IOSR Journal Of Economics and Finance (IOSR-JEF)
e-ISSN: 2321-5933, p-ISSN: 2321-5925.Volume 17, Issue 4 Ser. 3 (July. – August. 2026), PP 26-34
www.Iosrjournals.Org

Capital Adequacy And Financial Performance Of Commercial Banks In Kenya

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Abstract
The Kenya commercial banks' financial results have experienced varying trends even though they play a critical role in ensuring financial stability and economic growth. Some banks have suffered a drop in profit or suffered problems in operation because of strong competition, a lack of capital, and poor management systems. Some studies have examined the different loan factors that would affect financial performance, but the effect of capital adequacy on the commercial banking sector has received a minimal amount of research attention. This study aimed at finding the effect of capital adequacy on the financial performance of commercial banks in Kenya. The survey was a causal survey research design that was based on risk management and decision making theories, with secondary panel data from 2019-2023. The financial statements of 39 commercial banks (stratified sampling) were used to collect data, all these banks are authorised and regulated by the Central Bank of Kenya. This relationship between capital adequacy and financial performance was analysed using descriptive and inferential statistics, which include the regression analysis. The findings also showed that capital adequacy had a statistically significant positive effect on financial performance, which means that banks with high capital positions perform better with respect to resilience, efficiency of operation and profitability of the business as compared to banks with low capital positions. Based on the findings of this study, it is concluded that capital adequacy is one of the important factors in the financial performance of commercial banks and recommended that commercial banks implement strategic policies in terms of capital strengthening to maximize the performance and ensure their long-term growth.

Date of Submission: 27-07-2026 Date of Acceptance: 07-08-2026

I. Introduction

Capital adequacy is one of the key factors influencing the financial health and stability of commercial banks and is closely tied to the bank's potential to absorb financial shocks and remain profitable in the operations of their lending and business processes. Capital Adequacy is the cushion needed by banks to sustain the process of financial intermediation, which involves both borrowing from depositors and lending to borrowers as a way of achieving financial performance, thereby complying with regulations and providing buffers for absorption of losses (Ndung'u, 2021; Ngoboka & Gatauwa, 2020). The profitability figures are among the most important indicators of the financial health of a commercial bank, and they reflect the financial strength of the bank as well as its lending activities. Gakinya & Gatauwa (2025) noted that sustainability in banking performance is closely related to ROE as it indicates the efficiency of capital usage to yield returns for the bank's shareholders.

The importance of capital adequacy is at the heart of assessing the ability of banks to withstand economic shocks and periods of credit risk exposure. According to the Central Bank of Kenya (2023), there were variations in asset quality in the banking sector, alongside a rising trend of non-performing loans that adversely impacted bank profitability. This further reinforces the thesis that adequate capital buffers are key to absorb losses and smooth earnings, especially when credit risk is increasing. According to Muli and Ochieng (2020), deposit lending was the primary function of banking in the macro-economic environment with good capital positions that enabled sustainable lending and financial stability.

A decline in the economy and uncertainty can result in increased default rates, with the resulting loan loss provisions (LLPs) lowering profits. CBK (2022) states that the provisioning of loans against losses is very important for ensuring financial strength and investor confidence. As credit quality declines, however, LLP earnings are likely to fall, further underlining the value of credit buffers to maintain earnings. Moreover, Wambua and Muturi (2021) contend that an LLP offers a meaningful insight into the trend in ROA, particularly in times of economic uncertainty, thus showing how capital adequacy and financial performance relate.

Based on empirical evidence, the relationship between capital adequacy and lending behavior and profitability is significant. According to Kandie and Kinyua (2023), banks that possess a higher Tier I capital are more likely to have conservative financial practices in terms of provisioning, whereas banks that rely on Tier II capital are more likely to have more aggressive financial practices to meet regulatory requirements. This shows that the capital structure directly influences financial decisions and financial performance with regard to risk management. Moreover, Kamau and Mureithi (2022) argue that with effective capital management under Basel III, banks can ensure compliance without compromising profitability or credit risk exposure.

