

INFLATION AND DEPOSIT MOBILIZATION IN DEPOSIT MONEY BANKS- THE NIGERIAN PERSPECTIVE

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Abstract

The broad objective of this study is to critically examine inflation rate in Nigeria with the view of ascertaining its effect on the deposit mobilization in Banks. The study which is ex-post facto, relied mostly on secondary data which were collected through the Central Bank of Nigeria (CBN) statistical bulletin, Nigeria interest research library research, textbooks, journal and report from 1994-2014. The population for this study included selected numbers of banks i.e. deposit money bank in Nigeria from 1994 – 2014. Multiple regression Ordinary Least Square (OLS) statistical tool was applied to establish the like fit to the observed data and the degree of relationship that exist between variables. Findings reveals among others that there exist a significant and negative relationship amongst demand, savings and time deposit with inflation in Nigeria, and that interest rate impacted significantly and positively on saving and time deposit .It is recommended among others evaluation of the marginal increment of deposit interest rate for savings and time Deposit through Central Bank of Nigeria Monetary Policy Committee (MPC) at higher rate than inflation as an incentive to attract high deposit mobilization, and encouragement of increased trade activities geared towards increased money supply in the economy.

Keywords: Inflation, Deposit Mobilization, Nigerian Banking Industry.

1.0 Introduction

One of the major macroeconomics problems is inflation. Inflation is a situation where the general price level witness incessant rise but for express monitoring of the price especially over a long period in an economy (Lipsey & Chystal, 1995). Umaru & Lubairu (2012), explained the concept of inflation an increase in price level of widespread or on a large scale of goods and services in a country consistently over time. In other words, “too much money chasing fewer goods”. Inflation reflexes the reduction in the purchasing power per unit of money. Although several people, consumers, professional, and trade unions have discussed the subject of inflation as monstrous to economy, frequently, only selected few investigates inflation and its impact.

Oyakolomen and Rekwot (2014) traced the history of inflation in Nigerian to 1960s when “Cheap money policy” was adopted by the government to stimulate development after independence. The military government introduced inflation induces policies that sought to put funds in the pocket of individuals following the oil boom of early 1970s. The inflationary pressure was further increased by high demand for imported consumer goods and services since the value of naira made such imported goods rather cheaper than local products. The government of Buhari in 1984 introduced economic polices targeted at reducing the inflation exerted by Shagari administration. In the second half of 1999 fiscal discipline was restored in the country which moderated the domestic prices in Nigeria and the official exchange rate.

Mallik and Chowdhury (2001), stressed that the relationship between economic development and inflation has remained controversial in literature and theories. The argument of the monetarist is against inflation viewing it as detrimental to economic growth while structuralist believes that inflation is indispensable in terms of economic growth. Banks and other financial institutions play a major role in the capital formation through intermediation process where deposits are generated from surplus units and redistributed as loanable funds to the deficit sectors.

According to Choi, Smith and Boyd (1996), higher inflation can be linked to decrease in earnings that accrue to savers and investors in financial markets. This is said traceable to two rationale: First, to demonstrate the variability, the savings function would have to shift behind. This first rationale has virtually few or no observed documentation to support the validity scientifically. Secondly, almost all scientific documentation is of the proposition that savings is not adequately responsive to rates of earnings to justify large inflationary effect. Bruno and Easterly (1995) supports this assertion when they demonstrated that a many economies have suffered prolonged inflations of between 20 and 30 percent without severe negative results. Nonetheless, assuming the level of inflation goes beyond biting point which they estimated estimate to be about 40 percent, there is bound to be compelling and serious reduction in the general level of real activity. This agrees with the conclusion of Bullard and Keating(1995).

There is also evidence suggesting that inflation negatively influences the distributive activities of capital markets, dampening the level of trading and transactions in those markets as well as reduction in the earnings of investors. Boyd, Levine, and Smith (1995) demonstrated this with a cross sectional analysis that divided economies in terms of their mean rates of inflation. The result showed that countries with lowest inflation quartile witnessed highest level of transactions in the financial market and vice-versa. The consideration of deposit mobilization by banks as a function of low inflation is almost a global consensus, especially as it relates to macroeconomic stability. In general, problems associated with inflation includes but not limited to the following:

The increased volume of money in circulation during high inflation results in every persons in the economy having money but very little goods to buy. This is because the inputs of production acquired with huge cash is small, hence the output that is not sufficient for consumers. Again Low Capital Formation is experience during inflation. Capital formation which is the production of building, machinery tools and equipment that will help producers in producing more is bound to decrease as a result of low savings.

