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Impact of Interest Rate Spread on Savings in Nigeria: An Empirical Investigation

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Abstract

This paper investigated the impact of interest rate spread on savings in Nigeria for the period, 1981-2019. The study argued that interest rate spread is a major determinant of saving behaviour in Nigeria. The study employs the ordinary least square models for the estimates using the multiple regression analysis. The study tested for unit root where savings and interest rate are integrated. The study also used the Johenson co-integration test to confirm the long-run relationship among the variables. The result of the study shows that interest rate spread and exchange rate, inflation, savings, interest, and GDP growth rate are statistically insignificant. The study concluded and recommended that the Central Bank of Nigeria (CBN) should put in place measures to monitor interest rate spread related measures such as; deposit rate, operating efficiency, liquidity risk and gross domestic rate while strengthening collaboration with financial institutions to put appropriate policies and strategies in place to reduce bank lending rate in other to boost financial performance in Nigeria.

Keywords: interest rate, monetary policy, monetary authority, monetary policy rate and savings

Introduction

The interest rates spread has been recognized in literature as a key indicator of the performance of the financial system. It is also generally accepted as a measure of intermediation efficiency both in developed and developing countries (Akinlo & Owoyemi, 2012). A large spread works as a weakness to expansion and development of financial intermediation process. In other words, it indicates the level of inefficiency of the financial system. This is because; possible savers are not encouraged as a result of low return on deposit and thus financing for possible borrowers are limited. According to Kama (2009), the real economy is benefited by financial system that are more efficient by allowing expected returns that are high for savers or lowering lenders costs such that investment rises and the economy grows.

Globally, it is recognized that efficiency in intermediation process establishes a smooth mechanism for the mobilization of funds from the surplus sector and the transfer of these funds to the deficit sector of the economy for investment purposes (Nwachukwu, 2011). This is in line with Kendall (2000), who argued that mobilized resources (i.e., savings) provides developed and developing countries (including Nigeria) with the much needed capital for investment in productive activities which will lead to reduction in external borrowing of government, employment creation and increase the people's standard of living.

In the light of the above explanations, different countries have adopted different interest rate regimes to improve the efficiency of the intermediation process (i.e., minimize the gap between lending and deposit rates). In Nigeria for example, various regimes such as control deregulation, regulation and complete deregulation have been experimented at different periods, since the introduction of the Structural Adjustment Programme (SAP) in 1986. Prior to the deregulation of interest rates completion in Nigeria, the financial sector worked under the regulations of finance and rate of interest were said to be blocked. The resulting low interest (deposit) rates during this regime discouraged mobilization of savings and through financial system; the directing of savings was mobilized. As a result, the Nigerian government took steps to loosen interest rates (i.e., lending and deposit rates) as part of the reform of the entire financial system (CBN, 2007). The deregulation of the rate of interest was as a result of the financial sector reforms, which took effect from August 1987 (Ikhinde, Obute & Adyorough, 2012). The interest rate regime was liberalized by the Central Bank of Nigeria (CBN) and employed the policy of fixing only its minimum rediscount rate to indicate the anticipated direction of interest rate. The policy was improved in 1989 when the CBN issued further directives on the required spreads between deposit and lending rates. During this period, the deposit rate was 18.2% and the lending rate was 25%. In 1991, the government prescribed a maximum margin between each bank's average cost of funds and its maximum lending rates. Later, the maximum lending rate and the deposit rate of 14% and 20% and a respectively was prescribed by the CBN.A fractional of the deregulation was, however, restored in 1992 when financial institutions were required to only maintain a specified spread between their average cost of fund and maximum lending rate.

The key macroeconomic variables that determine aggregate output such as savings and investment and total consumption seems to be an output determining variable that has attracted a lot of attentions and studies (Ezeji & Ajudua, 2015). This is so because about two-thirds of aggregate expenditure was account for as consumption expenditure in virtually all economies (Branson, 1989). Thus, the level of consumption per individual is seen as a central measure of an economy's productive success. According to Mudit and Shamika (2009), one of the most relevant issues that is related to inter-temporal substitution is whether bringing down interest rate paid on deposits will encourage consumers to increase consumption. This therefore suggests that the higher the spread, the higher will be the consumption expenditure. Therefore, a comprehensive study of its determinants such as the savings rate could help an economy achieve stability, increase in aggregate income and high level of employment of factors of production. (Ezeji & Ajudua, 2015).

