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CENTRAL BANK OF KENYA REGULATIONS ON LIQUIDITY AND FINANCIAL PERFORMANCE OF THIRD TIER COMMERCIAL BANKS IN KENYA

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Abstract

This paper examined the influence of Central Bank of Kenya regulations on liquidity and financial performance of third tier commercial banks in Kenya. The problem that made the researcher to conduct this study is that incidents of tier three commercial banks being put into receivership, others in liquidation, mergers and acquisitions have been on the rise in recent times. The study was guided by liquidity preference theory. The study was quantitative in nature and made use of causal comparative research design. The population for this study comprised of all tier three commercial banks in Kenya (22 in number) as per August 2018. However, when collecting data only 17 were utilised as they had been in operations from 2013 to 2017. The study made use of secondary data that was collected from commercial banks annual audited results and CBK annual supervision reports. The data was subject to descriptive statistics (percentages and means) and inferential statistics (correlations and linear regression). The study found out that liquidity ratio had negatively contributed to financial performance of tier three commercial banks in Kenya. The study concluded that majority of tier three commercial banks were unable to realise the statutory liquidity ratio (20%) which negatively affected their financial performance. The study recommended that tier three commercial banks need to encourage their account holders to increase their deposits to cushion themselves against liquidity and capital adequacy risks.

Keywords: Regulations, Tier III, Financial Performance, Commercial Banks

INTRODUCTION

Background to the Study

Commercial banking industry performs an important function in resource distribution and provision in countries across the world (Okoth & Gemechu, 2013). They channel money from those depositing to investors continuously. This can only happen if commercial banks generate adequate income to cover their operational expenses. Improved financial performance by commercial banks rewards shareholders for their investments that encourages additional investments and brings out fiscal development. Since great depression of 1940, research towards commercial banks institutions financial performance has been of great interest in these times. Flamini et al. (2009) indicates that financial performance of majority of banking institutions in Sub Saharan Africa in the last three decades had recorded moderate performance of only two percent which is below to their counter parts in developing countries (Khrawish, 2011). This research was guided by liquidity preferences theory. Liquidity preference theory is applied in situation where CBK sets the rate of interest to control the assets prices through demand for money (Mohamed, Mutegi & Muriuki, 2017).

CBK Prudential Regulations

CBK Prudential regulations are policies and rules that have been set up in a given country to monitor and regulate commercial banks operations (The Basel Committee on Banking Institutions Supervision, 1999). These new regulations by CBK came into effect in the year 2013 (although various amendments have been done) requiring all commercial banks to follow (Mwongeli, 2016). Regulations the research focuses consist of: liquidity ratios, capital adequacy ratios, interest rate and credit risk ratios. Omekara, Okereke and Ukaegeu (2016) argued that the financial stability of commercial banks could easily be determined through use of liquidity ratios. Commercial banks are liquid when they have adequate cash and have the capacity to mobilise additional cash quickly from various sources to ensure they meet payment requirements and financial commitments (Aymen, 2013). It is mostly used by commercial banks to address their short-term commitments (liabilities repayment date). Liquidity ratio is measured by total customer deposit/total loan (Vaita, 2017). Central Bank of Kenya compels commercial banks to preserve a least cash balances with them as an emergency supply against other liabilities and depositors (CBK, 2018). The minimum liquidity ratio that CBK requires commercial banks to hold is 20%.

Financial Performance of Commercial Banks

In measuring financial performance, two ratios are mostly used; Return on Assets (ROA) and Return on Equity (ROE). In Kenya, these indicators are used in showing the financial

performance of all commercial banks. ROE and ROA are mostly used to illustrate banking institutions in Kenya financial performance. Okoth and Gemechu (2013) define ROE as monetary ratio that explains how much profit a commercial bank has made in comparison to shareholders total equity they have invested or the ones appearing in its balance sheet. The higher the higher ROE, the higher the financial performance of commercial banks. Secondly, Khrawish (2011) defines ROA as a measure of profitability of commercial banks in comparison to the ratios of its income to its assets. When ROA values are higher, commercial banks appear to be more effective in resource utilisation.

