relationship between the independent and dependent variables with a view to establishing a causal link between them.

Model Specification

The functional relationship which is a multiple regression is as follows:

TADMB= f (INTRS, INTRD, INTRL)

The Econometrics model is specified as follows:

$TADMB_t = \beta_o + \beta_1 INTRS_t + \beta_2 INTRD_t + \beta 3 INTRLt + \mu$

Where: TADMB = Total assets of Deposit money banks

INTRS = Interest rate on savings

INTRD = Interest rate on Deposit

INTRL = Interest rate on lending

μ = Stochastic error term.

βo = coefficient/Equilibrium point.

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Proxies.

T = time series data

t-1,t-2,t-3,t-4 = Lag values of the variables

The Augmented Dickey Fuller (ADF) Test

Method of Evaluation

The study will make use of regression analysis method. The analytical procedures involved are; first, unit root test will be carried out for each of the variables so as to ascertain the time series properties of the data set and obtain the stationary status. Next, Estimation analysis will be carried out to understand the relationship between the dependent variable and the independent variables, such will help to establish weather a change in the independent variable will help to effect positive change in the dependent variable or not. The t-test and F-test probability ratio will shows the significance of the coefficient of each independent variable and the joint influence. An independent variable (parameter) is said to be statistically significant (or a hypothesis is said to be rejected) at 5% when the probability value is less than 5% (0.05).Granger causality test will be carried out to test statistical hypothesis test for determining whether one time series is useful in forecasting another also at 5% level of significance .

Decision Rule

If the computed P value exceeds the 5% level of significance as the chosen level of significance, we reject the null hypothesis; otherwise, we do not reject it.

RESULT PRESENTATION AND ANALYSIS

Unit Root Test

This section presents and analyses the estimated results based on the model specified in the previous section. In order to conduct a comprehensive dynamic analysis preliminary unit roots tests are performed on the data. The importance of stationarity of time series used in regression borders on the fact that a non-stationary time series is not possible to generalize to other time periods apart from the present. This makes forecasting based on such time series to be of little practical value. Moreover, regression of a non-stationary time series on another non stationary time series may produce spurious result. The Augmented Dickey Fuller (ADF) test is employed in order to analyze unit roots.

Variables	ADF Test Statistics	5% Critical value	Order of integration
TADMB	--3.780154	--3.580623	I(1)
INTRS	-7.891955	-3.580623	I(1)
INTRD	-6.028529	--3.587527	I(1)
INTRL	-7.138499	-3.587527	I(1)

From the preliminary result, the variables (Total assets of Deposit money banks, Interest rate on savings, Interest rate on Deposit and Interest rate on lending) are not stationary at levels form but become stationary at first difference. Hence the data cannot be used in its state without differencing it.

Johansen Cointegration Test

Date: 02/17/20 Time: 22:55				
Sample (adjusted): 1991 2018				
Included observations: 28 after adjustments				
Trend assumption: Linear deterministic trend				
Series: TADMB INTRD INTRS INTRL				
Lags interval (in first differences): 1 to 1				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.684531	56.98637	47.85613	0.0055
At most 1	0.425520	24.68287	29.79707	0.1731
At most 2	0.270799	9.162772	15.49471	0.3506
At most 3	0.011371	0.320213	3.841466	0.5715
Trace test indicates 1 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.684531	32.30349	27.58434	0.0114
At most 1	0.425520	15.52010	21.13162	0.2541
At most 2	0.270799	8.842559	14.26460	0.2995
At most 3	0.011371	0.320213	3.841466	0.5715
Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

From the result above, Trace test indicates 1 cointegrating eqn(s) at the 0.05 level and Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level. According to Johansen Cointegration Test rule, if the result indicate at least one cointegrating equation, therefore there is cointegration, the establishment of cointegration means that there exist long run relationship between the dependent variable and the independent variables.

Estimation Result

- From the estimation result, Interest rate on savings(INTRS) is positively related to Total assets of Deposit money banks(TADMB), therefore a change in Interest rate on savings(INTRS) will lead Total assets of Deposit money banks(TADMB) to increase by 556.142
- Interest rate on Deposit(INTRD) is also positively related to Total assets of Deposit money banks(TADMB), a unit change in Interest rate on Deposit(INTRD) will cause Total assets of Deposit money banks(TADMB) to increase by 434.9899
- Interest rate on lending (INTRL) is negatively related to Total assets of Deposit money banks(TADMB),a percentage change in Interest rate on lending(INTRL) will cause Total assets of Deposit money banks(TADMB) to decrease by 502.3921.
- The Prob(F-statistic) is 0.000006 which is less than 5% , the chosen level of

significance, therefore since f statistic measure the joint statistical significance of the independent variables, we conclude that the independent variables are jointly significant

- The R-squared is 0.694755 which measure the explanatory power of the independent variables on the dependent variable. There for the independent variables explain 69% changes in the dependent variable

