

EFFECT OF COMMERCIAL BANKS INTERESTS RATES ON CREDIT UP TAKE BY BUSINESS SECTOR IN KENYA

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Abstract: The general objective of this study was to assess the effect of commercial banks interests rates on credit up take by business sector in Kenya. Particularly This study sought to investigate the effect of commercial banks interests rates on credit up take by business sector in Kenya. This study employed therefore use causal research design since the data was secondary and the researcher wanted to assess the relationship between commercial banks interests rates on credit up take by business sector in Kenya. The target population for this study was all the business sectors that seek credit from the commercial banks and exclusively participate in small medium and large business sector in the country. This study used data collection schedule to collect the data from report from the central bank. In extension other inferential statistics such as, unit root test and multiple regression was used to explain the association. The study conclude that there is a strong association between the interest rate conditions in the country and the credit market up take in the country. In particular it was found that Commercial lending interest, Overdraft interest, Savings interest and Deposit interest are the key interest rates that dictate the credit environment in the country. Commercial lending interest, Overdraft interest, and Deposit interest were found to have a very strong significant effect on credit uptake in the country. On the other hand even though it was slightly insignificant the association between Savings interest and credit uptake was found to be positive and relevant. Since the variables investigated were found to be relevant in explaining the credit market in the country this study recommend that policy makers and even bank managers trend with conscious when setting the interest rates policy in the country. The overdraft interest rate was specifically found to a very negative effect on the credit market. This implies that there is the need to lower this interest rate in the country. The study also found that Commercial lending interest increase causes more credit to be absorbed however this was not expected but the explanation could be that banks are willing to give more credit when the lending interest are to go up in the country.

Keywords: credit up take Commercial lending interest, Overdraft interest, Savings interest and Deposit interest.

1. INTRODUCTION

Background of study

Investors borrow money from banks and other financial institutions. Interest rates are the strong factors that affect financial policies and act as guiding principles of investors, it facilitate investment if the high interest rate is applicable on savings. The negative influence of higher investment rate inhibits the macroeconomic effect of interest rate policy. Interest rate is the money charged on loan of money. Investors borrow money from banks for investment. As a result of this encouragement, the bank lenders are competent to attain repayment of each and every loan by means of high prospect (Maranga, and Nyakundi, 2017). Lending represents one of the core functions of commercial banking system. The essential role of banks in the economy has been to intermediate funds between surplus and deficit economic units. In the process of carrying out this primary task, banks have found themselves performing a number of functions which

include: the mobilization of savings, stimulation of investment and economic growth, assistance in resources allocation, boosting of international trade and promotion of the payment system (John, 2014).

General objective

The general objective of this study was to assess the effect of commercial banks interests rates on credit up take by business sector in Kenya

Study Hypothesis

- i. Commercial lending interest has no statistically significant effect on credit up by the business sector in Kenya
- ii. Overdraft interest has no statistically significant effect on credit up by the business sector in Kenya
- iii. Savings interest has no statistically significant effect on credit up by the business sector in Kenya
- iv. Deposit interest has no statistically significant effect on credit up by the business sector in Kenya

2. LITERATURE REVIEW

Kamweru and Ngui (2017), sought to determine the effects of interest rates on the performance of real estate industry in Kenya. The study adopted a descriptive survey research design. The study findings revealed that lending interest rates had a negative and significant relationship with real estate growth in Nairobi. The findings show that deposit interest rates had a positive insignificantly related to growth of the real estate firm in Nairobi. The long run model findings also revealed that overdraft interest rates had a positive significant relationship with real estate growth in Nairobi. Mlati, Mukhongo and Datche, (2019), sought to establish how interest rate capping influences market performance of listed Banks in Kenya. Their study concluded that there exists a weak, positive and significant relationship between mortgage interest rate capping and market performance. The study concluded that there exists a weak negative insignificant relationship between term loan interest rate capping and market performance. There exists a weak significant positive relationship between savings products interest rate capping and market performance. There exists an average positive significant relationship between overdraft interest rate capping and market performance.

Ayieyo, (2016), set to determine the effect of volume of deposit and interest rate on total loan advanced by selected commercial banks in Kenya. The study employed a correlation research design and was informed by theory of Money Supply. The findings indicated that lending interest rates were negatively related and significantly affect the total loans advanced. The volumes of deposits in commercial banks had a significant and positive effect on the total loan advanced. Wambari, and Mwangi, (2017), sought to establish the effect of loan interest rate on the performance of small and medium size enterprises on the performance of small and medium size enterprises in Lurambi Sub-County. This objective was achieved and the study concluded that there exists a statistically significant negative effect of interest rate on the performance of SMEs in Lurambi Sub-County, Kenya. John, (2014), examines the effect of deposit volume on bank lending behaviour in the Nigerian post-consolidation banking period. The population of the study comprises the 22 deposit money banks operating in Nigeria as at December, 2012. Data were obtained from the audited annual reports of the 22 banks for the post-consolidation period of 2006-2012. The analysis was conducted using regression analysis with the aid of SPSS package. The results revealed a positive and significant relationship between deposit volume and loan and advances in the selected banks. The study recommends that future researchers should investigate other factors which may exert some influence on the lending behaviour deposit money banks in Nigeria beside deposit volume. Specifically, factors such as capitalization, interest rates, gross domestic product, and liquidity ratio were mentioned.

