

CENTRAL BANK PRUDENTIAL REGULATIONS AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

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Abstract: The study sought to examine the effect of central bank prudential regulations on financial performance of commercial banks listed at the Nairobi Securities Exchange, Kenya. The hypothesis of stakeholder preference, agency, and liquidity was reviewed to support study variables, and empirical evaluations related to research was reviewed. A randomized study design was conducted on 12 quoted commercialized banking establishments in the NSE was the research population. Secondary information for the survey was compiled from the Central Bank of Kenya's financial disclosures as well as yearly articles. The outcome produced by the analysis reported that capital regulation affected listed commercial banks' financial performance positively in a manner that is insignificant; liquidity and credit regulations inversely significantly affected financial performance; while foreign exchange regulations insignificantly in a way that is negative affected listed commercial banks financial performance at the Kenya's Nairobi Securities Exchange. The recommendation was that in order to improve the financial performance of listed Kenyan banks, the central bank authority should conduct a comprehensive review of the capital regulation to identify the effect of such on the overall financial performance. This would enable the management of the listed banks to plan and optimize their investment towards maximizing the banks' profitability.

Keywords: Capital Regulation, Liquidity Regulation, Credit Regulation, Foreign Exchange Regulation and Financial Performance.

1. INTRODUCTION

1.1 Background to the Study

Commercial institutions are of importance as a result of its functions of intermediation in economies which they perform (Muraina, 2018). In view of the growth and development of countries, there is a need to have a vibrant and well-functioning banking sector. The economic advancement of countries is thus achievable by the presence of an efficient banking sector (Kamande, 2017). Importantly, these significant roles can only be carried out when the commercial banks are able to achieve optimum financial performance thereby enabling them to cater for the operations costs that they incur in the process of intermediation (Ongore & Kusa, 2013; Karugu, Achoki & Kiriri, 2018). Thus, it is the link between financial performances of commercial institutions and advancement in the economy of countries.

In the context of developing countries, commercial banks over the years have experienced declining financial performance. The poor financial performances are largely linked to the absence of sound regulations and guidelines. This is further made complex by the difficulties to forecast the demand for money as well as fiscal pressure to rapidly expand the monetary base (Okoth & Gemechu, 2013). Generally in the context of developing countries, central banks have poor

records in terms of supervision. African commercial banks inadequate performance resulted to the collapse of certain banks namely Society General Bank Ltd, Alpha Merchant Bank Ltd, Savannah Bank Plc, (in the Nigerian context), while the Consolidated Bank of Kenya Ltd, Capital Finance Ltd, Trust Bank of Kenya, Continental Bank of Kenya Ltd as well as Chase Bank (in the Kenyan context).

In the context of Kenya, the banking industry has experienced several issues which affected the level of its performances. The challenges emanate as a result of poor regulatory framework (Ongore, & Kusa, 2013). The apex bank (Central bank of Kenya) stands as the Ultimate resort as well as commercialized banking institutions' banker within nation (Meshak & Nyamute, 2016). The Central Bank of Kenya's primary job is to maintain the country's monetary system in good working order by controlling the money supply, ensuring liquidity, and maintaining financial stability (CBK, 2016).

Prudential regulations are guidelines and set rules governing banking and investment services. In Kenya, all financial establishments are governed by the Kenyan central bank (CBK) and they are responsible for setting the prudential regulations. Thus, commercial banks are governed by the prudential regulations set by the apex bank of Kenya. Prudential regulations are essential in order to reduce bank financial and administrative crisis (Molefe & Muzindutsi, 2015). According to CBK (2019), the Central Bank of Kenya formulated 22 prudential regulations which cuts across credit, capital, investment, liquidity and foreign exchange. However, this study focused on Capital, Liquidity, Credit and Foreign Exchange Regulations.