Inflation also favor’s the borrower and harms lender. i.e since inflation leads to the fall in the value of money, a borrower at the time of payment of his debt will be paying back an amount whose value has fallen. Inflation may also retard the economic growth because of the redistribution effect, discourages domestic savings and contribute to capital flight from foreign investors.

It is on the basis of the above problems that this research is undertaken to examine the impact of inflation on the deposit mobilization of the deposit money banks in Nigeria.

1.2 Objectives of the study

The objective of this study is to broadly examine inflation rate in Nigeria with the view of ascertaining the effect of inflation on deposit mobilization in Banks. The specific objectives of this study are:

- a. Access the impact of inflation on saving deposit mobilization by the Nigerian Banks.
- b. Identify the relationship between inflation and time deposit mobilization function of banks in Nigeria.
- c. Examine the impact of inflation has on mobilization in the Nigerian banking industry.
- d. Investigate the effect of inflation on foreign deposit in the Nigerian banking industry.

1.3 Research questions

This study is guided with the following research questions;

- a. How has inflation affected the level of savings mobilized by banks?
- b. What impact does inflation on time deposit mobilization?
- c. The impact of inflation on Demand deposit volume realized?
- d. What is the impact of inflation on foreign deposit inflows into the Nigerian banks?

1.4 Research Hypothesis

To effectively carry out this study in the Nigerian perspective, the following hypotheses have been formulated as a guide:

- Ho1: Inflation does not influence on saving deposit mobilized by DMBs
Ho2: Inflation exerts no impact on volume of time deposit mobilized by DMBs
Ho3: Inflation does not impact on Demand deposit mobilized by DMBs

2.0 Theoretical Review

Two theories have attempted to explain inflationary impact on economies, the monetary theory and Keynesian theory of inflation. Monetarism who are those lending support to M. Friedman (1912-2006) proposed that “only money matters”, hence monetary policy is useful as instrument in economic stability than the fiscal policy. They are of the view that money supply is the “controlling factor, though not exclusive” in determining the level of short-run production and prices as well as the level of prices of goods and services at long run. However, the long-run production output is not affected by the volume of money (Friedman and Schwartz, 1963). But generally, the monetarists stresses the role of money in the economic activities. The Milton Friedman led School-of-Thought (modern theorists) opines that “inflation remains and has always been a monetary process that results from expansion of volume of money as opposed to total level of production output. Its earliest review was to be found in the simple quantity theory of money.

According to the Keynesian theory of inflation, John Maynard Keynes (1883-1946) and his supporters stressed emphasized that the demand-pull inflation is as a result of the rise in aggregate demand. In Keynesian model, the aggregate demand comprises consumption, investment and government expenditure. Keynes believes that inflation originates from expansory forces, rise in input prices (Cost Push Inflation) and concentrated industries (Profit inflation).

2.1 Conceptual Review

Inflation is explained as continuous rise over time in the prevailing price level of goods and services in an economy. This rise in prevailing prices of goods and services translates to the monetary unit purchasing less goods and services. Hence it can be concluded that inflation mirrors decreasing purchasing power per unit of the country's currency, reduced value of goods and services in the medium of exchange and unit of account within the economy (Fischer, 1993). Fisher further mentioned that a key evaluation of price inflation is the inflation rate, which is measured by the percentage increase or decrease in a general price index annually (proxied by the consumer price index) over time.

(Keynes 1919) said "Inflation results in capricious and total arbitrary rearrangement of riches and violates the principles of distribute justice and also renders business undertaking riskier and thereby turn the process of wealth getting into a gamble and a lottery". Inflation strike not only at security but at confidence in the equity of the redistribution of wealth in Nigeria (). Inflation has continued to assume an ugly dimension showing a persistent geometric growth rate.

(Nnanna, Englama and Odoko, 2004) were of the opinion that in Nigeria, the low level of funds mobilized by deposit money banks can be explained reasons ranging from low saving interest rate to the poor banking habits or culture of the people. According to him customer do not find it interesting in saving for the future and due to the way of life of some persons and mobilization is limited (that is culture). Conceptually, saving is the part of income which is not applied on current consumption. It can be looked upon as reduction in cost or expenditure. When (Olusoji, 2003) applied to capital mobilization, saving increase production output. Hence, to effectively mobilize saving in an economy, the deposit rate must be relatively high and inflation are stabilized to ensure a high interest rate on saving (Simon – Oke, and Jolashola, 2013) so interest earn on saving must be higher to motivate investors to save and also after tax the rate of interest earn on your saving must be greater than the rate of inflation, in order for your money to actually be growing.