Thus, from the rate of interest regime that is unstable in Nigeria, the interest rate keeps changing and such frequent changes could affect savings, investment and private consumption expenditures, which in sequence could impact on the general economy of the country despite the huge financial sector reform programmes. This raises the attention on the impact of interest rate spread on savings in Nigeria. It is against this perspective that this study is germane.

Financial instability in developing country like Nigeria, has been associated with serious issues in the financial sector. These issues have been relatively large in terms of weak public confidence in financial markets and inefficient financial intermediation, posing great threat to savings and investment (Kama, 2009). Instability of financial system could be damaging to the economy, through a wide gap in interest rate.



Furthermore, there are various developmental finance schemes that have been introduced by CBN to specifically address problems of high rate of lending and access to credit in Nigeria. These measures include: Agricultural Credit Guarantee Scheme Fund (ACGS) in 1978, Interest rate drawback programme in 2002, the Commercial Agricultural Credit Scheme (CACS), Small and Medium enterprises Equity Investment Scheme (SMEIS) in 2001, and Microfinance policy in 2004.

In 2010, the Central Bank, injected N500 billion into the economy as a special intervention fund under a quantitative easing program to ensure the flow of liquidity to the real economy at reasonable interest rates. These measures were complemented by interventions to manage inter-bank liquidity and the use of treasury securities (Tule et al, 2015)

Studies such as Newman (2012); Umejiaku (2011); Tule et al (2015) and Jibrina, Iyaji and Ejura (2014) have argued that despite the policy measures put in place, the phenomenon of high lending rates still persists as reflected in the complaints of manufacturers, industrialists, and Small and Medium-sized Enterprises (SME) operators who consistently identify high lending rates as a key contributor to the unfavourable business and investment climate in Nigeria. A strong financial system with less spread in interest rate is still not in place, as most people still do not have access to commercial bank credits. From the point of view of those who seem to fully use the services of the financial sector are not finding it so easy. The result of incompetence in the system of banking together with continued limitation of success that may have been recorded caused by corruption. According to Kama (2009), the banking system still leaves out certain people who should have been benefiting from the interaction created by the bridging of financial gap between lenders and borrowers of credit in the economy. This is indicative of inefficiency and poor performance of the financial system.

Financial sector intermediation inefficiency which could result from banking crisis, not only pose a barrier to savings and investment but also to consumption expenditure. This is because, it limits the amount of credit that goes to households for the purchase of durable goods (Damar, Gropp & Mordel, 2014). For instance, the global financial crisis of 2007 and 2008 which spread towards developing countries and more particularly in Nigeria, negatively affected household consumption expenditures. This is reflected in available statistics from CBN (2010) which shows a sharp downward trend in private consumption spending. For instance, there was a drastic fall in private consumption expenditure as a percentage of total expenditure from 102.8% in 2003 to 58.5% in 2006. This continuously fell to 38.3% and 31.7% in the year 2008 and 2010 respectively.

The Central Bank of Nigeria has also adopted various measures aimed at solving the problems of bank inefficiency, financial sector crisis and to boost the performance of the banking system in terms of increase in savings mobilization. Some of these measures are issuance of prudential guidelines for proper coordination of banks, regular assessment of the banks' books and supervision of other banking operations (CBN, 2009).

Studies of various kind have been done on the effects of interest rate on definite areas. These studies among others include; Udonsah (2012), Ekwem (2012), Udeh and Nwachuku (2016) and Acha (2011), who studied the effect of interest rates on investment and economic growth. Studies like, Sayinbola, Sobande, and Adedeji (2012), Sakaria and Nyambe (2015), and

Adeyemi and Alege (2013) have exploited interest rate relationship with savings, interest rate and consumption expenditure both in Nigeria and outside Nigeria. However, no existing study to the best of our knowledge has dealt with the effect of interest rate spread on savings, investment and private or household consumption. From the above studies, this study thus, pursues to fill this knowledge gap that currently exists and discover how interest rate spread affects savings, investment and private consumption in Nigeria.