1.2 Statement of the Problem

Banking establishments stands as one of most vibrant sectors that perform important roles of capital allocation and their future flows in economies (Borio, Gambacorta & Hofmann, 2015). Commercial banks function in facilitating savings mobilization and diversification (Udeh, 2015). They further function in providing money changing as well as payment processing services, assets transformation in respect to their maturity, quality, and denomination and over time control and management of risks (Bogale, 2019). The strength of the banking sector is therefore a key prerequisite towards ensuring the stability and growth of economy (Dembel, 2020). Hence, the need for prudential regulations by the apex regulator for purposes of ensuring smooth financial intermediation through optimum commercial banks' financial performance.

Despite the fact that apex Bank in Kenya has put in place some safety guidelines, the status of commercial bank's financial performance is in poor shape as reported by World Bank in 2020. The ROE was reported in 2010 to be 25.98% and this decreased in 2011 to 23.10%. Additionally, in 2012 a further decrease was recorded at 21.99% while also declining in 2013 to 20.94% and in 2015 to 20.88%. Furthermore, ROE was reported at 17.39% in 2018. The main objective of banks entails financial intermediation while maximizing owners' equity and bank assets through advancing loans to customers for consumption and investment purposes (Mafumbo, 2020). Hence, the declining performance of banks in Kenya has been an issue of high concerns which in turn forms a basis for this study.

Despite banking institutions' contributions towards economic expansion, many empirical studies have explored the scope as well as essence of the contribution of secured reforms to the finance performances of commercialized banking establishments but results as well as contextual, methodological and conceptual deficiencies may differ. Wanjiru (2016) found that capital regulation had significant result on ROA and insignificant result on ROE while liquidity regulation had insignificant result on Micro Finance Banks' financial performances in Kenya. The research however was centered on MFBs which are notably guided by varying prudential regulates, despite the Central Bank of Kenya being the apex regulator. Credit regulation, capital adequacy regulation and liquidity regulation have substantial effects on MFBs finance performances in Kenya, as recorded by Mwenda (2018). The two studies however were focused on MFBs which are based on smaller operational frameworks as compared to commercial banks thereby indicating a contextual gap. Tesfai (2015) reported that capital adequacy and liquidity had significant effect on ROE, ROA and cost income. Despite focusing on the commercial banking sector, the study failed to incorporate other prudential regulations which include credit and foreign exchange regulation thereby establishing a conceptual gap. Consequently, these two regulations among others were considered in this study.

A methodological gap was also identified in the case of the study by Ahmed (2015) which determined the how the exposure of Forex affects finance performances of Kenyan commercialized banking institutions', although the study revealed a negative effect, it however utilized both primary and secondary data. Kamande (2017) documented that asset quality, liquidity and capital adequacy had significant effect on the performance of finance but failed to incorporate foreign exchange regulation which identifies as a conceptual gap, and also the study was restricted to a timeframe of 2011

to 2015. Takon, Obim and Atseye (2019) revealed that capital adequacy had remarkable nexus with profitability which was however based on Nigerian Mega Banks which identifies as a contextual gap. The central bank prudential regulations effect on the financial performances of publicly traded commercialized banking institutions' at the NSE, Kenya was assessed in the light of the research gaps discussed above.

1.3 Objectives of the study

1.3.1 General Objective

The general objective was to examine the effect of central bank prudential regulations on financial performance of commercial banks listed at the Nairobi Securities Exchange, Kenya.

1.3.2 Specific Objectives

The following specific objectives were the basis of this study:

- i. To examine the effect of capital regulation on the financial performance of commercial banks listed at the Nairobi Securities Exchange, Kenya.
- ii. To determine the effect of liquidity regulation on the financial performance of commercial banks listed at the Nairobi Securities Exchange, Kenya.
- iii. To assess how credit regulation affects financial performance of commercial banks listed at the Nairobi Securities Exchange, Kenya.
- iv. Assessment of the effect of foreign exchange regulation on financial performance of commercial banks listed at the Nairobi Securities Exchange, Kenya.

2. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Stakeholder Theory

The proposition of stakeholders as initiated by Mitroff (1983) focuses on an extensive individual groups and/or institutions unlike the focus of agency theory which is largely on associations between principal and agents. These groups are referred to as stakeholder who fall either in the internal or external stakeholder category. Businesses are influenced by a large groups of individuals and not just the management and shareholder. The theory categorizes stakeholders into two groups namely: internal stakeholders and external stakeholders. The employees, managers and owners are categorized under the internal stakeholder group while community, suppliers, creditors, environment, government and customers are classified under the external stakeholders' group (Turnbull, 1994).