The effect of inflation is not disturbed evenly in the economy, and as a consequence there are hidden cost to some and benefit to other from this decrease in the purchasing power of money. Inflation can have negative or positive effect (Orjako, 1999). Higher inflation and interest rates may depress the demand for bank deposits, causing banks to restrict the supply of credit and thereby inducing declines in spending (Kamin and Roger, 2000: 92). High inflation has adverse effects on economic performance either by creating distortions, encouraging rent seeking activity, or by raising risk premia, one would expect central bank independence to improve economic performance (Alesina and Summers, 1993: 152). Higher inflation implies less long-run financial activity. In economies with high inflation, intermediaries will earn less and allocate capital less effectively, and equity markets will be smaller and less liquid (Boyd et al., 2001: 223).

2.2 Literature Review

Bamanyisa (1986) conducted a research on savings mobilization by financial superstructure and found out that the growth of financial savings in Tanzania is adversely affected by un-conducive financial regulation, structure of rate of interest payable on savings deposits, forgeries, inefficiency, financial development policies and inflation. And among other variables, interest rate payable on savings deposits was found to be one of the factors that affect the level of savings in Tanzania.

Telatela (2013) examined factors influencing deposits mobilization in financial institutions in Tanzania, employed a quota sampling technique, where 120 customers and 40 bank staff were sampled, revealed that information communication technology, varieties of services offered and location of the bank are among the most important factors to facilitate deposit mobilization.

Edeme and Ifelunini (2015) investigated savings, inflation in Nigeria and how it impacts

one the economic growth. Extracting annual time series data in Nigeria from 1980-2013, and using the 2-stage least squares (2SLS) method, they discovered that inflation related negatively with real interest rate and with economic growth while exchange rate exerted a positive impact on economic growth.

2.3 Measurement of Inflation:

Consumer price index (CPI) puts together the sum total price of portfolio of consumer good and services consumed by the household to evaluate the changes therefrom. The CPI is seen as a statistically measurement arrived at adopting the different prices of a sample of representative items whose prices are collected on monthly, quarterly, bi-annually and annually. It can be used for inflation adjustment to arrive at indices for Salaries, Pension, Real Wages and to adjust monetary magnitude and demonstrate changes in real economic value.

Calculating the CPI for a single item

$$\text{Current item price (N)} = (\text{base year price}) * [(\text{current CPI}/\text{Base year CPI})]$$

Or

$$\frac{\text{CPI}_2}{\text{CPI}_1} = \frac{\text{Price 2}}{\text{Price 1}}$$

Where 1 is usually the comparison year and CPI1 is usually an index of 100

Calculating the CPI for multiple items

$$\text{CPI} = (\sum \text{CPI}_i * \text{weight}_i) / \sum_{i=1}^n \text{weight}_i$$

3.0 Methods of Data Collection and Sources

This study relied mostly on secondary data. The data were collected through the Central Bank of Nigeria (CBN) statistical bulletin, Nigeria interest research library research, textbooks, journal and report from 1994-2014.

3.1 Population of the study

The population for this study include selected numbers of banks i.e. deposit money bank in Nigeria from 1994 – 2014.

3.2 Methods of Data Analysis

Data analysis is the breaking of the quantitative information gathered (Osika 2014). Anyanwu (2000) on his own defined data analysis as the conversion of raw data into variable information. Data are collected to product or make inference from some preconceived notion or misconception that a researcher has concerning the population from which data were gathered, and this must be in recognition of the hypothesis formulated and the objectives of the study.

Multiple regression Ordinary Least Square (OLS) statistical tool which is used for this study because medium term forecasting which seeks to establish the like fit to the observed data. It measures the degree of relationship that exist between variables (Lucey 2002: 133).