Empirical Literature Review

The empirical literature on the relationship between interest rate and savings is vast within this plethora of literature, a number of studies has found positive relationship between interest rate and savings in Nigeria; these studies include, Udude (2015), Ojeaga and Odejimi (2014), Sayinbola, Sobande, and Adedeji (2012), Okere and Ndugbu (2015), and Davis (2013) these studies employed time series data in the analysis of the relationship between interest rate and savings. The studies differ in methods of analysis. For instance, Udede (2015) used the VAR model in his study and found it useful and significant. Ojeaga (2014) employed the quantile regression method in his analysis and he discovered an insignificant result; while Okere and Ndugbu (2015) employed the error correction model in their analysis and their results were significant. The conclusion is that the above mentioned studies used time series data in their analyses, they employed different methods and found out different results in their analysis of the relationship between interest rate and savings in Nigeria.

Some other studies discovered negative relationship between interest rate and savings. These studies include; Olayemi (2013), Onwumere, Okere and Ibe (2012), Edwin (2014), Olayami and Jolaosho (2013), and Ogwumike and Ofoegbu (2012). These studies employed time series data in the analyses of savings and interest rate relationship, but the studies differ in terms of methodology, For instance Olayemi (2013) employed the VAR model in his analysis and found a significant relationship between interest rate and savings in Nigeria. He also discovered that the sign of the coefficient of interest rate was negative which implies that there exists a negative relationship between interest rate and savings in Nigeria.

On the other hand, Onwumere, Okere and Ibe (2012); Wafure (2012) used the ordinary least square regression model in their analyses and found an insignificant and negative result. Edwin (2014) employed the two stage least square technique and discovered that there is a significant negative relationship between interest rate and savings in Nigeria. Olayami and Jolaosho (2013) employed the vector Auto regressive model in their analysis and discovered a significant negative result. Wafure (2012) employed the error correction model approach in his analysis and also found a significant negative result. Ogwumike and Ofoegbu (2012) used Autoregressive Distributed lagged regression technique but their own result was insignificant.

One of the most absorbing thing about this studies is that the above mentioned studies used the same type of data which is time series data; they employed different techniques in their analyses of the relationship between interest rate and savings in Nigeria, and they made similar findings in terms of the sign of the coefficient of interest; but they discovered varying results in terms of significance.



On the other hand, the relationship between interest rate, savings and economic growth have been carried out empirically. Some studies have found a positive relationship between interest rate and savings. These studies include Irfan et, al. (2014), Douglas, and Ayalew (2013). These studies used different type of data and different approaches, but found similar result. Irfan et al (2014), used descriptive statistics and error correction model in their analyses, they also discovered a positive and significant relationship between interest rate and savings in Pakistan. Ayalew (2013), used Autoregressive distributed lag model (ADRL), he also discovered a significant positive relationship between interest rate and savings in Ethiopia.

Previous empirical attempts are not without some limitations. From the empirical findings, most researchers found that there is a negative relationship between interest rate and investment in Nigeria while some others found out that there is a negative relationship between interest rate and economic growth.

From the above review, none of the researchers both in Nigeria and outside Nigeria has looked at interest rate spread on savings. It is against this backdrop that this study intends to fill the gap created by investigating the impact of interest rate spread on savings in Nigeria.

Theoretical Framework, Model Specification and Data Sources

The paper was anchored on Irving Fisher's theory of the rate of interest. From Fishers point of view, to save or consume is a decision an individual has to make. When individual sees that the future is best, they will prefer to save than current consumption, they will prefer to consume small today and save more for future consumption. According to the theory of interest rate developed by Fisher, the interaction of demand and supply for savings is the determinant of the interest rate in the long-run, and also depend on productivity of capital marginally and MPS, respectively. From the expression of Fishers law, the relationship between nominal and real interests is as follows:

$$(1 + \dot{t}_t) = (1 + r_t) * (1 + \pi_t^{\theta})$$
(1)

The ex-post facto research was also adopted to enable the researchers make use of secondary data to determine the cause-effect relationship of the interest rate spread on savings, in Nigeria, and to determine the relationship between the independent and dependent variables with a view to establishing a causal link between them.