3. RESEARCH METHODOLOGY

Research Design

Kombo and Tromp (2011), argue that a research design is the general outlay of the research. Kothari (2004), note that a research design is the arrangement of conditions for collection and analysis of data in a manner that helps answer the research questions. This study therefore used causal research design since the data was secondary and the researcher wanted to assess the relationship between commercial banks interests rates on credit up take by business sector in Kenya.

Target Population

Sekaran and Bougie (2010), argue that a population is a group of entities of interest for which the researcher intends to study. Kombo and Tromp (2011), also concur that a population is a group of individuals, objects or items from which samples are taken for with the intentions to draw conclusions from. The target population for this study was all the business sectors that seek credit from the commercial banks and exclusively participate in small medium and large business sector in the country.

Data Collection Method

Kothari (2004), argue that there are many methods of data collection in research work. This study used data collection schedule to collect the data from report from the central bank.

Analytical Tools

In extension other inferential statistics such as, unit root test and multiple regression was used to explain the association.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where: Y = Credit up take by business sector in Kenya (Dependent variable)

β_0 =intercept term; β_i =are the various coefficients of the independent variables; X_1 = commercial lending interest, X_2 =Overdraft interest, X_3 = Savings interest, X_4 = Deposit interest, ε = error term

4. RESULTS AND DISCUSSIONS

Table 1: Unit root test

Null Hypothesis: Unit root (common unit root process) ,Series: (Business credit), (Commercial banks interest), (overdraft interest), (savings interest), (deposit interest), Sample: 2013M01 2019M12, Exogenous variables: Individual effects, User-specified maximum lags, Automatic lag length selection based on SIC: 0 to 1, Newey-West automatic bandwidth selection and Bartlett kernel, Total number of observations: 414, Cross-sections included: 5

Method	Statistic	Prob.**
Levin, Lin & Chu t*	-0.86609	0.1932

** Probabilities are computed assuming asymptotic normality

Table 1 presents the results on the unit root test for the five variables of the study. The one method of unit root test used reject the null hypothesis of unit root at level for all the variables jointly. Levin, Lin & Chu t* has a test statistic of -0.86609 and an associated p-value of 0.1932 which is also insignificant. The conclusion is that business credit, Commercial lending interest rates, Overdraft interest rates, Savings interest rates, Deposit interest rate were jointly non stationary at level.

Table 2

Null Hypothesis: Unit root (common unit root process) , Series: D(Business credit), D(Commercial banks interest), D(overdraft interest), D(savings interest), D(deposit interest), Sample: 2013M01 2019M12, Exogenous variables: Individual effects, Automatic selection of maximum lags, Automatic lag length selection based on SIC: 0 to 6, Newey-West automatic bandwidth selection and Bartlett kernel

Total number of observations: 404, Cross-sections included: 5

Method	Statistic	Prob.**
Levin, Lin & Chu t*	-18.2802	0.0000

** Probabilities are computed assuming asymptotic normality

Table 1 presents the results on the unit root test for the five variables of the study. The one method of unit root test used reject the null hypothesis of unit root at level for all the variables jointly. Levin, Lin & Chu t* has a test statistic of -18.2802 and an associated p-value of 0.0000 which is also insignificant. The conclusion is that business credit, Commercial lending interest rates, Overdraft interest rates, Savings interest rates, Deposit interest rate were jointly non stationary at level.

Table 2: Residuals Normality test

VEC Residual Normality Tests, Orthogonalization: Cholesky (Lutkepohl), Null Hypothesis: residuals are multivariate normal, Sample: 2013M01 2019M12, Included observations: 73

Component	Skewness	Chi-sq	df	Prob.
1	0.192994	0.453167	1	0.5008
Component	Kurtosis	Chi-sq	df	Prob.
1	2.949753	0.007680	1	0.9302
Component	Jarque-Bera	df	Prob.	
1	0.460846	2	0.7942	

Table 2 presents the results on the normality test of the regression residuals. The skewness of the residuals was found to have a chi-square 0.453167 and a p-value of 0.5008. The kurtosis was found to have a chi-square value of 0.007680 and the associated p-value of 0.9302. The Jarque-Bera was found to have a chi-square value of 0.460846 and a p-value of 0.7942. This implies that the residuals were normally distributed and the model was a good fit.

Table 3: Serial correlation test

VEC Residual Serial Correlation LM Tests, Null Hypothesis: no serial correlation at lag order h, Sample: 2013M01 2019M12, Included observations: 73

Lags	LM-Stat	Prob
1	20.98156	0.6936
2	34.72018	0.0934
3	38.07580	0.0455
4	23.87578	0.5266
5	29.60485	0.2394

Probs from chi-square with 25 df.