Mitchell, Vanburen, Greenwood and Freeman (2015) noted that various stakeholders form a large constituent of a bank providing moral support, legal support and financial performance. They opined that shareholders are entitled to great profits on their investment as board of directors is saddled with the mandate of turning their shares into profitable investments. Mackenzie (2014) supported the previous researchers by stating the negative consequence of not integrating stakeholders into the administration and management of the business as it results into unfruitful organizations goals and poor financial performance. Stakeholders' theory supports the notion that financial institutions' financial performances are a function of the activities of several stakeholders.

2.1.2 Liquidity Preference Theory

In 1936 Keynes established the Liquidity Preference theory and it holds the contention that financial organizations have the desire of holding liquidity due to several reasons. The theory holds the assertion that demand for money is informed by three different motives which are transaction motive, precautionary motive as well as speculative motive which facilitates the anticipation of changes in future prices changes, thereby allowing for participation in the financial assets (such as stock) acquisition (Keynes 1936).

The transaction motive for keeping or holding money is to be used for running day-to-day activities and fulfilling basic human needs such as feeding, transportation etc. People hold liquid for precautionary motive in order to avert risk and manage unforeseen circumstances. Precautionary liquid is mostly used as a contingency plan in times of crisis. The speculative reason for why people hold liquid is to manage speculation such as increase in food prices, hike in price of

fuel, inflation, scarcity, decrease in market value of shares etc. liquidity preference explores various reasons and motives why people need liquid.

The liquidity preference theory not only applies to borrowers but also shareholders and individuals. However, Investors prefer to purchase long term securities thereby needing less liquidity (Keynes, 1936). The nexus between prudential regulations (liquidity) regulations and financial performances is underpinned by liquidity preference theory.

2.2 Empirical Review

2.2.1 Capital Regulation and Financial Performance

In the survey of Tesfai (2015), capital and liquidity regulation were examined for their effect on financial performance (ROA, ROE, and net income) of commercial banks. The documentation with regards to capital adequacy and liquidity demonstrated significant effect on ROE, ROA and cost income. Despite focusing on the commercial banking sector, only a single bank (Habib Bank AG Zurich) was considered however 12 Kenya's NSE-quoted commercialized banking establishments, this present study was focused on.

Ndolo (2017) evaluated impact of privacy policies on the finance performances of commercialized banking establishments NSE-quoted between 2012 and 2016. The investigation collected secondary data and used descriptive and regression analyzes of panel data for data review. Was therefore observed that adequacy of capital guidelines included an impact negatively on the financial performances of Nairobi Stock Exchange-listed banking industry, as measured by the ROE. However, this present investigation employed ROA and NIM in addition to ROA as a profitability factor as the previous study only used ROA.

Prudential regulation was examined for it has an impact on performances of Kenya's Micro Finance banking establishments by Mwenda (2018). 13 microfinance banks were employed and their secondary data was gathered. Inferential and descriptive analysis was conducted on the data and which reported that capital adequacy effect on performance is positive. This current study, on the other hand, concentrated on listed Kenyan commercialized banking institutions on the NSE, with the former study limited to Microfinance banks.

Prudential regulations have a direct influence on the Profit growth of Nairobi Securities Exchange-listed banking institutions (NSE), Kenya, according to Akims and Akims (2019) having considered prudential regulations effect on Nairobi Securities Exchange (NSE) listed commercialized banking established in Kenya. Profitability t was measured based on ROA, and panel regression assessment was applied to evaluate data from bank reports from 2013 to 2017. This current study provided a more comprehensive outcome by using ROE as a measure of profitability and also used data provided between 2015 and 2020.