3.3 Model Specification

To test the hypothesis stated, it is specified that the impact of inflation on deposit mobilization in Nigerian bank is a function of the following:

Model 1:

$$\text{Savings Deposit} = f(\text{Infl}, \text{IntR}, \text{CPI}) \quad (1)$$

The model of eqn (1) in its explicit form can be expressed as:

$$\text{SavingsD} = \beta_0 + \beta_1 \text{Infl} + \beta_2 \text{IntR} + \beta_3 \text{CPI} + u \quad (2)$$

log-linear transformation model of eqn 2 results in eqn 3 below

$$\text{Log}(\text{Savings}) = \beta_0 + \beta_1 \log(\text{Infl})_t + \beta_2 \log(\text{IntR})_t + \beta_3 \log(\text{CPI})_t + u \quad (3)$$

Where; $\beta_0, \beta_1, \beta_2$ and β_3 , are coefficient of the constant, interest rate coefficient, Inflation Coefficient, Consumer Price Index. t represent the time trend analyzed by the study and e is provide for the error term Savings D = Total Savings Deposit Mobilized proxied as dependent upon the (INFL) Inflation Rate (Independent Variable) and (INTR) Saving Interest Rate (Independent Variable), e is the stochastic error term in the equation.

Model II:

$$\text{Demand Deposit} = f(\text{Infl}, \text{Ms}, \text{CPI}) \quad (4)$$

The model of eqn (1) in its explicit form can be expressed as:

$$\text{DemandD} = \beta_0 + \beta_1 \text{Infl} + \beta_2 \text{Ms} + \beta_3 \text{CPI} + u \quad (5)$$

log-linear transformation model of eqn 5 results in eqn 6 below

$$\text{Log}(\text{DemandD}) = \beta_0 + \beta_1 \log(\text{Infl})_t + \beta_2 \log(\text{Ms})_t + \beta_3 \log(\text{CPI})_t + u \quad (6)$$

Where; β_0, β_1 and β_2 are coefficient of the constant, interest rate coefficient, Money Supply Coefficient, t represent the time trend analyzed by the study and u is provide for the error term. Demand D is Total Demand Deposit Mobilized proxied as dependent Variable on the equation while (INFL) Inflation Rate is the independent Variable as well as (MS) Money Supply an Consumer Price Index, with e as the stochastic error term.

Model III

Time Deposit

$$= f(\text{InflR}, \text{Int. R}, \text{Ms}, \text{CPI}) \quad (7)$$

The above eqn (7) can be expressed as follows in its explicit fo

$$\text{TimeD} = \beta_0 + \beta_1 \text{InflR} + \beta_2 \text{IntR} + \beta_3 \text{Ms} + \beta_4 \text{CP} \quad (8)$$

log-linear transformation model of eqn 8 results in eqn 9 below

$$\text{Log}(\text{TimeD}) = \beta_0 + \beta_1 \log(\text{InflR})_t + \beta_2 \log(\text{IntR})_t + \beta_3 \log(\text{Ms})_t + \beta_4 \log \text{CPI} + u \quad (9)$$

Where; β_0, β_1 and β_2 are coefficient of the constant, interest rate coefficient, Interest rate coefficient, and Money Supply Coefficient. t represent the time trend analyzed by the study and u is provide for the error term. TimeD is Total Time Deposit Mobilized proxied as dependent Variable on the equation while (INFL) Inflation Rate is the independent Variable as well as (MS) Money

Supply and (IntR) interest rate and Consumer Price Index, with u as the stochastic error term.

4.0 Data Analysis and Empirical Results

The empirical analysis utilized annual time series data from 1985 to 2016 generated from Central Bank of Nigeria Database and Statistical Bulletin 2015-2016. The data includes inflation, deposits mobilized by deposit money banks (DMBs) decomposed into savings deposit, demand deposit and time deposit, interest rate on savings and time deposit, Consumer Price Index (CPI) and the Money Supply (Ms) in Nigerian economy within the period under investigation.

