ANALYSIS OF CBN INTEREST RATE POLICIES, BANKS LENDING AND CUSTOMERS' LOAN ATTITUDES IN ADAMAWA STATE

*ABUBAKAR MAHMUD BELLO; *MONICA SHADRACH; & **MUSTAPHA SULEIMAN

*Department of Accountancy, Federal Polytechnic Mubi, Adamawa State. **Department of Business Administration and Management, Federal Polytechnic Mubi, Adamawa State

ABSTRACT

*This study is titled **Analysis of CBN Interest Rate Policies, Banks Lending and Customers' Loan Attitudes in Adamawa State.** The objectives of the study are to assess whether interest rate policies have an impact on commercial banks' lending activities and also assesses whether interest rate policies and customers' loan attitudes are positively correlated. Field survey was adopted as a research design for this study. Data was sourced from both primary sources (questionnaire and interview) and secondary sources (textbooks, journals & internet). A sample of 10 respondents from 10 banks totaling 100 was taken for testing hypothesis 1 and 100 customers were taken for testing hypothesis 2. Chi-square and regression were used in testing hypotheses 1 & 2 respectively. Findings from the study reveal that interest rate policies have a positive impact on commercial banks' lending activities and also that there is a positive correlation between interest rate policies and customers' loan attitudes. The study recommends that the CBN should adopt and release interest rates that will boost the level of savings and encourage investment borrowing so that the Nigerian economy will pull out of the current recession it is currently in which is largely due to a general fall in global oil prices.*

Keywords: Interest rates, policies, lending, correlation, investment borrowing

Introduction

An interest rate, or rate of interest, is the amount of interest due per period, as a proportion of the amount lent, deposited or borrowed (called the principal sum) (tradingconomics.com., 2016). The total interest on an amount lent or borrowed

depends on the principal sum, the interest rate, the compounding frequency, and the length of time over which it is lent, deposited or borrowed. It is defined as the proportion of an amount loaned which a lender charges as interest to the borrower, normally expressed as an annual percentage. It is the rate a bank or other lender charges to borrow its money, or the rate a bank pays its savers for keeping money in an account.

The importance of interest rate is hinged on its equilibrating influence on supply and demand in the financial sector (Ikechukwu & Chigozie, 2011).The developmental role of interest rate is possible because of the interlocking linkage existing between the financial and real sectors of economies. It is therefore through this linkage that the effect of interest rate on the financial sector is transmitted to the real sector. For instance, the lending rate which translates into the cost of capital has direct implications for investment. A situation in which high lending rates prevail leads to a discouragement of investment borrowing and vice versa. Savings rates, on the other hand, when high encourages savings which ultimately translates into increased availability of loanable funds. The snag here is that the high savings rate is also bound to translate into high lending rates with attendant negative consequences on investment (Ikechukwu & Chigozie, 2011).

According to classical economists, savings level is determined by rate of interest rate on savings (Ikechukwu & Chigozie, 2011). This view holds that increase in this interest rate will lead to increased savings and hence a positive relationship. It is this view that must have encouraged the Nigerian authorities to abandon administratively fixed interest rates for market determined ones. Ahmed (2003) revealed that deregulated interest rate is actually critical for both development and economic stabilization. This simply implies that there is a relationship between interest rate and investment. However, various studies have revealed that high lending rates discourage borrowing for investment and vice versa (Anyanwu and Oaikhenan, 1995). Since economists hold that investment plays a fundamental role in capital formation, and hence on economy's growth and developments, it becomes obvious that lending rates through perceived influence on investment plays a developmental role. That is, a decrease in lending rate is theorized to cause investment borrowing to rise which leads to increased capital formation and eventually to economic growth (Onoh, 2007). The link between savings and investment is no less important as the level of savings in an economy also plays a role in the determination of

investment levels. This is why monetary authorities in their pursuit of monetary policies try to influence level of savings and availability of credit by directly, in the case of administratively fixed rates or indirectly during deregulated era, influencing the rate of interest (Ikechukwu & Chigozie, 2011). To achieve the desired level of interest rate, the Central Bank of Nigeria (CBN) adopts various monetary policy tools, key among which is the Monetary Policy Rate (MPR). This rate, which until 2006 was known as the Minimum Rediscount rate (MRR), is the rate at which the CBN is willing to rediscount first class bills of exchange before maturity (Onoh, 2007). The same author opined that by raising or lowering this rate the CBN is able to influence market cost of funds. If the CBN increases MPR, banks' lending rates are expected to increase with it, showing a positive relationship