Kabochi (2020) conducted a study on 37 Kenya's banks in order to describe the connection capital adequacy has with bank's performance. Data was examined using correlation matrix in the survey using ROE and performance as a companies' performance that is financially measured, which demonstrates that capital adequacy is not substantially linked to asset performances. ROE was utilized as financial performances in this investigation rather than the ROE and efficiency used in the previous study.

2.2.2 Liquidity Regulation and Financial Performance

Kamande (2017) conducted research on prudential requirements effect on commercial bank financial performance. It was demonstrated that asset quality, capital adequacy and liquidity significantly affected financial performances. Importantly, the previous research was restricted to a time scope of 2011 to 2015, while the present study made findings on the effect of capital regulations, liquidity regulations, credit regulation and foreign exchange regulation on Nairobi Securities Exchange listed commercial banks' financial performance in Kenya.

Ndolo (2017) investigated liquidity regulations effect and how they influences the performances of Kenyan listed commercialized banking establishments on the NSE over a 5-year period (2010 to 2016). ROE was employed as profitability metric, and the model was utilized to assess the data was the panel-regression. The investigation revealed that liquidity management regulation positively affected NSE listed commercial banks. The present study improved on the previous study and conducts the study within the time scope of 2015 to 2020.

Amina and Fedhila (2018) looked at the outcome of prudential-regulations on the performances of Tunisia's commercial banks from 2001 to 2016 using liquidity regulation as the prudential regulation determinant and ROA & ROE as the

measure of profitability. The study discovered an advantageous influence of liquidity ratio on ROA and ROE. Despite the efforts of this study to evaluate the degree to which prudential regulations affect commercial banks performance, it was limited to Tunisia and only liquidity regulation was considered. This current study nonetheless bridged the gap by conducting the study in Kenya.

Using ROE as profitability measurement of Kenyan commercial banks listed in Nairobi Securities, an inverse effect of liquidity regulation was obtained insignificantly on profitability when Akims and Akims (2019) analyzed how the listed commercial banks profitability is being affected by prudential regulations utilizing panel data analysis to analyze the data gotten. Nevertheless, this present study explored other metrics of profitability which is ROE.

Kabochi (2020) did a research using correlation analysis to determine the correlation liquidity regulation has with Kenyan finance performances of their banking establishments. The obtained output demonstrated that liquidity regulation is correlated positively with the financial performances of banks using return on assets and efficiency as a estimate of finance performances. This research focused on NSE listed commercial banks and not all commercial banks.

2.2.3 Credit Regulation and Financial Performance

Otieno and Nyagol (2016) performed an inquiry into the correlation between Microfinance Banks' performance and credit management. With credit management being the independent variable and Performance of Microfinance banks being the dependent variable, the research findings using correlation analysis established a significant negative affiliation with the correlation with the Microfinance banks' financial performance. However, it was carried out within the confines of Microfinance banks. Thus, this study explored Nairobi Securities Exchange listed commercial banks in Kenya.

Darwish, Abdo, and Alshuwaiee (2018) researched the effects of the efficiency of credit management on Microfinance banking institutions loan performances in Kenya. The study employed the use of inferential analysis which reported an insignificant effect on their loan performance. Investigation was restricted to Microfinance banking institutions however not commercial banks and also focused on loan performance. Thus, this study therefore extended the research to NSE commercial banks listed in Kenya by examining how capital regulation, liquidity regulation, credit regulation and foreign exchange regulation affect their financial performance.

Kabochi (2020) performed a study on the way Kenya's commercial banks financial performances is affected by credit risk regulation. Using regression analysis, the report revealed a negative credit risk regulation effects on the commercial banks' finance performances NSE-quoted. Nevertheless, this research used both correlation and regression analysis on the data gathered and also conducts a research on the manner through which capital regulation, liquidity regulation and foreign exchange regulation in addition to credit regulation determine NSE financial performance in Kenya's commercial banks.

2.2.4 Foreign Exchange Regulation and Financial Performance

Ahmed (2015) observed Kenya's commercialized banking institutions' financial performances affects its exposure to foreign currency exchange. Using both primary and secondary data, it was reported that foreign currency exchange exposure has negative influence on banks performance. Despite the researcher's effort to set up the kind of effects foreign exchange regulation has upon commercial banking institutions' finance performances, the result was applied to all commercial banks whereas this inquiry was centered on the Kenya's Nairobi Securities Exchange (NSE) listed 12 commercial banks.