Table-4.0 Descriptive Analysis

	DEMANDD	INFLR	MS	SA_INTR	SAVINGS	TBILLS_RATE	TDINT_R	TIMED
Mean	1611.389	20.08453	5075.250	7.519284	724.4875	13.70583	12.50643	1096.090
Median	396.5114	12.07481	1175.974	5.042500	190.5668	12.95083	11.16000	194.9299
Maximum	6180.041	76.75887	23388.33	18.80000	3674.544	26.90000	28.02000	4782.484
Minimum	6.649800	0.223606	26.27760	1.410541	3.699900	6.130000	5.460000	6.851000
Std. Dev.	2149.927	19.43992	7073.991	5.433363	1031.634	4.564057	5.329389	1543.327
Skewness	1.007629	1.586013	1.257870	0.692182	1.473326	0.597257	1.101970	1.151112
Kurtosis	2.356374	4.341561	3.197525	1.932975	3.999412	3.557567	3.785358	2.840774
Jarque-Bera	5.967363	15.81538	8.490617	4.073340	12.90877	2.316992	7.298849	7.100783
Probability	0.050606	0.000368	0.014331	0.130462	0.001574	0.313958	0.026006	0.028713
Sum	51564.44	642.7051	162408.0	240.6171	23183.60	438.5867	400.2057	35074.90
Sum Sq. Dev.	1.43E+08	11715.23	1.55E+09	915.1646	32992321	645.7491	880.4740	73837592
Observations	32	32	32	32	32	32	32	32

Table 4.0 x-rays the descriptive data of the explained and the explanatory variables used in the study and it reveals that the volume of money supply in the economy averaged 5,075.25 with all-time high 23,388.33 and all-time low of 26.77. This is followed by demand deposit that averaged 1,611.38 while time deposit averaged 1096.090. The analysis of all variables revealed that money supply, demand deposit and time deposit had the highest deviation from the mean of 7073, 2149 and 1543 respectively. The Jarque-Bera (JB) test of normality statistics of 5.967363, 15.81538, 8.490617, 4.073340, 12.90877, 2.316992, 7.298849 and 7.100783 for the variables are all above 0.05, which indicates that there is insufficient evidence that the data is from a normal population. This means that the variable are all normally distributed as confirmed by the low p-values. Again, all variables skewed positively and leptokurtic (i.e. relatively peaked, meaning that their distributions are normal, Tabachnick and Fidell, 1996; Brown 1997)

Table-4.1 Correlation Analysis

	CPI	DEMANDD	INFLR	MS	SA_INTR	SAVINGS	TBILLS_RATE	TDINT_R	TIMED
CPI	1								
DEMANDD	0.977785	1							
INFLR	-0.34633	-0.32776	1						
MS	0.988096	0.98841	-0.30586	1					
SA_INTR	-0.679	-0.64843	0.603456	-0.60971	1				
SAVINGS	0.986445	0.972708	-0.29509	0.994033	-0.58577	1			
TBILLS_RATE	0.083377	0.051194	0.319194	0.100848	0.326969	0.141842	1		
TDINT_R	-0.60556	-0.57976	0.523839	-0.56098	0.838879	-0.561	0.509652	1	
TIMED	0.95714	0.975137	-0.31681	0.978163	-0.614	0.955918	0.028449	-0.52718	1

Table 4.1 itemizes the result of correlation analyses to test the relationship between variables used in the study. It shows that some variables maintained a positive relationship with others and vice-versa. Prominent among the relationship is Money Supply which correlates with savings deposit, demand deposit, consumer price index at 99 percent, and time deposit at 98 percent while between. The lowest positive correlation exist between treasury bills rate at 8.37 percent, 5.12 percent, 31.92 percent, 10.08, 32.69percent and 14.18 percent with CPI, demand deposit, Inflation, Money Supply, Savings interest rate, Savings Deposit, treasury bills rate, time deposit rate and time deposit respectively. The analysis further revealed high negative correlation of 67percent, 64 percent and 61 percent between savings interest rate and CPI, demand deposit and money supply.

Table-4.2 Test for Unit Root Analysis

	5% TEST CRITICAL VALUES	ADF LEVELS	ADF IST DIFF	REMARK
MS	-2.991878	3.292574		I(0)
INFLR	-2.986225	-1.990039	-4.266017	I(1)
CPI	-2.976263	5.003161		I(0)
DEMANDD	-2.960411	2.098187	-4.038214	I(1)
SAVINGS	-2.986225	3.255568		I(0)
TBILLSR	-2.960411	-2.980536		I(0)
SAVINGSINTR	-2.986225	-2.340439	-5.626898	I(1)
TIMED	-2.991878	-0.380027	1.607607	I(1)
TDINTR	-2.960411	-2.081975	-5.847312	I(1)

Table 4.2 shows the test for stationarity of the variables to avoid the problem of serial auto-correlation. The Dickey-Fuller test is employed for the test and augmented by introduction various lag to the variables. At 5percent level of significance, the results reveals that ADF statistic exceeded the critical values at levels for some variables and at Ist difference for some variables, hence the variables were stationary at levels and Ist difference and is concluded that there existed no unit root in the model and as such rejected the null hypothesis.