Statement of the Problem

According to Basel (2010), prudential regulation of commercial banks aims at increasing the safety of the banking sector. Effective and efficient financial performance of commercial banks is a great indicator of nation's financial stability (Vaita, 2017). When banking industry fails to perform as expected, it has significant effect on nations economy hence the need for efficient regulation of the industry. Banking industry in Kenya has seen mergers and consolidation activities. Cytonn (2017) report showed that Diamond Trust Bank acquired Habib Bank, Giro Bank was acquired by I&M Bank, M-Bank acquired Oriental Commercial Banks and SBM Bank of Mauritius acquired Fidelity Commercial Bank and recently Chase Bank. Despite their huge numbers (22), most researchers have not developed interest in third tier commercial banks. Further, the recent incidents of merges, liquidation and statutory management of a number of tier three banks motivated the researcher to investigate whether the prudential regulations introduced could explain the trend.

Research Objective

The objective of the paper was to determine the influence of central bank of Kenya regulations on liquidity on financial performance of tier three commercial banks.

LITERATURE REVIEW

Theoretical Framework

This study was guided by Maynard Keynes (1936) liquidity preference theory to try to explain how regulations pertaining influences financial performance of tier three commercial banks. The liquidity preference is the demand for money that is mostly taken as liquidity. Keynes developed this theory to explain how interest rate was dependent on the demand and supply for money. This demand for money as an asset was taken to rely on interest pre-determined by not seizing bods (government bonds, liquidity assets and stocks). According to Keynes, interest rate may

not be a compensation for depositing and saving money since if an individual accumulate his/her money in cash and keeping it under the bed will not receive interest despite not utilising the accumulated cash. Panico (2008) says that in Keynesian evaluation, interest is a reward for separating with liquidity. Panico (2008) explained that the demand for liquidity is control by three factors; transaction motive, level of income and speculative motive. When interest rates are lower, customers would demand more cash until the rates increases significantly, which then would drive down bond price so that it is kept within the interest rate margin. Hence, the low the interest rate, the more money customers would demand from commercial banks (Rothbard, 2008). This theory of liquidity is used by central banks to regulate commercial banks to ensure they comply with the standard sets.

Liquidity Ratios

Olagunju, David and Samuel (2011) defined bank liquidity as the capacity of commercial bank to ensure that funds are available to meet financial obligations at fair prices at all times. When commercial becomes have adequate liquidity, it enable them to meet the following risks; time risk, funding risk and lending risk. Time risk is the capacity for bank to compensate for non-receipt inflows of money if the creditor fails to realise their obligation at a particular period. The lending risk is the capacity of bank to meet money request from popular clients (Domikowsky, Bornemann, Duellmann & Pfingsten, 2014). The funding risk is the capacity of commercial banks to substitute net outflows of money through non-renewal of wholesale money or withdrawals of retail deposits. Highly level of liquidity is associated with high bank financial performance (Dang, 2011).

Empirical Study on Liquidity Ratio and Financial Performance of Commercial Banks

In Rwanda, Karemera (2013) sought to determine the relationship between regulation and financial performance of commercial banks. They collected data from 8 commercial banks. The study found out that liquidity ratio had no significant relationship with financial performance of commercial banks in Rwanda (profitability). In Kenya, Odunga, Nyangweso and Nkobe (2013) studied how liquidity ratios affected operational efficiency of Kenya commercial banks. They found out that liquid asset to short-term liabilities ratio, operational efficiency ratio and total capital ratio did influenced commercial banks operational efficiency significantly. In a research done in Kisii County, Ali and Okibo (2015) determined prudential regulations effect towards financial performance of banks operating there. The focus was on; liquidity management. They found existence of strong positive relationship between liquidity management with commercial banks in Kisii county financial performance.