Dependent Variable: TADMB				
Method: Least Squares				
Date: 02/17/20 Time: 23:20				
Sample (adjusted): 1990 2018				
Included observations: 29 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11652.79	1401.160	8.316528	0.0000
D(INTRS)	1556.142	958.0225	1.624327	0.1174
D(INTRD)	434.9899	421.4445	1.032141	0.3123
D(INTRL)	-502.3921	376.9355	-1.332833	0.1951
R-squared	0.694755	Mean dependent var		10864.51
Adjusted R-squared	0.643881	S.D. dependent var		12287.57
S.E. of regression	7332.695	Akaike info criterion		20.79366
Sum squared resid	1.29E+09	Schwarz criterion		21.02940
Log likelihood	-296.5081	Hannan-Quinn criter.		20.86749
F-statistic	13.65635	Durbin-Watson stat		0.258821
Prob(F-statistic)	0.000006			

Causality Test

Pairwise Granger Causality Tests			
Date: 02/17/20 Time: 23:47			
Sample: 1989 2018			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
INTRS does not Granger Cause TADMB	28	1.09787	0.3504
TADMB does not Granger Cause INTRS		0.29969	0.7439
INTRD does not Granger Cause TADMB	28	1.98922	0.1597
TADMB does not Granger Cause INTRD		1.23579	0.3092
INTRL does not Granger Cause TADMB	28	0.43067	0.6552
TADMB does not Granger Cause INTRL		0.93010	0.4089

From the Granger causality test above at 5% level of significance, the variables did not show causality relationship

Test of Hypotheses

Hypothesis I

$H_0$1: interest rate deregulation has no positive impact on performance of deposit money banks in Nigeria. From the result of the analysis, it is been established that interest rate deregulation has positive impact on performance of deposit money banks in Nigeria. the null hypothesis is therefore rejected.

Hypothesis II

$H_0$2: There is no causality relationship between interest rate deregulation and performance of deposit money banks in Nigeria. From the Granger causality test, the research did not find a causality relationship, therefore we fail to reject null hypothesis

Findings, Conclusion and Recommendations

Summary of Findings

The work examined the impact of Interest rate deregulation on the performance of deposit

money banks in Nigeria captured with data from 1989-2018.

- The Augmented Dickey-Fuller (ADF) test for stationarity at 5% level of significance shows that the variables (Total assets of Deposit money banks, Interest rate on savings, Interest rate on Deposit and Interest rate on lending) are not stationary at levels form but become stationary at first difference. Hence the data cannot be used in its state without differencing it.
- From the Johansen Cointegration test carried out, Trace test indicates 1 cointegrating eqn(s) at the 0.05 level and Max-eigenvalue test indicates 1 cointegrating eqn (s) at the 0.05 level. According to Johansen Cointegration Test rule, if the result indicate at least one cointegrating equation, therefore there is cointegration, the establishment of cointegration means that there exist long run relationship between the dependent variable and the independent variables.
- Interest rate on savings (INTRS) is positively related to Total assets of Deposit money banks (TADMB), therefore a change in Interest rate on savings (INTRS) will lead Total assets of Deposit money banks (TADMB) to increase by 556.142
- Interest rate on Deposit(INTRD) is also positively related to Total assets of Deposit money banks(TADMB), a unit change in Interest rate on Deposit (INTRD) will cause Total assets of Deposit money banks(TADMB) to increase by 434.9899
- Interest rate on lending (INTRL) is negatively related to Total assets of Deposit money banks (TADMB), a percentage change in Interest rate on lending (INTRL) will cause Total assets of Deposit money banks(TADMB) to decrease by 502.3921.
- The Prob(F-statistic) is 0.000006 which is less than 5% , the chosen level of significance, therefore since f statistic measure the joint statistical significance of the independent variables, we conclude that the independent variables are jointly significant
- The R-squared is 0.694755 which measure the explanatory power of the independent variables on the dependent variable. There for the independent variables explain 69% changes in the dependent variable.

CONCLUSION

This research empirically analyzed the impact of interest rate deregulation policy on the performance of deposit money banks in Nigeria 1989-2018. Interest rate plays a vital role in any economy as the signal that affects the channeling of funds. As a result of this significant role played by deposit money banks, many regulatory and reforms framework have been initiated by developing countries in order to further strengthen their activities so as to be highly competitive in both domestic and foreign. Deregulation has been favored as it leads to more competition and efficiency gains, causing both developed and developing economies to incorporate such policies into their Structural Adjustment Programs(SAP, 1986 for Nigeria) as opposed to its opposite; financial regulation or repression. From the result of the analysis, it was established that interest rate deregulation has positive impact on performance of deposit money banks in Nigeria; therefore the deposit money banks must embrace it. The granger causality test result shows that there is no causality relationship between interest rate deregulation and performance of deposit money banks in Nigeria, therefore interest rate deregulation should not be abolished from the system.

RECOMMENDATIONS

- The Johansen Cointegration test carried out shows that there exist long run relationship between interest rate deregulation and the independent variables. Therefore, the Monetary authority should endovour to establish stability in interest rate regim so that the total assets of deposit money banks will attain continous growth
- The negative relationship between interest rate on lending and banks assets shows that the poor performance of most banks loans are affecting the growth and stability of the Nigerian banking sector, hence a set down rule should be followed by banks from the monetary authority to ensure return on lending
- The none establishment of Causality relationship between bank assest and interest rate, shows that the growth of the Nigerian banking sector is not attiring dependent on loans, hence the banks should

be encourage to increase their interest in the real sector.

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