Tadesse (2015) investigated the magnitude foreign exchange rate effect on the profit growth of commercialized banking institutions in Ethiopia using ROE as a measure of profitability. Using panel regression analysis on the secondary data gotten, it was observed that commercial banks profitability was strongly and inversely affected by foreign exchange rate. Further results were made from the present study by extending the research to commercial banks listed at NSE, Kenya.

Between 2006 and 2015, Manyok (2016) looked at the nexus that exists amongst foreign exchange rate and its effects on the finance performances of South Sudan's commercialized banking institutions. Product obtained demonstrated effects of foreign exchange on their finance performances is insignificantly adverse. Although the investigation was limited to South Sudan, the present study focused on Kenya.

Nyandema and Lagat (2016) conducted a research on the impact of fluctuation that occurs with foreign exchange rate and how such affects the NSE commercial banks that performed financially and listed for the period 2006 and 2013. Using a design of correlation, multivariate linear regression to establish the relationship, the investigation demonstrated a

substantial positive currency rate of exchange as well as the NSE listed commercial banks' performance financially is correlated. However, the current study provided updated information on foreign exchange regulation using data gotten between 2015 and 2020 and thereby analyzes the data using regression and correlation analysis.

Nafiseh, Mosayeb and Hossein (2020) conducted a study using econometric panel model data to ascertain how foreign exchange rate affect Iranian banks' finance performances. It was reported that foreign exchange affected the banking institutions' financial performances positively. Nonetheless, the inquiries were focused on Iran, while this existing research focused on an African Country which in this context Kenya. Furthermore, the study was focused only on foreign exchange regulation while this current study focused on capital, liquidity and credit regulation alongside foreign exchange regulation.

3. RESEARCH METHODOLOGY

3.1 Research Design

In the layout of a investigation describes the comprehensive plan to solving a research problem. Casual research design is employed to analyze the cause and effect association amongst variables (Mugenda & Mugenda, 2013). Therefore, the study embraced the use of casual research design as it is an appropriate approach to investigating the affiliation independent variables have with the dependent variables and the effects of predictor parameters on response parameter.

3.2 Target Population

A demographic populace defines the overall group of the research study that is to be analyzed (Cooper and Schindler, 2009). All 12 Kenyan commercialized banking institutions registered on the NSE that has operated within 2015 up till 2020 make up the study's target population. Therefore, the entire 12 commercialized banking establishments NSE-quoted are the unit of analysis.

3.3 Sampling Design

The census sampling approach was adopted, in accordance to Mugenda and Mugenda (1999), noting that it is suitable when the target populace is considerably little. Consequently, samples were taken from all 12 Kenya's NSE-publicly trading commercialized banking institutions.

3.4 Empirical Model

Panel regression analysis served as the operation techniques for data evaluation where mathematical approach was stated as.

$$FIP_{it} = \beta_0 + \beta_1 CRE_{it} + \beta_2 LIR_{it} + \beta_3 CRR_{it} + \beta_4 FER_{it} + \epsilon_{it}$$

Where:

FIP_{it} – Financial Performance (Return on Equity)

β_0 - Constant

CRE_{it} – Capital Regulation

LIR_{it} – Liquidity Regulation

CRR_{it} – Credit Regulation

FER_{it} – Foreign Exchange Regulation

$\beta_1 - \beta_4$ = Regression coefficients

ϵ_{it} = Error term

4. RESEARCH FINDINGS AND DISCUSSIONS

4.1 Descriptive Statistics

In order to pinpoint the crucial factors that most accurately capture the behaviour of the survey's data of the NSE listed commercial banks, the data were subjected to a descriptive statistical analysis. Data overview is shown in Table 4.1.

