EFFECT OF LIQUIDITY REGULATION ON PERFORMANCE OF THE COMMERCIAL BANKS IN NAKURU COUNTY KENYA

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Abstract

Commercial banks promote balanced regional development and they make optimum utilization of resources possible. They promote savings and accelerate the rate of capital formation, they are source of finance and credit for trade and industry. Financial performance of commercial banks in Kenya determines the economic growth and development of the country. However, the financial performance of commercial banks in the country has not been impressive in the ten years during which new regulations have been introduced. The general objective of the study was to establish the effect of financial regulations on financial performance of commercial banks in Kenya. Specifically, the study sought to establish the effect of capital regulation, interest rate regulation, credit regulation and liquidity regulation on financial performance of commercial banks in Kenya. The liquidity preference theory and public interest theory guided the study. The study adopted the descriptive survey research design. The target population was 11 listed commercial banks. The researcher used census technique. Data was collected using a secondary data collection sheet. Descriptive statistical tools such as mean, mode, median, standard deviation and variance was used. Inferential statistical analysis was done by the use of Pearson's product moment correlation coefficient and multiple regression analysis to establish the relationship between the dependent and independent variables. The results further indicated

that a negative correlation existed between liquidity regulation and financial performance of commercial banks (r = - 0.760; p = 0.035 < 0.05). The study recommends that banks should maintain credit-deposit ratio as low as possible to avoid overreliance of deposits. The study further recommends that banks should regulate on the collateral requirement of borrowers to reduce the amount of bad loans.

Keywords: Liquidity regulation, Commercial Bank, Bank Regulations, Financial Performance and Capital regulation

INTRODUCTION

Liquidity regulations are financial regulations designed to ensure that commercial banks have the necessary assets in order to prevent liquidity disruptions due to changing market conditions (Christensen & Abbas, 2010). It determines the financial stability of the commercial banks. Dwindling levels of liquidity causes systematic crisis among the commercial bank (Barasa, 2018). In Kenya, the year ending December 2016 compared with December 2015 liquidity ratio rose by 22%. Addition annually 5.7 % growth was realized on short term liabilities (Romer, 2017). Regulated percentages by CBK of the liquidity are 20% (Ondieki & Jagongo, 2013). The performance of the commercial banks is influenced by liquidity regulation due to sufficiency in amount available to lend (Haron, 2014)

In the U.S., banking is regulated at both the federal and state level (Reena, 2018). A bank's primary federal regulator could be the Federal Deposit Insurance Corporation, the Federal Reserve Board, or the Office of the Comptroller of the Currency. The Federal Reserve Board (FRB) is one of the most recognized of all the regulatory bodies. It is responsible for influencing money, liquidity and overall credit conditions. Its main tool for implementing monetary policy is its open market operations, which control the purchase and sale of U.S. treasury securities and federal agency securities (Miller & Howard, 2013). Further, interest rates are determined by the Federal Open Market Committee, which consists of the seven governors of the Federal Reserve Board and five Federal Reserve Bank previously as at 2007 operated their financial institutes devoid of the legislations and this has led to a collapse in the financial industry .This financial industry crush promotes the introduction of financial industry regulative to restore economic stability. This results to an improvement in the performance of financial banks (KPMG, 2014).

In Malaysia, the authority to supervise and regulate banking sector is rested on the Central Bank of Malaysia, Negara Bank. The Central bank in Malaysia regulative emphasizes

on risk management. They focus on how to regulate risks and crisis in the banking sectors as this may lead to failure in the banking sector if the risks are not managed (Beck, 2011). The bank of Negara in Malaysia additionally focuses on the Capital and liquidity regulate and it gas implemented Basel accord developed by Basel committee on Banking supervise (Beck, 2011). The bank conducts monetary policy by moving the interest rates either up or down to stabilize the economy of the country (Eken & Kale, 2013). According to (Financial Services and Markets Act [FSMA], 2000) has the mandate to financial regulation according to the regulation the prudential regulative authority's strategy is determined in relative to its objectives, and reviewed from time to time.