However, in spite of the release of interest rates by the CBN, the commercial banks have experienced several problems over the years. A study by Simon, (2009) revealed that problems associated with the commercial banks include lack of strict adherence to lending and deposit policies, lack of proper supervision by the regulatory bodies and absence of CBN monitoring mechanisms to ensure compliance with established polices. Therefore, this study assesses the impact of interest rate policies on commercial banks' lending activities and also assesses whether interest rate policies and customers' loan attitudes are positively correlated.

MATERIALS AND METHODS
Research Hypotheses
To achieve the above objectives, 2 hypotheses were formulated as stated below:

H_{o1}: Interest rate policies do not have a significant impact on lending activities of commercial banks.

H_{o2}: Interest rate policies and customers' loan attitudes are not positively correlated.

Research Designs
The research design adopted for this study is the survey research method. The survey design approach was justified on account of its economy, rapid data collection and ability to understand a population from a part.

Population and Sampling Technique
The population adopted for the study consists of 10 staff each from Ecobank, First Bank, Zenith Bank, Skye Bank, Keystone Bank, GT Bank, Union Bank,

UBA, Fidelity Bank and Access Bank respectively which gives a total of 100. The same target of 100 was set for the customers as it is difficult to limit the respondents due to the fact that they will be issued the questionnaires during banking hours. The sampling technique used for the study is the simple random sampling. Data was collected using both primary and secondary sources.

Method of Data Analysis

Chi-square was used in testing hypothesis 1 which analyzes responses from the banks staff while regression analysis was used in testing hypothesis 2 which is based on the responses from banks customers and here, the Statistical Package for Social Sciences (SPSS) was utilized. For the regression analysis, a model was formulated for testing hypothesis 2 developed for this research. The model is:

$Custloanatt_0 = \alpha + \beta_0 Intrestratepolicy_0$

Where: $Custloanatt_0$ = Customers Loan Attitudes

α = Intercept of regression model

$\beta_0 Intrestratepolicy_0$ = Interest rate Policies released by the CBN

μ = Error

RESULTS

Test of Hypothesis 1

As stated before, the chi-square was used in testing hypothesis 1 and is calculated by using the formula:

$$X^2 = \sum \frac{(Fo-Fe)^2}{Fe}$$

Where X^2 = Chi-square statistic

Fo = Observed frequency

Fe = Expected frequency

Table 1 Chi-Square Calculation Table

Fo	Fe	Fo-Fe	$(Fo-Fe)^2$	$(Fo-Fe)^2 /Fe$
64	8.3	55.7	3102.49	373.79
19	8.3	10.7	114.49	13.79
72	8.3	6.37	40.57	4.88
11	8.3	2.7	7.29	8.78

78	8.3	69.7	4858.09	585.31
5	8.3	-3.3	-10.89	-1.31
67	8.3	58.7	3445.69	415.14
16	8.3	7.7	59.29	7.14
69	8.3	60.7	3684.49	443.91
14	8.3	5.7	32.49	3.91
				1855.34

Degree of freedom = (Row-1)(Column-1)
$$= (10\text{-}1)(5\text{-}1)$$
$$= 9 \times 4 = 36$$

At 36 degree of freedom and 5% level of significance, the t-distribution table shows an X^2 value of 3.582. A high value for the chi-square statistic (1855.34) means there is a high correlation between the variables. Therefore the 1st hypothesis which states that interest rate policies do not have a significant impact on lending activities of commercial banks is hereby rejected.

Test of Hypothesis 2
Simple linear regression allows a researcher to look at the linear relationship between one normally distributed interval predictor and one normally distributed interval outcome variable. The second hypothesis was formulated to look at the relationship between interest rate policies and customer loan attitudes; in other words, predicting **customer loan attitudes** from **interest rate policies**.