In other research studies, Gichinga and Tsuma (2016) evaluated factors influencing financial performance of Kenyan banks. They found out that change in liquidity influenced financial performance of banks. A research was done by Muriithi and Waweru (2017) to look at liquidity risk effect on commercial banks financial performance in ten-year period (2004-2010). The measurement for liquidity risk ratio was through Net Stable Funding Ratio (NSFR) and liquidity coverage ratio (LCR). Financial performance was measured through return on equity. It was found out that net stable funding ratio negatively affected commercial banks profitability whereas liquidity coverage ratio did not significantly affect profitability of commercial banks in Kenya. In conclusion, liquidity risk ratio was found to have negative influence on commercial banks performance. Vaita (2017) investigate the effect of liquidity ratio on financial performance tier one commercial banks in Kenya. Vaiata applied descriptive research design to the entire population of six tier one-listed commercial banks in Kenya. Findings showed that liquidity coverage ratio had insignificant effect on ROE and a positive significant effect on ROA. An increase in liquidity coverage ratio lead to a decrease in ROE and an increase in ROA. David and Muendo (2018) explored the effect of CBK regulations of microfinance banks financial performance. A descriptive design was utilised to collect data from 13 institutions, which are licensed and regulated by CBK with the respondents forming a workforce staff of 82. Primary and secondary data was collected. They found out that liquidity level was also found to be high above the 20.0% threshold.

MATERIALS AND METHODS

This research use causal comparative research design. According to Ogula (2009), causal comparative (also called ex post facto) research are not experimental and they evaluate the cause and effect relationships. The design also permitted use of correlations to find out whether relationship exists between independent (liquidity regulation) and dependent variable (financial performance). The target population for this study were all (22) third tier commercial banks operating in Kenya. The study utilised secondary data to provide answers to the study objective. Secondary data was obtained from secondary sources (CBK and third tier commercial bank websites) and commercial banks annual audited results to maximize on accuracy. The period to which data for this study was collected was from 2013 up to 2017. Data was collected from the year 2013 because that is the time new CBK regulations started being implemented by commercial banks. Secondary data collected from CBK annual supervision reports and commercial banks annual audited published results was analysed using descriptive; means percentages and inferential statistics; correlations, and linear regression analysis. SPSS) version 21.0 software package was used as a tool to help determine the effect of independent

variable on dependent variable. Further, Microsoft Excel (2010) aided in computing descriptive statistics.

RESULTS AND DISCUSSION

Descriptive Analysis

The following sections presents the descriptive analysis of research data collected on; financial performance of 17 commercial banks based on the following indicators; ROE and ROA. Further, presentation is made on the following regulatory factors; credit risk management, capital adequacy ratio, liquidity ratio and interest rate. Figure 1 shows the return on assets value for the 17 commercial banks in the period 2013 – 2017.