Bank of England does its regulation by three main regulators the bank of England, prudential regulation authority (PRA) and financial conduct authority (FCA). In England, the Bank of England has the mandate of controlling banking industry through monetary policy. In particular, the Bank of England has introduced bank capital regulation in the United Kingdom. This has been able to control traditional tendency whereby Banks have been operating with insufficient capital (Michiyo, Nakamto & David, 2017). The bank of England supervises the financial markets infrastructures. The bank also operates the monetary policy by moving the interest rates either up or down depending on the status of the economy (Eken & Kale, 2013).

The South African Reserve Bank (SARB) is responsible for bank regulation and supervision in South Africa and is the primary regulator (Angela, 2018) Its purpose is to achieve a sound, efficient banking system in the interest of the depositors of banks and the economy as a whole (Jalian, 2017). The bank issues banking licenses to banking institutions, and monitoring their activities in terms of the Banks Act and the regulations South Africa Reserve Bank in South Africa determines the amount of reserves to be held by the banks, both secondary and primary capital. A minimum requirement of two hundred and fifty million roads is required as tertiary capital (Wighton, 2017). The South African reserve bank supervises all the registered banks using a supervisory review process by means of on and off site supervisory actions and discussions with boards of directors. The bank operates the monetary policy so as to ensure sound functioning of the economy of the country (Jalian, 2017). This supervisory approach helps assess the impact of emerging risks in the banking sector. In addition, legislates of The South Africa reserve bank control the value of correct current and fixed assets to be held by the banks (Beck, 2011).

In Rwanda the National bank of Rwanda (NBR) is the Central bank of Rwanda and in subjected to the responsibility of regulating and supervising commercial banks in Rwanda. Main mission of the Rwandan central bank are to ensure and maintain price stability, to enhance and maintain a stable and competitive financial system without any exclusion, to support

government general economic policies, promoting investment or regulating international currency movements (Wighton, 2017). Central bank attempts to manipulate monetary and credit policy instruments (the domestic money supply, the discount rate, foreign exchange rate, commercial bank reserve ratio requirement, etc) to achieve major macroeconomic objectives such as controlling inflation. (Rose, 2013).In its capacity as the government's bank, the NBR does hold the government accounts, administers all government transactions and lends to government, though at an interest. The NBR sells government treasury bills. In ensuring a good and effective foreign exchange market, the NBR controls and manages foreign reserves (Rose, 2013).

Banking institutions in Kenya is governed by two Acts; Banking Act and Central Bank of Kenya Act. According to Sonal, Anjarwalla and Khanna (2013), banking institution in Kenya is governed under the Banking Act (Chapter 488, Laws of Kenya) and by Central Bank of Kenya Act (Chapter 491, Laws of Kenya. CBK Act.). Central Bank of Kenya (CBK) is the main financial institutions regulator in Kenya which came into operation since 1966 through the Act of Parliament, to carry out its functions free from any interference of the individuals, group of persons or politics. It is an independent body in its mandate (CBK, 2015).

Central bank of Kenya is guided by international financial regulation standards set by the Basel committee that recommended setting of minimum capital requirement (Allen, 2012). Kenya's bank seems to be growing very fast over the past few years in spite of strict regulations (Njoroge, 2016). According to the monthly economic review of November 2015 by CBK, the balance sheet saw an increase by kshs.3168.7 billion in November 2014 to ksh.3626.9 as at November 2015, the growth rate was 14.5 percent (Barasa, 2018). In January 2015 Banks realized a growth of 2.5% (12% to 14.5%) on weighted risk assets to capital ratio (CBK, 2015).

Statement of the Problem

The banking sector is governed by the Banking Act. The sector has undergone many regulatory and financial reforms in the past. Such reforms have brought in so important changes to the banking sector as well as inspiring foreign banks to enter the Kenyan market (Njoroge, 2016). However, the financial performance of commercial banks in the country has not been impressive in the ten years during which new regulations have been introduced with banks facing stiff completion from other financial institutions. Typically, one would expect regulations to improve efficiency and lower any risk of a financial crisis. In spite of strong regulatory and legal framework enforced by the Central Bank, the Kenyan banking system has experienced banking problems, which has led to the collapse of several commercial banks (Ondongo, 2018) with the recent ones in 2015 and 2016 being Imperial and Chase banks respectively. Further, based on

the annual CBK Supervision Reports, the pace of growth of commercial banks in Kenya has been on a decline and as such, the growth in profitability has been on the declined (Allen, 2012). According to a survey by KPMG in 2017 majority of financial institutions were finding it very difficult to comply with new regulations that had been imposed. The survey showed that there was a reduction in profits as a result of regulations. Therefore, it is on above bases that the present study seeks to examine the effect of liquidity regulation on performance of the commercial banks in Nakuru County Kenya.