Table-4.3 Test for Cointegration

Hypothesized	Trace	0.05		Max-Eigen	0.05			
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.997348	474.9326	197.3709	0.0001	0.997348	177.9755	58.43354	0.0000
At most 1 *	0.919071	296.9571	159.5297	0.0000	0.919071	75.42567	52.36261	0.0001
At most 2 *	0.914498	221.5314	125.6154	0.0000	0.914498	73.77661	46.23142	0.0000
At most 3 *	0.831542	147.7548	95.75366	0.0000	0.831542	53.43211	40.07757	0.0009
At most 4 *	0.714137	94.32268	69.81889	0.0002	0.714137	37.56732	33.87687	0.0173
At most 5 *	0.597555	56.75536	47.85613	0.0059	0.597555	27.30591	27.58434	0.0542
At most 6	0.450836	29.44945	29.79707	0.0548	0.450836	17.98076	21.13162	0.1306
At most 7	0.317188	11.46869	15.49471	0.1843	0.317188	11.44608	14.26460	0.1332
At most 8	0.000754	0.022614	3.841466	0.8804				

Since few variables were stationary at 2nd difference we conducted a test for co-integration. Table 4.3 shows that the tarace test and Max-eigen value test indicates 5 (five) co-integrating equations in the variables utilised in the study.

Regression Result for Demand Deposit

Model 1: OLS, using observations 1985-2016 (T = 32)
 Dependent variable: DemandD
 HAC standard errors, bandwidth 2 (Bartlett kernel)

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
Const	167.114	193.302	0.8645	0.3946	
InflR	3.12880	2.14388	1.459	0.1556	
MS	0.299121	0.0398843	7.500	<0.0001	***
CPI	0.171102	4.76780	0.03589	0.9716	
Mean dependent var	1611.389	Adjusted R-squared		0.975277	
Sum squared resid	3199629	S.E. of regression		338.0421	
R-squared	0.977670	Durbin-Watson		1.529346	
F(3, 28)	180.4102				
Log-likelihood	229.6110				
Schwarz criterion	473.0849				
Rho	0.576880				

Gretl computation.

$$\text{DemandD} = 16\ 7114 - 3.1288\text{InflR} + 0.299121\text{MS} - 0.17110\ 2\text{CPI} + u$$

The results above reveals a negative relationship between demand deposit and inflation while money supply exerts a positive influence on mobilization of demand deposit. The above shows that a unit change in inflation will result 3.12 per cent change in mobilization of demand deposit by banks in Nigeria with other variables at constant. The explanatory power of the regression model with an adjusted R² of 0.97 is commendable and means that 97 per cent of demand deposit mobilization in Nigeria within the period of the study is explained by the inflation to the sector. The remaining 3 per cent is explained by variables outside this model. From the results the standard errors for this model is statistically significant at 5%. The F-statistics will be used to test for statistical significant of the parameter.

Regression Result for Savings Deposit

Model 2: OLS, using observations 1985-2016 (T = 32)

Dependent variable: Savings Deposit

HAC standard errors, bandwidth 2 (Bartlett kernel)

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
Const	388.564	176.161	2.206	0.0361	**
InflR	0.649134	0.879245	0.7383	0.4667	
CPI	8.63841	3.77206	2.290	0.0301	**
MS	0.0848142	0.0266632	3.181	0.0037	***
SaIntR	18.6485	9.10629	2.048	0.0504	*
Mean dependent var	724.4875	Adjusted R-squared		0.990814	
Sum squared resid	263955.4	S.E. of regression		98.87429	
R-squared	0.991999	Durbin-Watson		1.475244	
F(4, 27)	502.8258				
Log-likelihood	189.6908				
Schwarz criterion	396.7103				
Rho	0.512638				

$$\text{SavingsD} = 388.5 + 0.649134\text{InflR} + 8.63841\text{CPI} + 0.0848142\text{MS} + 18.6485\text{SaIntR} + u$$

The results above reveals a negative relationship between savings deposit and inflation while money supply and consumer prices exert a positive influence on mobilization of savings deposit. The above shows that a unit change in inflation will result 6.4 per cent change in mobilization of savings deposit by banks in Nigeria with other variables at constant. While consumer prices and level of money supply will 86 percent and 8.5 percent respectively. Interest rate have positive influence on the growth of deposit mobilization up to 186 percent respond to a unit change in the rate of interest. The explanatory power of the regression model with an adjusted R² of 0.99 is commendable and means that 99 per cent of demand deposit mobilization in Nigeria within the period of the study is explained by the inflation to the sector. The remaining 1 per cent is explained by variables outside this model. From the results the standard errors for this model is statistically significant at 5%. The F-statistics will be used to test for statistical significant of the parameter.