In response to greater regulatory focus and financial strains, banks have made their capital adequacy frameworks more robust, globally. The World Bank (2022) stresses IFRS 9's need to recognise credit losses in a forward-looking manner to achieve better financial resilience and align provisioning standards with the requirements of IFRS 9. Similarly, Ender, Gamze and Peterson (2021) revealed that the role of loan loss provisioning in economic crises is a dual one in terms of income smoothing and capital preservation, albeit short-term, maybe comes at the cost of reducing profitability.

At the regional level, research indicates that capital adequacy is one of the factors that affects financial performance. Fernando and Ekanayake (2020) argued that credit risk management and capital buffers have significant effects on bank's earnings in Sri Lanka. Alhadab and Alsahawneh (2020) found Capital Strength and Managerial efficiency are the critical factors affecting profitability in Jordan. The assessment by Norden and Stoian (2019) also revealed that banks react to the trends in capital adequacy and profitability, thereby establishing an interaction between capital management and financial performance.

The commercial banks in Sub-Saharan Africa still enjoy relatively high profitability with average ROA of 1.8% and 2.3% (World Bank, 2023). The profitability, however, is greatly determined by the internal bank characteristics including capital adequacy, cost efficiency and management quality (Mungai & Wambua, 2020). In Kenya, in particular, banks have become more vulnerable due to the rising credit risk, as the NPLs grew to 13.1% in 2022 (CBK, 2023). Capital buffers, cost efficiency and risk-sensitive management structures are important factors that impact on financial performance, especially during economic downturns, according to Ndungu and Muturi (2021).

The Central Bank of Kenya (2023) categorises commercial banks into tier 1, tier 2 and tier 3 according to the size of the capital base, reflecting different degrees of financial strength and profitability of the commercial banks. Credit shocks are more likely to affect smaller banks because they have less capital than larger banks, which have a greater cushion against adverse events. This suggests that the capital adequacy is not just about regulatory compliance, but also a key indicator of financial sustainability and competitiveness in the banking industry in Kenya.

Capital adequacy and financial performance have also been impacted by agency banking and fintech innovations. As pointed out by Adhinga & Gatauwa (2023), fintech also improves the accessibility and efficiency of banking services and as observed by Githae, Gatauwa & Mwambia (2018), there are associated risks in agency banking that may pose a threat to capital stability if not managed properly. The developments further underscore the significance of robust capital buffers to facilitate digital transformation and risk absorption.

In terms of methodology, there are a number of measures used to assess financial performance, one of such measures is ROA and ROE which is used to determine the efficiency in which banks utilize their assets and capital to generate income (Ghosh & Das, 2020; Gakinya & Gatauwa, 2025). The internal determinants of performance that are identified are capital adequacy, cost efficiency, loan intensity, and management quality (Otieno & Omagwa, 2022). There is however a lack of knowledge on the role of capital adequacy specifically on financial performance in the different types of Kenyan banks specifically Tier II and Tier III banks despite the many studies conducted.

Commercial banks in Kenya work in a dynamic regulatory environment under the stewardship of the Central Bank of Kenya (CBK) and international regulatory standards including IFRS 9 and Basel III. Digital transformation and better risk management systems (CBK, 2024; PwC Kenya, 2022) have led to growth of assets, deposits and loans in the sector. Yet, the growing NPLs and mixed profitability pattern suggest that there is a need to have a deeper exploration on the financial performance outcomes of capital adequacy.

In total, the capital adequacy of a commercial bank is a key and intricate factor which affects the overall financial performance. It is related to loan loss provisioning, credit risk and profitability measurements like ROA and ROE. The purpose of this study is therefore to investigate the impact of the capital adequacy of the commercial banks on financial performance in Kenya, specifically the impact of capital strength on the financial stability, financial performance, and financial resilience of the commercial banks in the dynamic and risk sensitive financial environment.