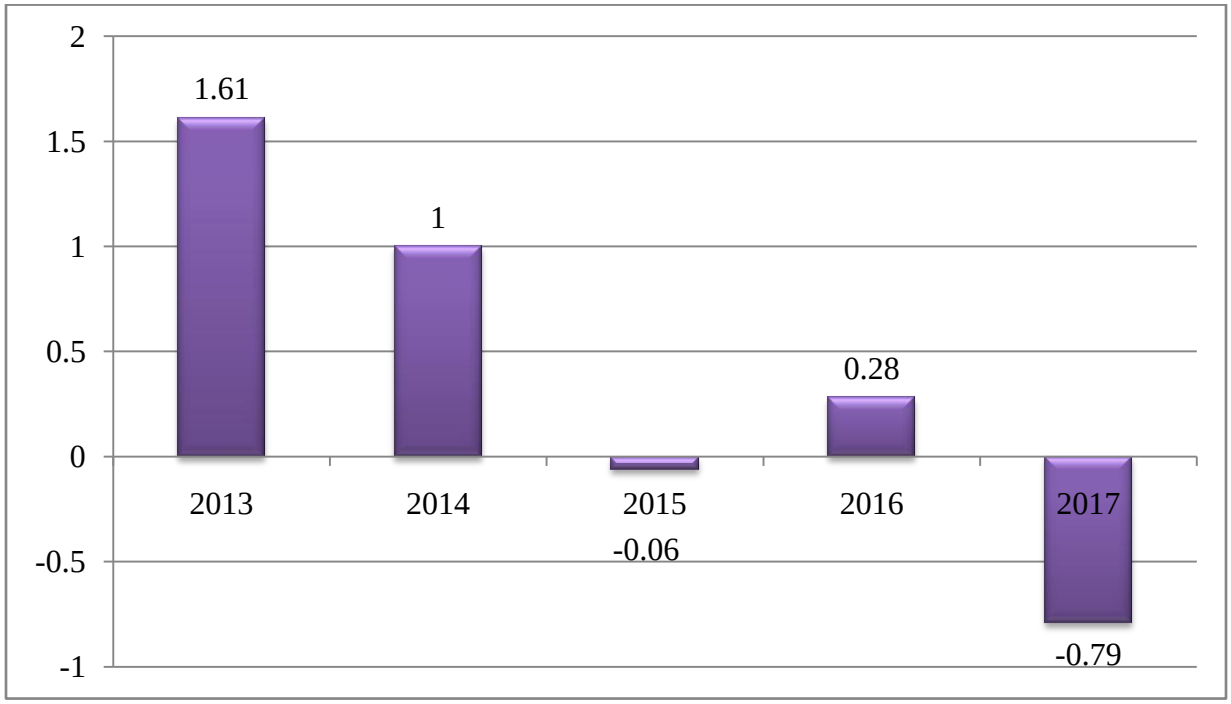

Figure 1 Return on Assets Value for Third Tier Commercial Banks (2013-2017)

Figure 1 shows that the return on assets value for third tier commercial banks under the study has been inconsistent and poor compared to second tier and first tier commercial banks in Kenya. For instance, the ROA was 1.61 in 2013, which then slumped to 1.0 in 2015 and later recorded loss in 2015 to post -0.06 and bounced back in 2016 to 0.28 and decreased further by -0.79 in 2017. This could be attributed to the regulations that were brought about in the last five years and therefore affects the performance of these small banks. Further, data on return on equity was collected from the said banks and results are presented in Figure 2.

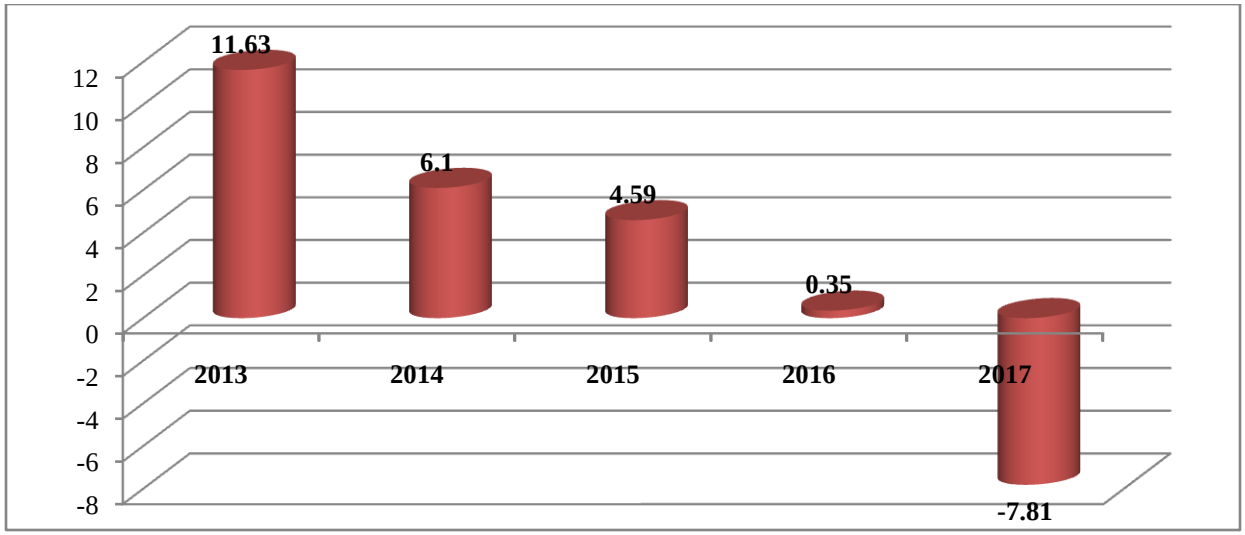

Figure 2 Return on Equity Values for 3rd Tier Commercial Banks (2013-2017)