Table 4.1 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min.	Max.
Financial Performance	83	0.1621	0.0910	-0.0910	0.4217
Capital Regulation	83	0.1260	0.0272	0.0181	0.1679
Liquidity Regulation	83	0.1723	0.1218	0.0120	1
Credit Regulation	83	0.1051	0.0893	0.0125	0.4757
Foreign Exchange Regulation	83	0.0043	0.0035	0	0.0145

Source: Study Data (2023)

The results displayed in as tabulated in 4.1, revealed that performance financially has a mean average of 0.1621. This is consistent with the financial performance standard deviation for the listed commercial banks, which is 0.0910. This showed that the survey's results ranged between the minimum and maximum ratios of -0.0910 and 0.4217. The capital regulation had a mean value of 0.1260. The capital regulation data standard deviation was 0.0272. The variance revealed that the survey's results fall between the minimum and highest values of 0.0181 and 0.1679. With a mean of 0.1723, liquidity regulation had a fluctuating value that was quite high at 0.1218. Regarding both lowest and maximum values, the data used fall between 0.0120 and 1. Data from Table 4.1 findings discovered that the mean average for credit regulation data was 0.1051. The outcome revealed that the data's standard deviation was 0.0893, meaning that the data used to indicate credit regulation spans between 0.0125 and 0.4757, representing the minimum and maximum values. The descriptive statistics for the foreign exchange regulation showed a mean of 0.0043 and a mean deviation from standard of 0.0035. The data for foreign exchange regulation contained two extreme values, with 0.0145 as the highest value and zero as the minimum value, respectively.

4.2 Model Specification test

The utilization of Hausman Test compares the parameters of the random and fixed effects model to discover the fitting survey model. The test endorsed the randomized model effect appropriateness as against the alternative hypothesis of fixed effect suitability. The assessment outcomes are as exhibited in Table 4.2.

Table 4.2: Model Specification Results

	(b)	(B)	(b-B)	Sqrt (diag(V _b -V _B))
	Fixed	Random	Difference	S.E.
Capital Regulation	-0.1901368	0.0140504	-0.2041872	0.0977596
Liquidity Regulation	-0.1422604	-0.1377476	-0.0045128	0.0093125
Credit Regulation	-0.3566703	-0.4019333	0.45263	0.0207069
Foreign Exchange Regulation	-1.246027	-1.098664	-0.147363	0.222866
chi2(4)	5.08			
Prob>chi2	0.2787			

Source: Study Data (2023)

The outcomes are illustrated in Table 4.2, supporting the null premise. Due to the results in Table 4.2, the estimator advised adopting the randomized effect-sized model rather than the fixed effect parameter model estimates. The evaluation provided a 0.2787 p-value, less compared to the p-value found in Table 4.2 and relies on the 0.05 threshold of significance. Drawing from the enquiry's outcome, the randomize size effect regression estimation was favored to the fixed effect framework.

4.3 Regression Analysis

Using the regression framework, the investigation's hypotheses were evaluated. This was done to ascertain how the explanatory factors affected the explained factor under investigation. The panel regression method was employed to analyze this effect, therefore, regressing the explanatory factors on the explained factor of listed banks. The survey's outcomes were displayed in Table 4.3 to demonstrate the effect of capital regulation, liquidity regulation, credit regulation, and foreign exchange regulation on listed commercial banks of Kenya's financial performance.

Table 4.3: Regression Results

Financial Performance	Coef.	Robust Std. Err.	Z	P> z	[95% Conf. Interval]
Capital Regulation	0.0140	0.2991	0.05	0.963	-0.5721902 0.600291
Liquidity Regulation	-0.1377	0.0310	-4.44	0.000	-0.198585 -0.0769103
Credit Regulation	-0.4019	0.1736	-2.31	0.021	-0.7423182 -0.0615484
Foreign Exchange Regulation	-1.0986	1.8208	-0.60	0.546	-4.667469 2.470142
_cons	0.2310	0.0352	6.56	0.000	0.1619489 0.30000953
R ²	0.4540				
Wald chi2 (4)	31.43				
Prob> chi2	0.0000				

Source: Study Data (2023)

The products revealed an r-squared of 0.4540. By implication, NSE listed banks financial performance in Kenya changes as a result of central bank prudential regulations by a percentage of 45.4%. Therefore, the dependent variable is affected significantly by other factors not incorporated in model thus lowering the illuminating power of the model (R-squared). In other words, the regressors still provide information on the listed banks' financial performance even if the data points deviate from the regression line. The model's significance was indicated by its F statistics value of 31.43 and p-value of 0.0000. This designates that performance of Kenya's listed banks is affected significantly by central bank regulations of prudential.