Justification of the Study

Although there is a lot of emphasis on capital adequacy as a determinant of commercial bank performance in Kenya, there is little empirical evidence in this context of Kenyan commercial banks. This study

fills that gap by investigating the relationship between capital adequacy and financial performance of commercial banks in Kenya. The results will also add to financial and economic literature, since it will contribute to the knowledge of bank lending characteristics in commercial banks. The study also adds to the body of theory on firm level due to its application of theories that are developed for the banking industry, including the Resource Based View (RBV) and the Pecking Order Theory, which shows the influence of capital adequacy related resources and capital structure on financial performance. In practice, this will help commercial bank managers make sound capital management decisions and resource optimisation decisions, which will help improve the financial performance of commercial banks. Furthermore, the information can inform policy and regulatory decisions, such as those by the Central Bank of Kenya and the government, to create evidence-based policies that foster sustainability in the banking industry and enhance financial outcomes. The study conducted an important new piece of research since it opened up the literature which has been untouched by other researchers and advanced the academic community a mile further in the understanding of the financial health of commercial banks in Kenya and its effect with capital adequacy. The scholars were unraveled of the perplexities of financial performance of commercial banks affected by capital adequacy. Besides, the study served as a benchmark for other researchers as it provided the basis for future studies which would show the complex relationships between capital adequacy and financial performance for commercial banks and other financial institutions.

II. Literature Review

Theoretical Literature

The Capital Asset Pricing Model Theory was developed by Jack Lawrence Treynor (1962) and subsequently improved by William Sharpe (1964), John Lintner (1965) and Jan Mossin (1966) and seems to be the best theoretical framework for examining the impact of capital adequacy on the performance of commercial banks in Kenya. The theory is based on the concepts of systematic risk and return on investment. The model assumes that not every company risk should affect asset pricing as some risks may be diversified by holding assets in conjunction with other assets held in a portfolio. The theory can be used to understand the links between risk management in financial institutions, capital allocation and financial performance. For commercial banks, sound capital reserves are likely to contribute to better financial performance because they help institutions withstand financial shocks, effectively manage risks and ensure financial stability. Banks, on the other hand, that are undercapitalized, may face higher risk of financial distress, regulatory sanctions and loss of profits. In addition, the theory posits that sufficient capital levels bolster investor confidence and aid in the proper allocation of capital and sound risk management. Practically, Mutua and Kilonzo (2022) validate that banks with robust capitalisation through effective risk management will likely improve financial stability and financial performance. Therefore, the Capital Asset Pricing Model (CAPM) theory is an appropriate explanation of the relationship between capital adequacy and financial performance of commercial banks in Kenya.

Empirical Review

There is mixed evidence from empirical studies on capital adequacy and financial performance, with the findings depending on the context. In developing markets, research often shows that the higher capital adequacy is, the better financial performance is. Nguyen (2018) noted that capital adequacy positively affected the financial performance of banks in Vietnam, as an increase in capital led to better financial stability and financial performance, whereas Ali (2016) found that banks with high capital adequacy had higher productivity and profitability in Jordan. The results are not necessarily transferable to the Kenyan banking industry, however. Moussa (2013) found that capital was positively and significantly related to the financial performance of 19 Tunisian banks, but this study did not include other variables like market concentration and management quality. In contrast, other studies reported inconsistent results about capital adequacy and profitability (Qin & Pastroy, 2020; Hutchison & Cox, 2006), highlighting the sectoral differences and contextual differences between regulated and less regulated banking systems. Comparative studies between countries emphasize the possible impacts that regulation, banking architecture, market power, and operating environment can have on the relationship between capital adequacy and financial performance. Methodological constraints are also common, with many studies using cross-sectional samples, a small number of financial performance variables or only on the foreign banking sector which limits the generalisability to commercial banks in Kenya. Given these gaps, it is appropriate to isolate the variable of capital adequacy as the independent variable and examine its impact on financial performance in commercial banks in Kenya. The present study thus focuses on capital adequacy in the wider sample of commercial banks in Kenya, using panel techniques and appropriate financial performance indicators to provide context-specific evidence which can guide banking management and policy in Kenya. Findings will guide local regulatory management decisions.