Model Specification

The empirical methodology for this study is co-integration and error correction model. The data for the study were sourced from the Central Bank of Nigeria (CBN) Statistical bulletin. Following and modifying the specification of Udude (2015) with the multiple regressions in mind, this study adopts savings as a function of the specified explanatory variables. The model is specified thus:

$$SAV = \beta_1 + \beta_2 INRS + \beta_3 INF + \beta_4 GDP grwt + \beta_5 SAV_INT + \beta_6 EXR + \mu$$
(2)

Where SAV = Savings; INRS = Interest rate spread; INF=Inflation; GDPgrwt = Gross Domestic Product Growth Rate, SAV_INT =Savings_Interest rate and EXR = Exchange Rate

Where the $\beta_1 \beta_2 \beta_3 \beta_4 \beta_5 \beta_6$ are parameters for estimate and μ is the stochastic error term.

Empirical Results, Analysis and Discussion of Findings

The methodology for the empirical analysis is in different stages. First, the annual time series data of all the variables in the model are tested for stationarity. Secondly, the variables are tested for co-integration, to ascertain their convergence status. The Error correction methodology (ECM) was employed. ECM is a means of reconciling the short-run behaviour of an economic variable with its long-run behaviour.

To put the time series data to be used for this analysis in good structure, the estimation will begin with the descriptive analysis, unit root or stationarity test and the co-integration analyses of the time series data. These processes enable the researcher to carry out some predetermined operations, so as to minimize estimation errors and achieve the unbiased estimator of the models analyses. Table 4.1 presents the descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Gdp	35	17827.15	28092.36	94.32502	94144.96
Saving	35	2072.17	3457.95	6.56	12008.21
Saveratio	35	8.82	3.83	3.34	23.25
investment	35	2207041.00	4156779.00	8799.48	14100000.00
Pce	35	11800000.00	19800000.00	28574.86	73800000.00
Inf	35	19.72	17.94	5.38	72.84
sav_int	35	7.64	5.16	1.41	18.80
spread	35	13.57	7.29	2.25	26.04
lnGDP	35	8.06	2.29	4.546746	11.45
InSaving	35	5.55	2.44	1.880991	9.39
lninvestment	35	12.50	2.36	9.082448	16.46
Lncons	35	7.36	2.55	3.352527	11.21
Gpdgrwt	34	0.20	0.19	-0.0488682	0.79
Exr	35	71.14	65.89	0.61	194.00

Table 1: Descriptive Statistics of the Variables

Source: Author's Computation from Eviews 11.0

From the results above, the mean value of each variable represents its average, the maximum and minimum value shows the highest and the lowest figures of each variable respectively. The results of the descriptive statistics show that all the variables are normally distributed, having



large values of standard deviation. The mean of the average gross domestic product (GDP) is 17827.15, while the minimum is 94.32502 and the maximum 94144.96 and standard deviation is 28092.36. The mean value of Savings (SAV) is 2072.17, the minimum is 6.56 and maximum of 12008.21, with a standard deviation of 3457.95. The mean value of Investment (INV) is 2207041.00, the minimum is 8799.48 and maximum of 14100000.00, with a standard deviation of 4156779.00. The mean value of private consumption expenditure (PCE) is 11800000.00, the minimum 28574.86 and maximum of 73850.00, with a standard deviation of 1980000.00. The mean value of Inflation (INF) is 19.72, the minimum is 5.38 and maximum of 72.84, with a standard deviation of 17.94. The mean value of Real Exchange rate (REXR) is 71.14, the minimum is 0.61 and maximum of 194.00, with a standard deviation 65.89. The mean value of Savings_Interest (SAV_INT) is 7.64, the minimum is 1.41 and maximum of 18.80, with a standard deviation 5.16. The mean value of Spread is 13.57, the minimum is 2.25 and maximum of 26.04, with a standard deviation 7.29. The mean value of Saver ratio is 8.82, the minimum is 3.34 and maximum of 23.25, with a standard deviation 3.83. The mean value of GDP growth rate is 0.20, the minimum is -0.0488682 and maximum of 0.79, with a standard deviation 0.19.

Unit Root Test:

This test is designed to examine the stationarity state of the variables. Most time series variables are non-stationary at levels, hence their usage in econometric models produce spurious outcome. In this study, we utilize the Augmented Dicky Fuller Approach in testing for unit root.