Regression Result for Time Deposit

Model 3: OLS, using observations 1985-2016 (T = 32)

Dependent variable: Time Deposit

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
const	293.044	330.625	0.8863	0.3833	
InflR	3.99094	3.52124	1.133	0.2670	
CPI	11.8991	7.30954	1.628	0.1152	
MS	0.307197	0.0562137	5.465	<0.0001	***

TDIntR	7.12943	15.3878	0.4633	0.6468
Mean dependent var	1096.090	Adjusted R-squared		0.956733
Sum squared resid	2782523	S.E. of regression		321.0240
R-squared	0.962316	Durbin-Watson		1.424344
F(4, 27)	172.3694			
Log-likelihood	227.3762			
Schwarz criterion	472.0810			
Rho	0.152386			

Gretl computation.

$$TimeD = 293.04 - 3.991 InflR - 11.8991CPI + 0.307MS + 7.129TDintR + u$$

The results above reveals a negative relationship between time deposit and inflation while money supply and consumer prices exert a positive influence on mobilization of savings deposit. The above shows that a unit change in inflation will result 3.99 per cent change in mobilization of savings deposit by banks in Nigeria with other variables at constant. While consumer prices and level of money supply will 11.8 percent and 3.07 percent respectively. Interest rate have positive influence on the growth of time deposit mobilization up to 7.12 percent respond to a unit change in the rate of interest. The explanatory power of the regression model with an adjusted R² of 0.99 is commendable and means that 99 per cent of demand deposit mobilization in Nigeria within the period of the study is explained by the inflation to the sector. The remaining 1 per cent is explained by variables outside this model. From the results the standard errors for this model is statistically significant at 5%. The t-statistics will be used to test for statistical significant of the parameter.

TEST OF HYPOTHESES

	Critical t-value (t*)	Calculated t-value (t)		Result
Hypothesis I	0.683	1.459	t>t*	alternate hypothesis accepted
Hypothesis II	0.683	0.7383	t>t*	alternate hypothesis accepted
Hypothesis III	0.683	1.133	t>t*	alternate hypothesis accepted

5.0 Summary of Findings

The following constitute the major findings in this research work.

- A negative relationship exist between demand deposit mobilized and inflation while money supply exerts a positive influence on mobilization of demand deposit. It can be translated that a unit change in inflation will result 3.12 per cent change in mobilization of demand deposit by banks in Nigeria with other variables at constant.
- Again, a negative relationship is statistically inferred between savings deposit mobilization and inflation while money supply and consumer prices exerted a positive influence on mobilization of savings deposit mobilization. Hence, a unit change in inflation will result 6.4 per cent change in mobilization of savings deposit by banks in Nigeria

- Inflation and Consumer Price Index exerted a negative influence on time deposit, while money supply and interest rate both had a positive influence on mobilization of time deposit by Nigerian Banks.
- The findings also revealed that interest rate impacted significantly on saving and time deposit.

5.1 Conclusion

From the above summary of findings, it is concluded that all variables used in the construct were stationary at 1st difference, and at least one co-integrating equations existed in the model. Again, it can be concluded empirically, that inflation has negative impact on the deposit mobilization of the Nigerian banks. Hence reduction in the rate of the country's rate of inflation would translate to increased deposit mobilization. And finally, the interest rate here demonstrates itself as a useful monetary policy measure that impacts positively on the growth of deposit mobilization in the Nigerian banking industry.

5.2 Recommendations

The following recommendation were made after carrying out this research:

- Trade activities geared towards increased money supply in the economy should be encouraged by the government which could be driven by industrialization and commercialization would stimulate the economy and translate to high deposit in the Nigerian Banks.
- The Nigerian Banks has to evaluate the marginal increment of deposit interest rate for savings and time Deposit through Central Bank of Nigeria Monetary Policy Committee (MPC) at higher rate than inflation as an incentive to attract high deposit mobilization.
- Increased productivity and direct inflows would improve the volume of money supply which has positively influence all the types of deposit mobilization.

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