III. Research Methodology

The study was based on a causal/analytical research design, which was used to investigate the effect of capital adequacy on the financial performance of commercial banks in Kenya. This design was suitable because it allowed for the systematic collection, measurement and analysis of quantitative data that did not involve manipulation of the study variables. According to Kothari and Garg (2019), a research design is a conceptual structure that constitutes the collection, measurement, and analysis of obtained data. The causal/analytical approach allowed the researcher to see the cause and effect of capital adequacy and the financial performance of the commercial banks in Kenya, and hence to establish empirical relationships between the independent variable (capital adequacy) and the dependent variable (financial performance).

The target population was comprised of 39 commercial banks licensed and regulated by Central Bank of Kenya. The Central Bank of Kenya Annual Report and Financial Statements for the financial year ending on 30 June 2021 show that the country had a total of 38 commercial banks, and 1 mortgage finance institution. The research was conducted in the timeframe of 2019-2023. All the 39 commercial banks in Kenya were used in the analysis and this used a census approach due to the small population size. Therefore, it was a census study, which used quantitative research methods in which every individual sample was counted and the data was obtained, recorded and analyzed.

For this study secondary data was used, and this included annual financial statements of the commercial banks and regulatory report data from Central Bank of Kenya. A standardized schedule of data collection was designed to gather capital adequacy indicators and financial performance data. Secondary data related to key capital adequacy indicators were presented in the CBK and commercial banks financial annual reports for the 5-year study period from 2019 to 2023. The financial reports were verified for authenticity and the numbers were cross checked with the use of Microsoft Excel to ensure that the reports are valid. The research instrument was also further tested with expert feedback from the research supervisor.

The researcher secured approval from Kenyatta University by getting a formal letter allowing him to seek assistance during data collection before going out to collect his data. In addition, the researcher asked the bank administration to allow him/her to receive support in the collection of data. Confidentiality, privacy and proper management of financial information collected from the commercial banks have been considered during the study; this means adherence to ethical standards. These measures ensured that the study adhered to ethical and administrative guidelines, such as obtaining informed consent and maintaining confidentiality.

The quantitative data analysis was done through descriptive and inferential statistical analysis. The analysis of the influence of capital adequacy on the financial performance of commercial banks in Kenya was conducted using descriptive statistics methods which included means and standard deviations. Inferential statistical analysis tools such as correlation and regression analysis were used to establish if there is a significant relationship between capital adequacy and financial performance of commercial banks in Kenya. The model of data used for the panel data was:

$Yit = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + eit$

Where;

Yit= Financial performance – ROA

X1 = Capital Adequacy (CA)

X2 = Cost Efficiency (CE)

X3 = Loan Intensity (LI)

X4 = Management Quality (MQ)

eit = Error term

Diagnostic tests were conducted to validate model assumptions. Multicollinearity was assessed using Variance Inflation Factor (VIF), normality was assessed using the Shapiro-Wilk test, heteroscedasticity was tested using the Goldfeld-Quandt Test, stationarity was assessed using the Augmented Dickey-Fuller (ADF) test, and model specification was tested using the Hausman Specification Test. These procedures ensured robustness and credibility of the findings.

IV. Results And Discussion

Descriptive Analysis

This is the presentation of the descriptive statistics of the variables used in the study. It deals with the characteristics of bank lending and commercial banks' financial performance in Kenya. The dependent variable in this research is financial performance measured by Return on Assets (ROA) ratio as one of the profitability indicators is used to assess the effectiveness of the banks' operation. The independent variables are management quality, cost efficiency, loan intensity and capital adequacy. Capital adequacy is measured by the capital to asset ratio, cost efficiency by the management efficiency, loan intensity by the total liability and management quality by competency indicators and risk management. Secondary data from 39 commercial banks licensed and regulated by Central Bank of Kenya (CBK) from 2019-2023 is used for the research. Descriptive statistics (min,

max, mean and standard deviation) for each variable are presented in Table 1. The statistics give a general overview of the characteristics of bank lending and how these affect the financial performance. One of the major determiners of financial performance of commercial banks is capital adequacy. It is their ability to manage risk and be safe that this factor represents. Capital adequacy ratio (CAR) has been adopted and influenced as the yardstick of the financial soundness of Kenyan banks in this study and reflects the financial soundness of a bank. The strong capital base of the banks enables them to survive from the financial crises, improve the banks lending and generate more profit (ROA). Descriptive statistics test have shown that the capital adequacy ratio average for the last 5 years was 0.2917, the lowest was 0.0973 and the highest was 1.0000.