Research Hypothesis

H_{01}: There is no significant effect of liquidity regulation on performance of the commercial banks in Kenya.

LITERATURE REVIEW

Theoretical Review

The study was informed by the Liquidity Preference Theory

Liquidity Preference Theory

The theory was proposed by Keynes in 1936 and identified three reasons why cash management practices are vital for a firm. Liquidity preference theory simply refers to desire of having cash in your pockets. Liquidity is any form of an asset which can be easily converted in to cash, money is considered as the most liquid in all assets. Commercial banks deal with mostly liquid assets which can be demanded anytime by the investors. Interest rate is a reward for not holding liquid asset for specified period which it is calculated by the demand and supply of money. According to Keynes, demand for money is categorized in three motives; firstly, transaction motive which is desire to have cash for basic transaction such as for transport, wages or raw material payment. Secondly, precautionary motive which is holding cash to cater for any unexpected expenses if happens such as; accident or illness. Thirdly, speculative motive which is to hold cash and anticipate future changes in order to exercise your rights in stock buying. If stock price is expected to rise then interest rate is expected to fall so, investors will buy and wait until price rises. Supply of money of money is the total amount of money circulating in a country (Keynes 1936).

Pandey (2010) supported this theory and suggested that the need for cash to run the daily operations of a firm cannot be ignored. Entities should therefore invest adequate available funds in current assets for the success of its operations. The theory highlights why different approaches are adopted in managing cash and therefore enables the study to establish how the

various commercial banks have utilized these approaches and its effect on their financial performance. Different investors have different taste in liquidity where some may prefer illiquid assets. The more illiquid an asset is the more the interest rate. Liquidity in banks can be affected by several factors such as political instability in a country, like in the case of what happened in Kenya in 2007 and 2008 post-election violence, every investor from the affected area rushed to the bank with the desire to have his cash in the pocket.

Argument by Keynes was criticized by other authors such as Rothbard (2016), argued that, interest rate is influenced by other factors not liquidity preference only as Keynes suggested. The theory does not give the optimum amount of cash that can be held at a given time or a model that can be used to arrive at optimum amount. Keynesian theory was relevant to the current study as it considers short-run interest with no explanation on long run interest, therefore it address the issues of interest rate regulation and capital regulation on the financial performance of the commercial banks.
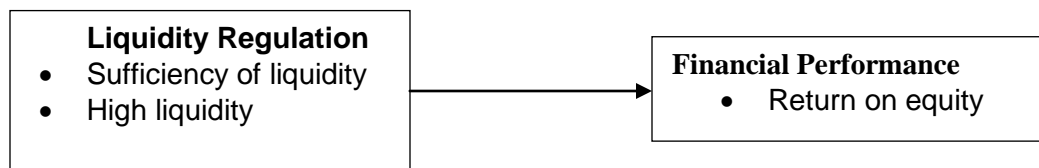
Conceptual Framework

Figure 1: Conceptual Framework

Loan Limits on Financial Performance of Microfinance Institutions

Loan limits are the maximum amount of money a lender will allow a consumer to spend using a credit card or revolving line of credit. The limits are determined by banks, alternative lenders, and credit card companies based on several pieces of information related to the borrower. They examine the borrower's credit rating, personal income, loan repayment history, and other factors, (Wakaria, 2016). Limits can be set for both unsecured credit and for secured credit. Unsecured credits with limits are generally credit cards and unsecured lines of credit, (Kairu, 2015). If the line of credit is secured backed by collateral the lender takes the value of the collateral into account. For example, if someone takes out a home equity line of credit, the loan limit varies based on the equity in the borrower's home.