The return on equity ratio data for third tier commercial banks studies has been declining significantly in the last five years. For instance, average ROE for the 17 banks was 11.63 in 2013 later slumped by a half in 2014 to record 6.1, reduced marginally in 2015 to 4.59, then slumped to less than 1 to record 0.35. Further, in 2017, the performed recorded was negative (-7.81). This could be attributed by one bank (Spire One) which recorded -132.7 return on equity ratio in the year. Further, other banks also recorded negative ratios. This state of affairs suggests that majority of third tier commercial banks are struggling in making profits and therefore investors have nothing to smile at the end of each financial year.

The study also collected data on liquidity ratios maintained by 17 third tier commercial banks for the period against the statutory 20.0% required by Central Banks of Kenya (Figure 3).

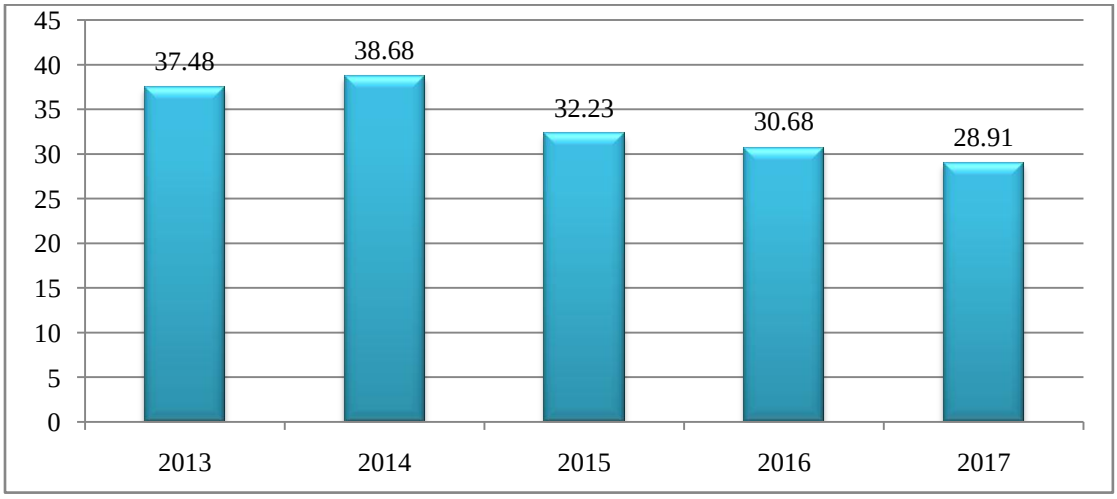

Figure 3 Liquidity Ratio for 3rd Tier Commercial Banks (2013-2017)

Data presented above shows that majority of third tier commercial banks had maintained the liquidity ratios above the required 20.0% by CBK. However, from 2014, there has been a decrease in ratio from 38.68% to 28.91% in 2017. Nevertheless, the findings presented above shows that most of these banks have adequate liquid money to meet their short-term obligations without looking for ways of raising external capital when they become due.

Inferential Statistics

The study also conducted inferential statistics; correlations and regressions for the research variables; independent (liquidity ratio) and dependent ones (return on assets and return on investments).

Correlation Analysis

At first, a correlation analysis was computed to check on the relations between these variables. Table 1 shows the results.

Table 1 Effect of Liquidity Ratios on Financial Performance of Tier III Commercial Banks

Liquidity ratio		ROE	ROA
	Pearson Correlation	.049	-.007
	Sig. (2-tailed)	.852	.977
	N	17	17

According to the findings, liquidity ratio was found to have a weak positive effect on return on equity (r=0.049) but negative effect with return on assets (r=-0.007). This implies that liquidity ratios did not significantly predict the performance of tier three commercial banks and other factors could have come into play. The results are supported by Okoth and Gemechu (2013) who found out that liquidity ratio was positively related to ROE and ROA despite the association being found to be weak. This was due because it is a factor, which is more related with fulfillment of customers (depositors) obligations, compared to investments.