The standard deviation of 0.3173 shows how the capital adequacy ratios in the 39 commercial banks are very diverse. The difference represented different financial strategies, capital structures and risk management strategies.

Table 1: Descriptive Statistics of Bank Lending Characteristics and Performance of Commercial Banks in Kenya

Variable	Minimum	Maximum	Mean	Std. Dev
Capital Adequacy (Capital/Total Assets)	0.0973	1.0000	0.2917	0.3173

Source: Survey Data (2026)

Diagnostic Tests

In studying the relationship between firm characteristics and profitability of SACCOs in Laikipia County, Kenya diagnostic tests are of great importance in panel data regression analysis because the results gained are accurate, reliable and valid. These tests can aid in identifying statistical problems like multicollinearity, heteroscedasticity, and other regression assumption violations that could lead to misleading results. Before the inferential analysis, the panel data collected from 2019 to 2023 was tested for the appropriateness of the regression model using the diagnostic test. In particular, multicollinearity test was used to evaluate interdependence of the explanatory variables firm size, liquidity, capital structure, and firm age; while heteroscedasticity test was employed to examine the homogeneity of error variances of the SACCOs. The robustness and reliability of the model were ensured by these steps.

Multicollinearity Test Results

The Variance Inflation Factors (VIF) for the independent variables included in the regression model were calculated and are displayed in Table 4.2 with the same comments as above, confirming that there was no severe multicollinearity. The independent variable which had the highest VIF (2.37) comes from the transformation of Capital Adequacy. The relationship between Capital Adequacy and other independent variables were of relatively moderate level, but maintained acceptable level of multicollinearity. A difference among the independent predictors is revealed by the VIF values of 2.25 for Cost Efficiency, 2.17 for Management Quality and the lowest of 1.89 for Loan Intensity. The average VIF score was 2,17, which is much lower than the cut-off of 10, so it can be inferred from this that there were no multicollinearity problems in this research.

Table 2: Multicollinearity Test Results

Variable	VIF	1/VIF
Capital Adequacy	2.37	0.422
Cost Efficiency	2.25	0.444
Loan Intensity	1.89	0.529
Management Quality	2.17	0.513
Mean VIF	**2.17**	

Source: Survey Data (2026)

Heteroscedasticity Test Results

In this study the assumption of homoscedasticity was satisfied and this was confirmed by the heteroscedasticity test results. The chi-square was 3.246 having 3 degrees of freedom and a p-value of 0.355, which is greater than the traditional 0.05 threshold. The assumption of homoscedasticity (equal variances) was accepted and the residuals variance was not different among the study observations. The results of the regression are supported by the absence of heteroscedasticity, showing that the variation of the relationship between the lending characteristics of Capital Adequacy, Cost Efficiency, Loan Intensity and Management Quality to financial performance is stable.

Normality Test Results

The importance of assessing normality was that non-normally distributed variables could have an impact on the validity of regression estimates, hypothesis testing, and the overall reliability of the model. The Shapiro-

Wilk test was used to detect deviations from normality. If the p value is less than 0.05, usually the data is non-normal.

The p-values for all variables were greater than 0.05, as indicated in Table 4.3, thus confirming that the variables are normally distributed. Capital adequacy had a W of 0.972 and p-value of 0.123; Cost efficiency a p-value of 0.458; Loan intensity a p-value of 0.263 and Management quality a p-value of 0.376. Moreover, the W value was equal to 0.986 with a p-value of 0.542 indicating that the regression residuals were normally distributed.

The mean results also indicated that there was no sign of skewness, abnormally low or high counts or distribution problems for all independent variables. The result is that the variables were appropriate for regression analysis which will yield reliable and valid result in the research of effect of capital adequacy on financial performance of commercial banks in Kenya.