When the lending institutions are assessing the loan limit of the borrower they use indicators such as, credit history, personal income and loan repayment history (Din 2017). According to Din credit history refers to the ability of the borrowed to repay debts and demonstrated responsibility in repaying debts. Later, Tahir and Memon, (2016) observed that

personal income is an individual's total earnings from wages, investment enterprises, and other ventures. The lending institution assesses the personal income of the borrower before issuing the loan (Kozmetsky, 2015).

Lenders don't want to issue a high loan limit for someone who won't be able to pay it back. If a consumer has a high loan limit, it means a creditor sees the borrower as a low risk borrower. For borrowers, longer loans signal shallower outreach because the most creditworthy and hence the least-poor usually get the longest loans (Conning, 2016). Term also matters because lenders usually allow borrowers only one loan at a time. Thus, if borrowers use loans to pay for periodic purchases, for example, monthly additions to inventory shorter terms would be more valuable than longer terms. On the other hand, if loans purchase fixed assets whose returns take longer to realize, longer terms would be more valuable both because such fixed-asset purchases are infrequent and because longer terms better match the size and timing of installments with the size and timing of returns from the fixed asset. In general, longer loans signal greater profitability but less depth of outreach, (Conning, 2016).

Empirical Review on Research Variables

Maringa (2017) conducted a study on the impact of financial regulations on the financial performance of commercial banks in Kenya: a case study of KCB bank. Specifically the study sought to determine the effects of financial regulations, to establish the effects of interest rate capping, to establish the effects of market structure and to determine if bank liquidity affects the performance of Kenya Commercial Bank. The researcher used secondary information sources which were obtained through reading relevant literature available in the library, various documents, publications and reports including journals and magazines. The research questionnaires were administered by the researcher himself, and respondents' data was analyzed through frequency and descriptive statistics. Data was presented with the aid of graphs and pie charts. The study established that the regulations are oriented towards achieving the development objectives of the country without having to sacrifice the prudential guidelines and financial sector stability considerations.

Mwongeli (2016) sought to investigate the effect of regulations on financial performance of commercial banks in Kenya. Particularly, the study sought to investigate the capital adequacy and the performance of the commercial banks as from 2010-2015. The target population was 43 commercial banks. Chi square test of independence was used to analyze the relationship between the two variables. The test was carried out on each of the ratios and the findings were that there is no relationship between regulations and financial performance of commercial bank. Most of the banks have been able to comply with the minimum capital requirement and the

government must continue to ensure that there is compliance of the stipulated guidelines in order to ensure the stability of the banking sector in Kenya.

Dzombo, Kilika and Maingi (2017) conducted a study on the effect of branchless banking strategy on the financial performance of commercial banks in Kenya. The specific objectives of the study were to analyze the individual effects of agency banking and electronic banking channels on the financial performance of commercial banks in Kenya and the combined effect of both agency and electronic banking on the financial performance of commercial banks in Kenya. The study adopted an exploratory research design. A survey of all the 42 licensed commercial banks in Kenya was done. Both primary and secondary data on branchless banking and financial performance of banks was obtained from the individual commercial banks, Central Bank of Kenya banking annual supervision reports respectively. Return on Assets (ROA) was used as the main indicator of commercial banks financial performance. The amount of investment in agency and electronic banking was used as indicator for agency and electronic banking. Data analysis was done using SPSS and STATA statistical software. Descriptive statistics, diagnostic tests and tests of hypothesis were done. Data was presented using tables and charts. Study findings indicated that when used in isolation; both agency and electronic banking had a significant negative effect on the financial performance of commercial banks.

Critique of the Existing Literature Relevant to the Study

Maringa (2017) conducted a study on the impact of financial regulations on the financial performance of commercial banks in Kenya: a case study of KCB bank. . The study established that the regulations are oriented towards achieving the development objectives of the country without having to sacrifice the prudential guidelines and financial sector stability considerations. The researcher used secondary information sources which were obtained through reading relevant literature available in the library, various documents, publications and reports including journals and magazines. However, the study focused only on the secondary data and left out the primary data. The current study used both the primary data and the secondary data.