Table 2: Model Summary of Interest Rate Policies and Customer Loan Attitudes				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985[a]	.788	.783	12.58103

a. Predictors (Constant), Interest Rate Policies

This table provides the R and R^2 values. The R value represents the simple correlation and is .985[a] (the 'R' column), which indicates a high degree of correlation. The R^2 value (the R square column) indicates how much of the total variation in the dependent variable (customer loan attitudes) can be explained

by the independent variable (interest rate policies). Here, 78.8% (.788) can be explained, which is significant.

Table 3: Analysis of Variation Goodness of Fit Model						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1 Regression	10506.244	1	10506.244	180.709	.000[b]	
Residual	18993.899	327	95.92935			
Total	29500.143	328				

   a. Predictors: (Constant), interest rate policies
   b. Dependent Variable: Customers loan attitudes

This table indicates that the regression model predicts the dependent variable very well. The regression Row "Sig" column shows that the statistical significance of the regression model was run. Here, P‹0.0005, which is less than 0.5, and indicates that, overall, the regression model statistically significantly predicts the outcome variable i.e (it is a good fit of the data).

Table 4 Models Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	39.533	4.6299		14.0893	.000
Intrstratpolcy	.910	.875	.985	17.2672	.000

   a. Dependent Variable: Customers loan attitudes

The coefficients table provides the necessary information to predict customers' loan attitudes from interest rate policies, as well as determine whether interest rate policies contribute statistically to the model (by making reference to the "Sig" column.

Furthermore, the values in the "B" column under the unstandardized coefficients column can be used to present the equation as:

$Custloanatt_0 = \alpha + \beta_0 Intrestratepolicy_0$

Substituting into the equation reveals;

$Custloanatt_0 = 39.533 + 0.910$(interest rate policies)

From the table, it can be seen that the relationship between customers loan attitudes and interest rate policies is positive (0.910) and based on the P-value of 0.000, it can be concluded that the relationship is statistically significant.

Hence the second hypothesis which states that interest rate policies and customers loan attitudes are not positively correlated is hereby rejected and it can be concluded that there is a statistically significant linear relationship between interest rate policies and customers' loan attitudes.

DISCUSSION

Findings from testing hypothesis 1 reveal that interest rate policies have a significant impact on the lending activities of commercial banks by virtue of the chi-square table showing a value of 1855.34 which is higher than a t-distribution value of 3.582.

Findings from testing hypothesis 2 shows that the model fits the data for prediction of customers' loan attitudes from interest rate policies. The R correlation coefficient of .985[a] shows a good level of prediction and the model has positive correlation. The R^2 value of .788 indicates that proportion in the dependent variable explained by the predictor variables. This means that 78.8% change in customers' loan attitudes is predicted by interest rate policies.

In addition, the regression coefficient of the predictor variable in the model is significant. The coefficient contribution of interest rate policies (.910) in the model is statistically significant with $P < .005$. This means that an increase in interest rate policies will lead to a decrease in the amount of loans sought by bank customers and vice versa.

The findings from testing the 2 hypotheses are in line with Ojo, (1993), Ogwuma, (1996), Onoh, 2007 and Ikechukwu & Chigozie, (2011) whose researches showed that there is a significant positive relationship between interest rate policies and inflation, consumption and saving which means that a high lending rate discourages investment, brings a fall in saving, fall in income and consequently will reduce corruption. The studies also reveal that high rate of interest on savings will induce saving, fall in lending rate, induced investment, increases income, increase consumption and at the long run brings about inflation in the economy.

Conclusion and Recommendations

Conclusions

Based on the findings of the study, it is concluded that the interest rate policies taken as the independent variable significantly affects the lending activities of commercial banks by virtue of the high chi-square statistic of 1855.34 derived from the computations.

This study also concludes that there is a positive correlation between the interest rate policies released by the CBN and customers' loan attitudes. The regression model (R coefficient) shows a good level of prediction and that 78.8% change in customers' loan attitudes is caused or predicted by the interest rate policies. Therefore, the variable added significantly to the prediction of customers' loan attitudes, meaning that interest rate policies surely have an impact on customers' loan attitudes.

Recommendations

By virtue of the study revealing that CBN interest rate policies are positively correlated with the lending activities of commercial banks and customers' loan attitudes, the study recommends that the CBN should adopt and release interest rates that will boost the level of savings and encourage investment borrowing so that the Nigerian economy will pull out of the current recession it is currently in which is largely due to a general fall in global oil prices.

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