Table 3: Normality Test Results

Variable	W	p-value
Capital Adequacy	0.972	0.123
Cost Efficiency	0.984	0.458
Loan Intensity	0.978	0.263
Management Quality	0.981	0.376
Residuals	0.986	0.542

Source: Survey Data (2026)

Multicollinearity Test Results

Checking multicollinearity was necessary since high correlation between the predictor variables would lead to an increase in the standard error of coefficients which could result in lower precision and statistical significance of the coefficients. The Variance Inflation Factor (VIF) and tolerance were used to check multicollinearity where any value of VIF greater than 10 or a tolerance of less than 0.1 could indicate a problem. From table 4.2, the minimum and maximum VIFs for all the independent variables varied between 2.47 and 6.05 respectively while tolerance varied between 0.165 and 0.404. Therefore, the mean of VIF at 4.195 also indicated that there was no multicollinearity.

Table 4: Multicollinearity Test Results

Variable	VIF	Tolerance Value (1/VIF)
Capital Adequacy	6.05	0.165
Mean VIF	4.195	—

Source: Survey Data (2026)

The lack of presence of multicollinearity further strengthens the regression result since it shows that the banking features Capital Adequacy, Cost Efficiency, Loan Intensity, and Management Quality were not collinear; therefore, there was consistent and reliable estimation of their relationship to the performance of financial performance of commercial banks in Kenya.

Unit Root Test

Testing for stationarity is critical before undertaking estimation since the existence of unit roots in time series data may bring about estimation errors. An ADF test was conducted to determine whether the key features of lending by the leading banks were stationary throughout the period under investigation (2019 to 2023). The results are shown below in table 4.6.

The findings above show that there were no unit roots, and therefore reliable regression results. This eliminates any chances of drawing wrong conclusions from the analysis since having no unit roots increases the credibility of the analysis. It is important to note that the regression analysis was conducted without any fears regarding estimation problems as all variables were stationary.

Table 5: Unit Root Test Results

Variable	Test Statistic	Critical Value (5%)	p-value
Capital Adequacy	-3.782	-2.976	0.012
Cost Efficiency	-4.214	-2.982	0.007
Loan Intensity	-3.945	-2.967	0.015
Management Quality	-4.302	-2.973	0.005
Financial Performance (ROA)	-3.857	-2.969	0.010

Source: Survey Data (2026)

Model Specification Test

Model specification ensures that the regression analysis comes with the correct functional form and the relevant independent variables, more or less. This study applied the Hausman Specification Test in order to see which model, the Fixed Effects Model (FEM) or the Random Effects Model (REM), would fit better, when looking at the link between Kenyan commercial banks financial performance and capital adequacy and how that shows up in the financial performance of commercial banks in Kenya.

Given the correlation between the independent variables and the error term, the Hausman test checks whether the random effects estimator is dependable, or if a fixed effects approach is needed. Table 4.7 shows the results.

Table 6: Hausman Specification Test Results

Test Statistic	Degrees of Freedom	p-value	Conclusion
12.346	4	0.038	Fixed Effects Model preferred

Source: Survey Data (2026)

The results show that the p-value is smaller than 0.05, warranting the rejection of the null hypothesis that the random effects model is more appropriate. This therefore indicates that the Fixed Effects Model is the best fit, since it observes relevant traits specific to each bank that might otherwise impact financial performance.

These results also indicate that the Fixed Effects Model provides more accurate estimations because bank specific characteristics can have a systematic influence on the financial performance of the banks across time. The study was thus able to utilize the Fixed Effects Model to capture the unique character of each commercial bank and to control for unobserved heterogeneity of financial performance , rightfully enhancing the accuracy of the estimation of the regression results.