Mwongeli (2016) sought to investigate the effect of regulations on financial performance of commercial banks in Kenya. Particularly, the study sought to investigate the capital adequacy and the performance of the commercial banks. The findings of the study revealed that most of the banks have been able to comply with the minimum capital requirement and the government must continue to ensure that there is compliance of the stipulated guidelines in order to ensure the stability of the banking sector in Kenya. However, the study only focused on the capital adequacy and the performance of the commercial banks and left out other variables like interest

rate regulation, credit regulation and liquidity regulation on the performance of commercial bank which were included in the current study.

Dzombo, Kilika and Maingi (2017) conducted a study on the effect of branchless banking strategy on the financial performance of commercial banks in Kenya. The specific objectives of the study were to analyze the individual effects of agency banking and electronic banking channels on the financial performance of commercial banks in Kenya and the combined effect of both agency and electronic banking on the financial performance of commercial banks in Kenya. Study findings indicated that when used in isolation; both agency and electronic banking had a significant negative effect on the financial performance of commercial banks. However, the study concentrated, effects of agency banking and electronic banking channels on the financial performance of commercial banks. Thus the findings of the study may not be applicable to the current study as the study variables differs. The current study sought to establish the effects of interest rate regulation, capital regulation, liquidity regulation and credit regulation on the financial performance of commercial banks.

Research Gaps

Maringa (2017) conducted a study on the impact of financial regulations on the financial performance of commercial banks in Kenya: a case study of KCB bank. The study was confined to KCB bank and the findings of the study may not be applicable to other banks. The current study will focus on different commercial bank including KCB bank. Mwongeli (2016) sought to investigate the effect of regulations on financial performance of commercial banks in Kenya. The study only focused on the capital adequacy and the findings may not be applicable to the current study as the study focused on different variables including like interest rate regulation, credit regulation and liquidity regulation on the performance of commercial bank. Dzombo, Kilika and Maingi (2017) conducted a study on the effect of branchless banking strategy on the financial performance of commercial banks in Kenya. The study was conducted on the branchless banking while the current study focused on the financial regulations and financial performance of commercial banks. Thus the current study sought to fill the gaps identified.

Summary of the Reviewed Literature

The study was anchored on the concept of liquidity preference theory and public interest theory. The liquidity preference theory posits that the need for cash to run the daily operations of a firm cannot be ignored. Entities should therefore invest adequate available funds in current assets for the success of its operations. The theory highlights why different approaches are adopted in managing cash and therefore enables the study to establish how the various commercial banks

have utilized these approaches and its effect on their financial performance. Different investors have different taste in liquidity where some may prefer illiquid assets. The more illiquid an asset is the more the interest rate. Liquidity in banks can be affected by several factors such as political instability in a country.

RESEARCH METHODOLOGY

Research Design

The study adopted the descriptive research design. The descriptive research design describes the present status of a phenomenon, determining the nature of prevailing conditions, practices, attitudes and seeks accurate descriptions (Mugenda, 2012). The descriptive study describes the phenomenon as it is on the ground without any manipulation of variables.

Population & Census

The target population refers to an entire group of individuals, events or objects that have a common observable characteristic or the total collection of elements that the researcher wishes to make some inferences (Mugenda, 2012). The target population was 11 listed commercial banks, those banks are; Equity Bank ltd, Housing Finance Company of Kenya ltd, NIC Bank ltd, National Bank of Kenya ltd, Diamond Trust Bank of Kenya ltd, Co-operative Bank of Kenya ltd, Stanbic Bank ltd, Barclays Bank Kenya ltd, Kenya Commercial Bank ltd, I & M Bank ltd and Standard Chartered Bank of Kenya ltd. A census method of 11 commercial banks in Kenya was adopted in this study, where data was gathered from all the eleven listed commercial banks.

Data collection Procedure

The data collection process began by getting a formal letter from the university which helps the researcher to seek a permit from the National Commission for Science, Technology and Innovation (NACOSTI). The permit together with the consent statement was then presented to the Central Bank of Kenya as a means of seeking authority to gather data from their institution. Data was acquired from the Central Bank of Kenya who is the regulator for commercial banks in the country.