VARIABLES	Augmented Dickey-Fuller Test						
	Test	Test Critical	Test Critical	Test	Diff	Order of	
	Critical	Value @	Value @	Statistic	Prob	Diff	
	Value @	5%	1%				
	10%						
INRS	-2.622	-2.980	3.702	-6.050*	0.0000	I(1)	
INF	-2.622	-2.980	-3.702	-5.957*	0.0000	I(1)	
SAV_INT	-2.622	-2.980	-3.702	-3.637*	0.0051	I(1)	
InGDP	-2.622	-2.980	-3.702	-4.143*	0.0008	I(1)	
InSAV	-2.622	-2.980	-3.702	-3.436*	0.0098	I(1)	
InINV	-2.622	-2.980	-3.702	-4.067*	0.0011	I(1)	
InPCE	-2.622	-2.980	-3.702	-3.931	0.0018	I(1)	
GDPgrwt	-2.623	-2.983	-3.709	-6.528*	0.0000	I(1)	
EXR	-2.622	-2.980	-3.702	-3.519	0.0075	I(1)	

TABLE 2: Unit Root Analysis

Source: Author's computation with the use Stata 13 (2021)

The results of the Augmented Dickey-Fuller test are reported in Table 2, the lag truncations for the Bartlett kernel were chosen according to the Newey and West, 1987, suggestions. Analytically the results from the unit root tests in the levels of INRS, INF, SAV_INT, InGDP,

InSAV, InINV, InPCE, GDPgrwt and EXR clearly point to the presence of a unit root in all cases in level form. The results after first differencing INRS, INF, SAV_INT, InGDP, InSAV, InINV, InPCE, GDPgrwt and EXR series robustly reject the null hypothesis of the presence of a unit root, suggesting therefore that the other series are integrated of order one I (1).

Table 3: Short Run ECM Model (Shows no Cointegration)							
	ECMcon	ECMcon	ECMsavin	ECMsaving	ECMinves	ECMinvest	
	1	2	g	1	t	1	
D.INF	0.00226	0.00301	0.00110	0.00129	-0.00142	-0.00141	
	(0.363)	(0.246)	(0.493)	(0.451)	(0.626)	(0.641)	
D.spread	0.0111	0.0140	0.00522	0.00528	0.0145	0.0151	
	(0.304)	(0.175)	(0.429)	(0.420)	(0.230)	(0.200)	
D.EXR	-0.00230	-0.00167	-0.000229	-0.000149	-0.00118	-0.00104	
	(0.437)	(0.562)	(0.905)	(0.939)	(0.731)	(0.757)	
D.SAV_IN	0.0118		-0.00595		-0.00859		
Т							
	(0.597)		(0.661)		(0.728)		
L.Residuals	-0.0262						
	(0.684)						
D.gpdgrwt		-0.219		-0.0831		-0.145	
		(0.173)		(0.433)		(0.443)	
L.Residuals		-0.0641					
		(0.283)					
L.Residuals			-0.0200				
			(0.639)				
L.Residuals				-0.0239			
				(0.576)			
L.Residuals					-0.0887		
					(0.229)		
L.Residuals					~ /	-0.101	
						(0.151)	
Constant	0.240^{***}	0.238***	0.218^{***}	0.220^{***}	0.193***	0.201***	
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
Observation	34	33	34	33	34	33	
S							
R^2	0.100	0.165	0.039	0.058	0.088	0.131	
Adjusted R^2	-0.061	0.010	-0.133	-0.117	-0.075	-0.030	
F	0.621	1.067	0.225	0.331	0.542	0.815	

Table 3: Short	Run	ECM	Model	(Shows no	Cointegr	nite

Short Run Error Correction Model

p-values in parentheses

*p<0.05, **p<0.01, ***p<0.001



VARIABLES	COEFFICIENT	STD ERROR	T-STAT	PROB
UHAT SAV (-1)	-0.0200483	0.0422291	-0.47	0.639
UHAT SAV1 (-1)	-0.238735	0.021321	-0.57	0.576
UHAT INV (-1)	-0.0886966	0.721278	-1.23	0.229
UHAT INV1 (-1)	-0.1010186	0.0682732	-1.48	0.151
UHAT CON (-1)	-0.0262386	0.636962	-0.41	0.684
UHAT CON1 (-1)	-0.064082	0.058454	-1.10	0.283

Table 4. Error Correction Model (ECM)

Since the test statistics of the residuals (UHAT) are -0.47, -0.57, -1.23, -1.48, -0.41 and -1.10 and the probabilities value 0.639, 0.576, 0.229, 0.151,0.684 and 0.283which are not less than 5%, it shows that the residuals are not statistically significant and shows no co-integration.