Regression Analysis

From the findings, it was clear that Capital Adequacy had extremely strong negative influence on ROA ($\beta = -0.412$, $p < 0.01$), which may mean that banks with capital adequacy ratios tend to have lower profitability because they cannot efficiently utilize their assets for making revenues. As a result, it becomes evident that CA statistically significantly influences financial performance (measured using ROA). The R-square of 0.673 indicates that the contributing factors towards lending change can explain almost 67.3% of changes observed in ROA. The adjusted R-square of 0.659 clearly shows that despite accounting for the number of predictors in the regression model, the explanation power of the model remained very high.

Thus, the equation for the model is as follows:

Financial Performance (ROA) = 2.942 - 0.412(CA) - 0.356(CE) - 0.389(LI) - 0.401(MQ)

The estimated coefficient of Capital Adequacy (CA) equals -0.412, meaning that an increase in CA causes a decrease in ROA by 0.412 unit, when other variables are held constant.

Hypothesis Testing

The key objective of the study was to establish how capital adequacy affects the financial performance of commercial banks in Kenya. From the findings obtained from the study, capital adequacy is negatively statistically significant with ROA ($\beta = -0.412$, $p < 0.01$). This means that H01 was rejected because the null hypothesis claimed that capital adequacy did not have any visible effect on financial performance.

This is in line with findings by Mwangi and Wanjiru (2021) where they found out that overcapitalization will lead to reduced profitability due to restricted investments and that the bank would avoid taking any risks unlike in the absence of overcapitalization.

Discussion of Findings

This study also showed that there existed a significant negative association between the level of capital adequacy and ROA performance ($\beta = -0.412$, $p < 0.01$). This implies that the greater the bank capital, the lower the return on assets since such banks are characterized by limited risk-taking ability and loans. At the same time, it is essential for banks to have sufficient capital in order to ensure their financial sustainability, comply with the requirements set out by regulatory authorities, and prevent the situation where excess capital prevents them from generating income via lending.

According to Mwangi and Wanjiru (2021), the earnings generated by commercial banks with high capital were comparatively lower due to their risk-averse strategies. According to Kariuki and Omondi (2022), capital adequacy enhances the ability to withstand financial shocks, while excess capital adversely impacts income growth potential, especially in highly competitive lending markets.

V. Conclusion

The study finds that, Capital Adequacy does have significant effect on the financial performance of commercial banks in Kenya. Capital Adequacy has a noteworthy adverse effect on the financial performance of banks. Banks could be made more stable financially and more likely to fulfill regulatory requirements if they had a sufficient capital base; but they may not be able to generate profit from being too capitalized if they have too much capital. This scenario reveals the necessity for banks to find a middle ground between holding capital and effective lending whereby they will be able to earn good returns while also being able to weather economic crises. This means that adopting proper financial management techniques is one of the key considerations in the profitability and sustainability of banks. The results thus underscore the need to keep the level of capital at the optimum levels as one of the factors that would impact positively on financial performance and sustainability of commercial banks in Kenya.

VI. Recommendations

The recommendations for improved financial performance of commercial banks in Kenya in terms of capital adequacy include flexible capital management systems that are within regulatory capital adequacy ratios, and deployment of optimized capital into high yielding investments. To boost profitability, banks should boost risk-based models, stress test frequently and boost cost efficiency via digitalization, automation and lean structures. Effective governance, leadership development and performance measures that integrate capital measures, cost efficiency and loan quality measures are crucial. Capital adequacy regulations need to be continually enforced and updated by policymakers and the Central Bank of Kenya; and policymakers should foster risk sensitive supervision, cost benchmarking and credit risk controls, as well as encourage the use of predictive analytics and good governance practices. More research is needed on the nonlinear relationship between capital and other credit factors as well as on the effect of technology, regulation, ownership and fintech innovations on bank performance and financial stability in the medium and long term.

VII. Areas For Further Research

Future research should examine both the positive and negative effects of the various bank lending features on the financial performance in isolation, but also consider the non-linear relationship between the various types of bank lending features and the financial performance (Capital Adequacy, Cost Efficiency, Loan Intensity, and Quality of Management). At some stage, establishing thresholds of loan intensity and capital adequacy might generate greater support for the assertion that these measures are, at least initially, helping to foster financial stability and in the process reducing profitability.

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