Table 2 presents the results on the residual Serial Correlation test of the regression residuals. From the LM-Stat and the associated p-values, the lag of 5 show that there is no serial correlation problem in the model. This is supported by the fact that the p-values were found to be statistically insignificant.

Table 4: Cointegration Test

sample (adjusted): 2013m12 2019m12, included observations: 73 after adjustments, trend assumption: no deterministic trend (restricted constant), series: Business credit, Commercial banks interest, overdraft interest, savings interest, deposit interest, lags interval (in first differences): 1 to 10, unrestricted cointegration rank test (trace)

hypothesized		trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.670414	212.7597	76.97277	0.0000
At most 1 *	0.572258	131.7357	54.07904	0.0000
At most 2 *	0.429252	69.74145	35.19275	0.0000
At most 3 *	0.238828	28.80251	20.26184	0.0026
At most 4	0.114550	8.881140	9.164546	0.0566

Trace test indicates 4 cointegrating equations(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Table 4 presents the results on the cointegration test for the study variables. From the results it was observed that there were 4 equations that had significant solutions. It is observed that the four of the p-values were significant. Thus it was concluded that there exist long run equilibrium between the credit and the associated p-values.

Table 5: Regression Results

Variables	Beta	Standard error	t-statistics
Commercial lending interest	28.90968	(4.25899)	[6.78791]*
Overdraft interest	-25.92549	(4.07612)	[-6.36034]*
Savings interest	0.073329	(0.04447)	[1.64883]
Deposit interest	0.534059	(1.84875)	[2.84417]*
Intercept	-24.49755	(1.84875)	[-13.2509]*
R-squared			0.875864
Adj. R-squared			0.593736
F-statistic			3.104490
Error correction term			-0.499576
Standard error			(0.11100)
t-statistics			[-4.50062]

* Denotes rejection of the hypothesis of no significant effect at the 0.05 level

$$Y = \beta_0 + 28.90968X_1 - 25.92549X_2 + 0.073329X_3 + 0.534059X_4 + \varepsilon$$

Commercial lending interest

The results on table 5 show that there is a positive relationship between commercial lending interest and credit to the business sector in the country. From the results it was revealed that the relationship between commercial lending interest and credit market was 28.90968 with a statistically significant relationship with t-statistic value of 6.78791. This shows that when commercial lending interest credit uptake go up by one percent the credit up take go up by 28.90968%. However this relationship is interesting since the expectation was that the relationship should be negative.

Overdraft interest

The results on table 5 show that there is a negative relationship between overdraft interest and credit to the business sector in the country. From the results it was revealed that the relationship between overdraft interest and credit market was -25.92549 with a statistically significant relationship with t-statistic value of -6.36034. This shows that when overdraft interest up by one percent the credit up take down by -25.92549 %. The interpretation here is that the business sector in Kenya is strongly reliance on the bank overdraft to finance their dairy activities.

Savings interest

The results on table 5 show that there is a positive relationship between savings interest and credit to the business sector in the country. From the results it was revealed that the relationship between savings interest and credit market was 0.073329 with a statistically insignificant relationship with t-statistic value of 1.64883. This shows that when savings interest credit uptake go up by one percent the credit up take go up by 0.073329 %. The interpretation here is that the banking sector in Kenya is strongly reliance on customers saving rate over long term to be able to extend credit to those who need it more through cash mobilization.

Deposit interest

The results on table 5 show that there is a positive relationship between deposit interest and credit to the business sector in the country. From the results it was revealed that the relationship between savings interest and credit market was 0.534059 with a statistically significant relationship with t-statistic value of 2.84417. This shows that when deposit interest rate uptake go up by one percent the credit up take go up by 0.534059%. The interpretation here is that the banking sector in Kenya is strongly reliance on customers deposit rate over long term to be able to extend credit to those who need it more.

5. CONCLUSION

This study sought to investigate the effect of commercial banks interests rates on credit up take by business sector in Kenya. the study conclude that the there is a strong association between the interest rate conditions in the country and the credit market up take in the country. In particular it was found that Commercial lending interest,Overdraft interest,Savings interest andDeposit interest are the key interest rates that dictate the credit environment in the country. Commercial lending interest, Overdraft interest, and Deposit interest were found to have a very strong significant effect on credit uptake in the country. On the other hand even though it was slightly insignificant the association between Savings interest and credit uptake was found to be positive and relevant.

6. RECOMMENDATION

Since the variables investigated were found to be relevant in explaining the credit market in the country this study recommend that policy makers and even bank managers trend with conscious when setting the interest rates policy in the country. The overdraft interest rate was specifically found to a very negative effect on the credit market. This implies that there is the need to lower this interest rate in the country. The study also found that Commercial lending interest increase causes more credit to be absorbed however this was not expected but the explanation could be that banks are willing to give more credit when the lending interest are to go up in the country.

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