Linear Regression Analysis

The study also conducted linear regression analysis to establish the influence of central bank liquidity ratios regulations on financial performance of tier three commercial banks in Kenya. The assumptions that are made are that; there exists linear relationship between the dependent and at least one independent variable. The results for ROA and ROE are given in the Table 2 and 3.

Table 2 (a) Model Summary ROE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.049[a]	.002	-.064	.17590	.002	.036	1	15	.851

a. Predictors: (Constant), LR

The model summary output shows that the correlation coefficient CBK liquidity ratio regulations is R=0.049 which shows existence of weak positive degree of relationship between CBK liquidity ratio regulations and tier three commercial banks return on equity ratios. Further, the R square shows that 0.2% of change in ROE can be explained by liquidity ratio regulations that were studied. The rest 98.8 could be explained by other factors that were not studied in the research.

Table 2 (b) Coefficients[a] ROE

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.007	.198		-.036	.972	-.429	.415
	LR	.110	.575	.049	.191	.851	-1.116	1.336

a. Dependent Variable: ROE

Data shows that the following linear equation:

$y = -0.007 + 0.11x$

This implies that there exists a weak positive coefficient between the liquidity ratios and performance of tier three commercial banks in Kenya as reflected through ROE. The ROE values are low suggesting that some commercial banks were underperforming while others recorded negative growth rate.

Table 3 (a) Model Summary ROA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.011[a]	.000	-.067	.02661	.000	.002	1	15	.968

a. Predictors: (Constant), LR

The model summary output shows that the correlation coefficient CBK liquidity ratio regulations is R=0.11 which shows existence of weak positive degree of relationship between CBK liquidity ratio regulations and tier three commercial banks return on asset quality ratios. This implies that liquidity ratio could not sufficiently explain the changes in dependent variable.

Table 3 (b) Coefficients[a] ROA

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.005	.030		.173	.865	-.059	.069
	LR	-.004	.087	-.011	-.041	.968	-.189	.182

a. Dependent Variable: ROA

Data shows that the following linear equation:

$y = 0.05 - 0.04x$

This implies that there exists a weak negative coefficient between the liquidity ratios and performance of tier three commercial banks in Kenya as reflected through ROA. The findings shows that the study variable had minimal or no effect on ROA and could be due to the fact that some banks were recording negative performance in ROA while others performance was low.

CONCLUSIONS AND RECOMMENDATIONS

Results showed that over the three-year period, majority of the seventeen banks studied had complied with the threshold set at 20.0%. Instances of third tier commercial banks not attaining the required liquidity level over the period was found to be on rare occasions. An average liquidity level of 33.59% over the five-year period was obtained. A closer look at the statistics showed a significant reduction in liquidity levels across the 17 banks from 2013 (37.4%) to 2017 (28.91%). This value could be explained by the fact that majority of these banks had increased customer deposits to significant level. To many scholars, deposit from customer is one of the cheapest source of capital as they have high margin between lending rate and deposit to which they utilise to generate profit. This has made also majority of commercial banks in the country to try and source for resources (funds) locally. A negative association was found between liquidity ratios and financial performance of tier three commercial banks. The study concludes that due to weak regulations and management by individual banks, some commercial liquidity ratios

were below the required threshold (20%) therefore complicating their ability to meet short-term obligations. In general, the study finds out that despite their weak influence on financial performance of tier three commercial banks, the CBK liquidity regulations would bring stability and sustainability in the Kenya financial sector that has experienced shocks in the last five years. In recommendations, there is need for tier three commercial banks management to motivate their customers to save more money with competitive interest rates at the end of the year, this will increase their liquidity and capital to lend more money hence improved profits.