Data Analysis and Presentation

Data analysis comprises of the minimization of accrued data to a manageable size, developing summaries, looking for patterns and applying statistical techniques. The collected quantitative in nature. Quantitative data was analysed by use of Statistical

Package for Social Sciences (SPSS) version 24. Descriptive and inferential statistics were employed in the study. Descriptive statistics involved the use of proportions, frequencies, mean and standard deviation. Multiple regression analysis was employed to determine the association among the dependent and the independent variables. The results of the analysis were presented in form of tables. Preliminary diagnostic tests was undertaken to ensure suitability of undertaking parametric statistics (correlation and multiple linear regression). The preliminary diagnostic tests include, linearity tests, multi-collinearity and normality test. The multicollinearity test checks on the degree of association (correlation) between independent variables (Walters, 2007).

FINDINGS AND DISCUSSION

The interpretation of the findings was made based on the mean and standard deviation. Standard deviation is a measure of the dispersion of a set of data from its mean.

Descriptive Statistics for the study variables

Liquidity Regulation for Commercial Banks

The researcher sought to establish the trends and to summarize the liquidity regulations for the sampled banks for the period of 5 years ranging from 2014 up to 2018. The summary of the findings is presented in descriptive statistics that includes the mean, median, standard deviation, minimum and maximum values as displayed in Table 1.

Table 1: Descriptive Statistics on Customer Deposits

Parameter	Liquidity
N	5
Minimum	188.6
Maximum	274.5
Median	227.9
Mean	228.18
Std. Deviation	35.3487

Source: CBK Reports

The findings indicate that the mean of the customer deposits as the indicator for liquidity regulation was Kenya Shillings 228.18 billion with the median of Kenya Shillings 227.9 billion and a standard deviation of Kenya Shillings 35.35 billion. It was also established that the

minimum deposits recorded was Shillings 188.6 billion in the year 2014 while the maximum was Shillings 274.5 billion in the year 2018.
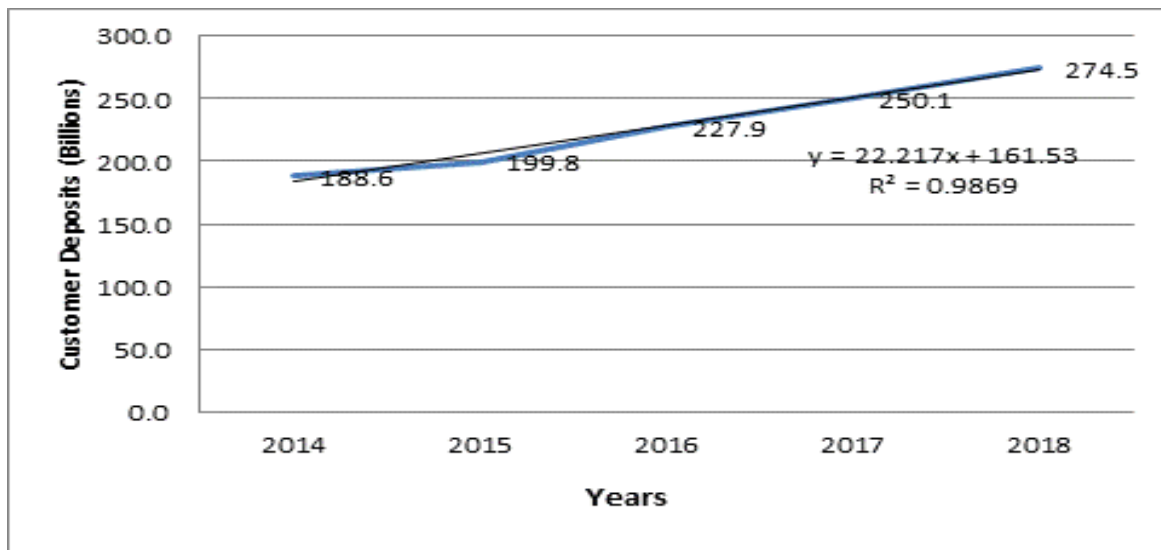

Figure 2: Liquidity Regulation Trend

Source: CBK Reports

The researcher plotted a time series trend for the customer deposits as the indicators for credit regulation from the year 2014 all the way to 2018. The curve recorded a peak at the year 2018 and the lowest point at the year 2014. According to trend line that was fitted to the curve, there is a relative increment in the interest rate with change in time. This is clearly shown by the positive gradient of 22.217 and the y-axis intercept of 161.53. According to the resultant R^2 = 0.9869 of the trend line, the change in the time explains 98.69 % of the change observed in the interest rate with only 1.31 % explained by the error term. The steady increment in the liquidity is in line with Pandey (2010) who suggested that there is need for cash to run the daily operations of a firm cannot be ignored. Liquidity in banks can be affected by several factors such as political instability in a country, like in the case of what happened in Kenya in 2007 and 2008 post-election violence, every investor from the affected area rushed to the bank with the desire to have his cash in the pocket.