4.4 Hypotheses Testing

4.4.1: Effect of Capital Regulation on Financial Performance of Listed Commercial Banks in Kenya

The investigation outcome exposed that the capital regulation insignificant affect Kenya's listed banks' financial performance however, in a positive direction. With these findings, the null proposition that capital regulation insignificant effect on listed banks of Kenya's financial performance was debunked, demonstrating that capital regulation insignificant affected the Kenya's listed banks financial performance. The results of the inquiry could be linked to the stringent measures adopted by the central bank to ensure the soundness of the financial system thus, creating confidence in the banking sector in Kenya. The survey's findings are congruent with Mwenda (2018) reported that capital adequacy effect on performance was positive. Akims and Akims (2019) documented a direct influence on the Profit growth of Nairobi Securities Exchange-listed banking institutions (NSE), Kenya. Kabochi (2020) demonstrated that capital adequacy is not substantially linked to asset performances. Nonetheless, the outcome is at variance with Tesfai (2015) established that capital adequacy demonstrated significant effect on ROE, ROA and cost income The study's contradictory findings may have been caused by the study's varied execution environments.

4.4.2: Effect of Liquidity Regulation on Financial Performance of Listed Commercial Banks in Kenya

The outcomes also demonstrated that liquidity regulation has negatively affected significant the Kenyan listed financially performed commercial banks. Pursuant to the inquiry's null hypothesis, liquidity regulation insignificant affects the Kenya's listed performance that is financially inclined of the banks. The output rejected the null hypothesis, which suggests that liquidity regulation played no meaningful part in the Kenyan listed financially performed commercial banks. The significant of the outcome could be traced to the fact that the central bank has overtime review the liquidity of the bank to aid the banks intermediation role in Kenya. The outcomes agree with Kamande (2017) that documented that liquidity significantly affected financial performances. Amina and Fedhila (2018) discovered an advantageous influence

of liquidity ratio on ROA and ROE. Akims and Akims (2019) also noted an inverse effect on the financial performance. Contrarily, the outcome deviated from Ndolo (2017) who revealed that liquidity management regulation positively affected listed NSE commercial banks. The inquiry's findings can be related to the various conditions that the researches are carried out in.

4.4.3: Effect of Credit Regulation on Financial Performance of Listed Commercial Banks in Kenya

The analysis demonstrated that credit regulation had a significantly inversely affect the Kenya's listed performance that is financially inclined of the commercial banks. As to the hypothesis, credit regulation has insignificant effect on the financially performed Kenyan listed banks. The products of the evaluation supported the rejection of the null claim and suggested that credit regulation significantly affects the financially performed Kenya's listed banks. Attributing the reason to the outcome therefore, the imposition of the central bank's regulation to avoid commercial banks from huge liability could have been linked to this outcome. The end result of the investigation is consistent with Otieno and Nyagol (2016) established a significant negative affiliation with the correlation with the Microfinance banks' performance financially. Akims and Akims (2019) discovered a significantly inverse effect of risk in credit regulation on the finance performance. Kabochi (2020) documented a negative credit risk regulation effects on the commercial banks' finance performance.