LIMITATIONS OF THE STUDY

The study was conducted among tier three commercial banks in Kenya therefore the results do not reflect the liquidity regulations or status among Tier I and II commercial banks in the country. Another limitation of this study is that variations occurred in terms of financial performance of commercial banks (using ROA and ROE) where some had negative outcomes and others had strong positive outcomes. Nevertheless, with increased regulations and monitoring, stability and consistency in performance would be attained by these groups of banks.

REFERENCES

Ali, G. R., & Okibo, W. B. (2015). Effects of Central Bank of Kenya prudential regulations on financial performance of Commercial banks operating in Kisii County. International Journal of Social Sciences Management and Entrepreneurship, 2(1), 262-273.

Aymen, B.M. (2013). Impact of capital on financial performance of banks: The case of Tunisia. Banks and Bank Systems, 8(4), 47-54.

Basel Committee on banking Supervision (1999). “Principles for the Management of Credit Risk”, CH – 4002 Basel, Switzerland Bank for International Settlements.

CBK (2017). Annual report. Retrieved 22-06-2018 from https://www.centralbank.go.ke/images/docs/CBKAnnualReports/2013annualreport.pdf

Dang, U. (2011). The CAMEL Rating System in Banking Supervision: a Case Study of Arcada University of Applied Sciences. International Business Journal, 3(9), 67-89.

David, J. K., & Muendo, D. (2018). Effect of Central Bank of Kenya Regulations on the Financial Performance of Microfinance Banks. The Strategic Journal of Business & Change Management, 5(1), 584- 623.

Domikowsky, C., Bornemann, S., Duellmann, K., & Pfingsten, A. (2014). Loan loss provisioning and pro-cyclicality: Evidence from an expected loss model (Discussion Paper 39), Frankfurt: Deutsche Bundesbank.

Flamini, V., Schumacher, M. L., & McDonald, M. C. A. (2009). The Determinants of Commercial Bank Profitability in Sub-Saharan Africa (No. 9-15). International Monetary Fund.

Gichinga, L., & Tsuma, M. W. (2016). Factors influencing financial performance of Commercial banks in Kenya: A case study of National bank of Kenya coast region. The International Journal of Business and Management, 4 (4), 64 - 69.

Karemera, J.M.V. (2013). The Relationship between Regulation and Financial Performance of Rwanda Commercial Banks. MBA Project, University of Nairobi.

Keynes, J. M. (1973). The general theory and after: defence and development. D. E. Moggridge (Ed.). Macmillan.

Khrawish, H.A. (2011) Determinants of Commercial Banks Performance: Evidence from Jordan. International Research Journal of Finance and Economics. Zarqa University, 5(5), 19-45.

Muriithi, J. G., & Waweru, K. M. (2017). Liquidity risk and financial performance of commercial banks. International Journal of Economics and Finance, 9 (3), 256-265.

Mwongeli, A.J. (2016). The Effect of Regulations on Financial Performance of Commercial Banks in Kenya. MBA Project, University of Nairobi.

Odunga R., Nyangweso, P., & Nkobe, D. K. (2013). Liquidity, capital adequacy and operating efficiency of Commercial banks in Kenya. Research Journal of Finance and Accounting, 4 (8), 76-80.

Ogula, P.A. (2009). A Handbook on Educational Research (2nd Ed.). Port Victoria: New Kemit Publishers.

Okoth, V.O. & Gemechu, B.K. (2013). Determinants of Financial Performance of Commercial Banks in Kenya. International Journal of Economics and Financial Issues, 3(1), 237-252.

Olagunju, A., David, A. O.& Samuel, O. O. (2012). Management and Commercial Banks' Profitability in Nigeria. Research Journal of Finance and Accounting, 2(7-8), 24-38.

Omekara, C. O., Okereke, O. E., Ukaegeu L. U. (2016). Forecasting Liquidity Ratio of Commercial Banks in Nigeria. Microeconomics and Macroeconomics, 4(1), 28-36.

Vaita, B. N. (2017). Effect of Liquidity on Financial Performance of Tier One Listed Commercial Banks in Kenya. MBA Project, United States International University – Africa.