SHORT RUN DIFFERENCE MODEL OF EFFECT OF INTEREST SPREAD ON SAVINGS S

	SRcon1	SRcon2	SRsaving	SRsaving1	SRinvest	SRinvest1
D.INF	0.00228	0.00228	0.00104	0.00130	-0.00154	-0.00141
	(0.351)	(0.351)	(0.509)	(0.441)	(0.598)	(0.646)
D.spread	0.00901	0.00901	0.00406	0.00401	0.00901	0.00898
	(0.334)	(0.334)	(0.500)	(0.507)	(0.421)	(0.419)
D.EXR	-0.00260	-0.00260	-0.000473	-0.000451	-0.00195	-0.00206
	(0.358)	(0.358)	(0.795)	(0.806)	(0.565)	(0.541)
D.SAV_INT	0.0156	0.0156	-0.00430		-0.000422	
	(0.435)	(0.435)	(0.739)		(0.986)	
D.gpdgrwt				-0.0827		-0.112
				(0.429)		(0.558)
Constant	0.243***	0.243^{***}	0.220^{***}	0.222^{***}	0.201^{***}	0.210^{***}
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Observations	34	34	34	33	34	33
R^2	0.094	0.094	0.031	0.047	0.039	0.061
Adjusted R^2	-0.031	-0.031	-0.103	-0.090	-0.094	-0.073
F	0.756	0.756	0.231	0.342	0.294	0.452

Table 5: Short Run Difference Model of Effect of Interest Spread on Consumption Saving and Investment

p < 0.05, p < 0.01, p < 0.001

From the above result of Table 5, in the estimation of short run difference of interest rate spread on SR savings and SRsavings1, Interest rate spread and exchange rate, inflation, savings interest and GDP growth rate are statistically insignificant. The R² is about 9% goodness of fit and F-statistics is 0.756 and 0.756 In the estimation of short run difference interest rate on SR investment and SRinvestment1, Interest rate spread and exchange rate, inflation, GDP growth rate and saving interest are statistically insignificant. The R² is about 3% and 4% goodness of fit and F-statistics is 0.231 and 0.342 In the estimation of interest rate spread SR consumption and SRconsuption1, Interest rate spread and exchange rate, inflation, savings interest and GDP growth rate are statistically insignificant. The R² is about 3% and 4% goodness of fit and F-statistics is 0.231 and 0.342 In the estimation of interest rate spread SR consumption and SRconsuption1, Interest rate spread and exchange rate, inflation, savings interest and GDP growth rate are statistically insignificant. The R² is about 3% and6% goodness of fit and Fstatistics is 0.294 and 0.425.

Conclusion and Policy Recommendations

Conclusion

The paper empirically examined the impact of interest rate spread on economic growth in Nigeria from 1980-2019. The paper is anchored on Fishers theory which explain that when individual sees that the future is best, they will prefer to save than current consumption; they will prefer to consume small today and save more for future consumption. According to him, two factors influence different individual to save, invest and consume; one is the income, when there is high income individual may save more and the other is compensation individual obtained for lending his savings to another individual, who needs extra funds and ready to pay for their use. The rate of interest is the reward or use of funds payment.

For effective estimation, the paper use short run ECM to investigate the impact of interest rate spread on savings. The short run difference model was also used to find the effect of interest spread on savings. To actualize all these estimations, all the structural tests on the data were carried out in order to achieve an unbiased estimation of the models. Starting from the descriptive test analysis, Augmented- Dickey Fuller Unit root test, co-integration test, Ordinary least square estimation and Error Correction Model (ECM), the ECM test was carried out to know whether there is an error in OLS model or not.