4.4.4: Effect of Foreign Exchange Regulation on Financial Performance of Listed Commercial Banks in Kenya

The results also demonstrated that foreign exchange regulation has negatively but insignificantly affected the listed Kenyan financially performed commercial banks. The survey's null hypothesis, owing to which the performance financially of listed banks is unaffected by the foreign exchange regulation, was accepted. The findings led to the conclusion that foreign exchange regulation had not significant affected the listed financially performed Kenyan banks. The reason to the direction of this outcome could be accredited to the fact that most of the banks have little investments abroad which has little effect of the Kenya's listed banks' financial performance. The conclusion aligned with Ahmed (2015) reported that foreign currency exchange exposure has negative influence on banks performance. Tadesse (2015) observed that commercial banks profitability was strongly and inversely affected by foreign exchange rate. Manyok (2016) demonstrated effect of foreign exchange on their finance performance is insignificantly adverse. The outcomes of Nafiseh, Mosayeb and Hossein (2020) and Nyandema and Lagat (2016) contradict the investigation's outcomes thus providing a positive effect on the performance financially. The distinctiveness that the firms have in various study areas may be to blame for the results' variation.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

The survey's main goal was to ascertain how central bank prudential regulations affected the Nairobi Securities Exchange listed commercial banks of Kenya's financial performance. In particular, the survey was used to investigate how capital regulation affected the listed performance of finance of the banks. Assertion from the investigation's conclusions, capital regulation had insignificantly effect on the performance of NSE listed banks finance. The commercial banks listed financial performance on the Kenyan NSE, in conclusion, was not significantly impacted by capital regulation of the central bank.

The objectives of the enquiry were categorised, and liquidity regulation was evaluated using the Kenya's listed banks' performance of their finances. Liquidity regulation had a significantly detrimental effect on the Kenya's banks' performance of finances listed, as per the investigation's results. The investigation's conclusion is that liquidity regulation had effects of significant on the Kenya's listed performance of the banks finances. Therefore, liquidity regulation implemented by the apex bank has enhanced the listed banks' financial performance in Kenya.

The findings were observed in light of the survey's declared objective, which was to investigate how credit regulation affects the performance of listed finances of the Kenyan banks. The products of the analysis suggest that credit regulation had affected significantly the Kenya's performance of listed banks' finances. The outcomes of the analysis observed that credit regulation influenced significantly the financial Kenyan banks performance listed.

Finding out how foreign exchange regulation affects Kenya's listed performance of the banks finances was the survey's core objectives. According to the survey's results, Kenya's foreign exchange regulations had no effect of a significant nature on the banks' in Kenya that are listed based of their performance financially. Discovered output unraveled that foreign exchange regulation effect on the performance of the banks finances listed in Kenya was significantly.

5.2 Recommendations

The discoveries as obtained as noted with regards to the factors in this investigation generated recommendations. The capital regulation had an insignificantly performance effect on the finances that is positive on Kenyan-listed banks. This suggests that in to boost the listed banks' financial performance, the central bank authority should conduct a comprehensive review of the capital regulation to identify the effect of such on the overall listed banks' financial performance in Kenya. This would enable the management of the listed banks to plan and optimize their investment towards maximizing the banks' profitability.

Liquidity regulation had significant but negative effect on listed Kenyan banks' performance of finances. Accordingly, the survey recommends that the management of the central bank should strengthen the liquidity of the banks to enable the banks meet their intermediation obligations. This would help the banks in maintaining sufficient liquidity to meet up with the daily needs of the customers this, providing value to the services offered by the banks thereby enhancing financial performance.

Credit regulation had a negatively affected significantly on listed Kenya's performance of the banks' financially. In view of the outcome of the inquiry, it is suggested that the central bank and the management of the bank should consolidate on the existing credit regulation to enhance the mobilization of funds from the deficit spenders to the surplus spenders to improve the banks interest incomes.

The outputs of the analysis demonstrated that foreign exchange regulation has insignificantly affected the listed banks of Kenya's financial performance. Using the investigation's results, the management of the central bank which has the mandate to ensure stability of the currency should review the foreign exchange rate regulation periodically to favour the commercial banks. This would allow for effective planning of the banks' investment thus, boosting their profitability potential.

5.3 Suggestions for Further Research

In relation to the outputs of the investigation on how the central bank prudential regulations effect on the performance of listed commercial banks financially in Kenya is attained, additional research may be conducted on listed microfinance banks, mortgage banks and other specialized banks. It is important to determine why capital and foreign exchange regulations have insignificant effect on the listed commercial banks' that performed financially at the NSE in Kenya.

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