ROE of Commercial Banks

The researcher sought to establish the trends and to summaries for the Return on Equity (ROE) for the sampled banks for the period of 5 years ranging from 2014 up to 2018. The summary of the findings is presented in descriptive statistics that includes the mean, median, standard deviation, minimum and maximum values as displayed in Table 2.

Table 2: Descriptive Statistics for ROE

Parameter	ROE
N	5 years
Minimum	13.3
Maximum	20.4
Median	14.4
Mean	15.86
Standard Deviation	2.84218

Source: CBK Reports

The findings indicate that the mean of the ROE was 15.86 % with the median of 14.4 % and a standard deviation of 2.84 %. It was also established that minimum interest rate recorded was 13.3 % in the year 2016 while the maximum was 20.4 in the year 2014.
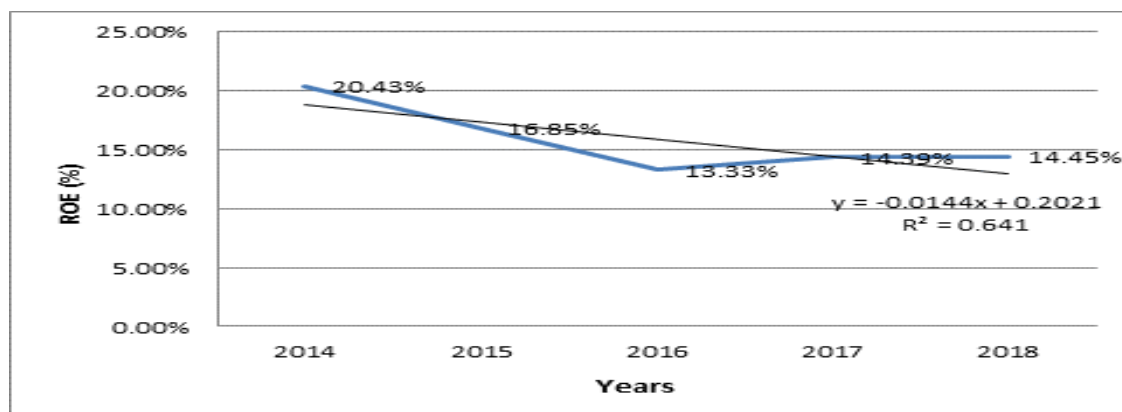

Figure 3: ROE Trend

Source: CBK Reports

The researcher plotted a time series trend for the government securities as the indicators for capital regulation from the year 2014 all the way to 2018. The curve recorded a peak at the year 2014 and the lowest point at the year 2016. According to trend line that was fitted to the curve, there is a relative increment in the ROE with change in time. This is clearly shown by the positive gradient of 10.104 and the y-axis intercept of 43.502. According to the resultant R^2=0.9745 of the trend line, the change in the time explains 97.45 % of the change observed in the ROE with only 2.55 % explained by the error term. The findings of the study are in line with a market perception survey conducted by the central bank's monetary policy committee (2019) which showed that for the first two months of 2019, Banks had more loans due to lower interest rates and consumer borrowing to fund education-related needs.

Test for Normality

Multiple regression analysis assumes that variables have normal distribution. Non-normally distributed variables can distort relationships and significance tests. In this study normal distribution of data was tested by use of Shapiro Wilk Test.

Table 3: Shapiro Wilk Test

	Statistic	Sig.
Liquidity Regulation	.940	.523

From the findings as indicated in Table 3, the data for all the four variables was normally distributed. The findings show that capital regulation (p-value=0.228), interest rate regulation (p-value =0.234), credit regulation (p-value=0.432), and liquidity regulation (p-value=0.523) were normally distributed

Inferential Statistics

The researcher undertook correlation and regression analysis to establish the nature and strength of the relationships between the independent and the dependent variables of the study.