Policy Recommendations

Based on the findings, the study recommends that the central bank should continue to put in place stronger measures to monitor interest rate spread related measures such as deposit rate, lending rate, operating efficiency, liquidity risk, provision and Gross domestic rate in other to boost financial performance in Nigeria. The study also recommends that government should strengthen collaboration with financial institutions to put appropriate policies and strategies in place to reduce banks' lending rate



References

- Acha, I. A. (2011). Interest Rates in Nigeria: An Analytical Perspective Research Journal of Finance and Accounting. 2 (3)
- Adeyemi, A. O. & Alege P. O. (2013). Interest Rate Pass-Through to Macroeconomic Variables: The Nigerian Experience; *International Journal of Economics and Finance;* 5(10)
- Akinlo, A. E, Owoyemi, B. O. (2012). The Determinants of Interest Rate Spreads in Nigeria: An Empirical Investigation. *Journal of scientific research*, *Modern Economy*, (3), 837-848.
- Damar, E. H., Gropp, R., & Mordel, A. (2014). Banks' financial distress, lending supply and consumption expenditure. European Central Bank, Working paper series. No 1687

Edwim, M. E. (2014). On Interest Elasticity of Commercial Bank Deposit in Nigeria Case study (Union Bank). *JORIND 12(1) 95-113*

- Ekwem, J.A. (2012). *Determinants of Interest rate spread in Nigeria*: An Empirical Investigation. Quarterly journal of economics.
- Ezeji, C. E & Ajudua, E.I. (2015). *Determinants of aggregate consumption expenditure*. ISSN 222-1700 (PAPER).6 (5).
- Jibrina, M. S., Iyaji, D. & Ejura, B. S. (2014). Private Domestic Savings Mobilization by Commercial Banks and Economic Growth in Nigeria. *Beykent University Journal of Social Sciences*.7(1):1307-5063
- Jolaosho, O. M., & Olayemi, S. O. (2013). Real Interest Rate and Savings Mobilization in Nigeria. *International Journal of Development and Economic Sustainability*. 1(2): 28-40
- Kama, U. (2009). Banking sector crisis and resolution options in Nigeria. Bullion *publication* of the central bank of Nigeria. 33, (4)
- Kendall, P. (2000). Interest rates, savings and growth in Guyana. Carribbean Development
- Mudit, K. & Shamika (2009). The effect of interest rate on household consumption; evidence from a natural experiment in India; *Social Science Research Journal, brookings institution; Indian School of Business (ISB).*
- Obute, C., Adyorough, A., & Ikhinde, A.I. (2012). An assessment of the impact of interest rates deregulation on economic growth in Nigeria. *Journal of Management and Entrepreneurial Development, Volume 2, Number 2, 2012*
- Ogumike, F.O. & Ofoegbu, D.I. (2012). On Financial Liberation and Domestic Saving in Nigeria .*Journal of Social Science* 7(9): 635-646

- Ojeaga, P. & Odejimi, O. (2014). The Impact of Interest Rate on Bank Deposit: Evidence from the Nigerian Banking Sector. *Journal of Social Sciences MCSER Publishing*, 5(6)
- Okere, P. A. & Ndugbu, M. (2015). Macroeconomic Variables and Savings Mobilization in Nigeria. *International Journal for Innovation Education and Research.3(1)*
- Onwumere, J.U.J., Okore, O.A. & Imo, I.G. (2012), "The Impact of Interest Rate Liberalization on Savings and Investment: Evidence from Nigeria". Research Journal of Finance and Accounting, 3(10): 130-136..
- Tule, M. K., Audu, I., Oji, K. O., Oboh, V. U., Iman, S. Z. & Ajayi, K. J. (2015). *Determination* of the Floor and Optimal Threshold of Lending Rates in Nigeria. CBN working paper series
- Udonsah, I. (2012). *The impact of interest rate on investment decision in Nigeria*. An econometric analysis (1981-2010); Caritas University.
- Udude, C. C. (2015). Impact of interest rate on savings on the Nigeria's economy. Journal of Policy and Development Studies. 9(3): 157-9385
- Umejiaku, R. I. (2011). Financial Reform and Financial Development in Nigeria: A Graphical Analysis. African research review, *An International Multi-Disciplinary Journal, Ethiopia* 5(3):20
- Wafure, O.G. (2012). Financial Sector Reforms and Private Savings: Evidence from Nigeria. WEEJS International Journal of Arts and Combine Sciences, 3(1): 1-12