Liquidity Regulation and Financial performance of commercial banks

The study further examined the correlation between liquidity regulation and financial performance of commercial banks in Kenya. The findings are presented in Table 4.

Table 4: Liquidity Regulation and Financial performance of commercial banks

		Financial performance of commercial banks
Liquidity Regulation	Pearson Correlation	0.760[*]
	Sig. (2-tailed)	0.035
	N	5

*. Correlation is significant at the 0.05 level (2-tailed).

The study as shown in Table 4 established that a strong positive correlation existed between liquidity regulation and financial performance of commercial banks (r = 0.760; p = 0.035 < 0.05). The results of the correlation analysis indicated that better liquidity regulation improve the financial performance of commercial banks. The findings are in agreement with Ehiedu (2014)

study which noted that liquidity had a direct influence on profitability of commercial banks. The study concluded that liquidity influenced the profitability of commercial bank.

Table 5 : Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
					Sig. F Change
1	.439[a]	.193	.132	.3873	.000

The R-squared in this study was 0.193, which shows that liquidity regulation can explain 19.3% of financial performance of commercial banks in Kenya.

Table 6: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.038	.145		.260	796
Liquidity Regulation	.596	.107	.548	5.578	023

The interpretations of the findings indicated follow the following regression model.

Y= 0.038+ 0.596X$_4$+ e

According to the intercept (β_0), when the three independent variables are held constant, the value of financial performance of commercial banks in Nakuru County will be 0.038. In addition a unit increase in liquidity regulation would lead to a 0.596 improvement in financial performance of commercial banks in Kenya.From these findings we can infer that capital regulation is affecting performance of the commercial banks in most, followed by liquidity regulation, credit regulation and interest rate regulation. Financial performance of commercial banks in Kenya determines the economic growth and development of the country (Barasa, 2018). Liquidity regulation are financial regulations designed to ensure that commercial banks have the necessary assets in order to prevent liquidity disruptions due to changing market conditions (Christensen & Abbas, 2010). It determines the financial stability of the commercial banks.

The study sought to test the hypothesis that there is no significant effect of liquidity regulation on performance of the commercial banks in Kenya.From the findings the p-value was 0.023 which was less the 0.05 significant level. Therefore, based on the rule of significance, the

study rejects the null hypothesis **(H$_{04}$)** and concluded that liquidity regulation has a significant effect on financial performance of commercial banks in Kenya.

CONCLUSIONS AND RECOMMENDATIONS

The findings indicate that the mean of the customer deposits as the indicator for liquidity regulation was Kenya Shillings 228.18 billion with the median of Kenya Shillings 227.9 billion and a standard deviation of Kenya Shillings 35.35 billion. According to trend line that was fitted to the curve, there is a relative increment in the interest rate with change in time. This is clearly shown by the positive gradient of 22.217 and the y-axis intercept of 161.53. According to the resultant $R^2 = 0.9869$ of the trend line, the change in the time explains 98.69 % of the change observed in the interest rate with only 1.31 % explained by the error term. The steady increment in the liquidity is in line with Pandey (2010) who suggested that there is need for cash to run the daily operations of a firm cannot be ignored. Liquidity in banks can be affected by several factors such as political instability in a country, like in the case of what happened in Kenya in 2007 and 2008 post-election violence, every investor from the affected area rushed to the bank with the desire to have his cash in the pocket

The study recommends that banks should maintain credit-deposit ratio as low as possible to avoid overreliance of deposits. The study further recommends that banks should regulate on the collateral requirement of borrowers to reduce the amount of bad loans. The study recommends that banks should maintain high liquidity in all seasons as this gives them a competitive advantage during tough economic times**.**

LIMITATIONS AND FURTHER STUDIES

The study was only limited to commercial banks and hence the findings might not be applicable to other financial institutions such as Saccos and MFIs**.** The study also only focused on listed commercial banks. The study suggests that similar studies should be conducted in other banking institution such as the Microfinance and the Saccos.

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