

## **DETERMINING THE RELATIONSHIP BETWEEN LIQUIDITY AND FINANCIAL PERFORMANCE OF LISTED COMMERCIAL BANKS IN KENYA**

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### **ABSTRACT**

**Purpose of Study:** The study sought to determine the relationship between liquidity and financial performance of commercial banks Listed in NSE, Kenya.

**Problem Statement:** Over the years, these institutions have played a pivotal role in the economy however, listed commercial banks in Kenya face several financial performance issues that threaten their stability, profitability, and overall contribution to economic development. One of the issues affecting the financial performance of Kenyan banks is credit risk management issues.

**Methodology:** The study adopted explanatory research study. The study targeted 11 listed commercial banks in Kenya for a period of five (5 years) covering between 2019 and 2023. The study conducted census of all the 11 listed commercial banks in Kenya. The researcher used data collection sheet to extract and compile the required secondary data. The study used both inferential and descriptive statistics.

**Result:** The findings revealed a strong negative and statistically significant correlation between liquidity and financial performance of listed commercial banks in Kenya.

**Conclusion:** Liquidity ratio has a statistically significant relationship with the financial performance of listed commercial banks in Kenya. Banks with higher liquidity ratios may experience lower short-term profitability due to the conservative approach to maintaining liquid assets.

**Recommendation:** The Central Bank of Kenya (CBK) should continue to enforce the minimum Capital Adequacy Ratio (CAR) to ensure the stability of the banking system.

**Keywords:** *Liquidity, Financial Performance, Return on Assets, Commercial Banks, Listed Banks*

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## INTRODUCTION

Financial performance is a measure of how well an organization can use its assets to generate revenues and profits. It is an essential aspect of business management, indicating the overall financial health and efficiency of an organization (Baharratai, 2019). Financial performance is typically evaluated using various financial ratios and metrics, such as profitability ratios, liquidity ratios, and leverage ratios. These metrics provide insights into an organization's ability to generate income, manage its debts, and sustain its operations over the long term (Waweru & Kalani, 2019). In the context of commercial banks, financial performance is crucial as it directly impacts their ability to attract investors, secure funding, and expand their operations. Commercial banks' financial performance is influenced by various factors, including interest rate policies, regulatory frameworks, credit risk management, and economic conditions, (Ongore & Kusa, 2020). Banks must maintain a delicate balance between profitability and risk management to ensure sustainable growth and stability. Effective financial performance management enables banks to optimize their resources, enhance shareholder value, and contribute to the overall stability of the financial system, (Nzotta & Okereke, 2021).

According to Moyer et al., (2020), financial performance is evaluated using profitability ratios, such as return on assets (ROA) and return on equity (ROE), which indicate how effectively an organization utilizes its assets and equity to generate profits. Ross, et al., (2021) emphasizes the importance of liquidity ratios, such as the current ratio and quick ratio, which measure an organization's ability to meet its short-term obligations. Additionally, Brigham and Houston (2020) highlight the significance of leverage ratios, such as the debt-to-equity ratio, which assess an organization's financial leverage and its ability to manage its debts.

In commercial banks, financial performance is measured using a combination of profitability, asset quality and capital adequacy metrics. Profitability is assessed using ratios such as ROA and ROE, which indicate the efficiency of banks in generating profits from their assets and equity (Pinto, 2019). Asset quality is measured using the non-performing loan (NPL) ratio, which indicates the proportion of loans that are in default or close to being in default,

(Bhadury & Pratap, 2019). A lower NPL ratio signifies better asset quality and effective credit risk management.

Globally listed commercial banks are recording different levels of financial performance. In China listed banks have experienced substantial growth, reflecting the rapid expansion of the country's economy. The liberalization of the financial sector and the opening of banking services to private and foreign entities have been pivotal in driving this growth. Major banks such as Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), and Bank of China (BOC) have consistently reported strong financial performance, characterized by increased assets, deposits, and loan portfolios (Liu, 2023). South Africa's listed banks, including major players such as Standard Bank, FirstRand, Absa, and Nedbank, have demonstrated significant growth and market positioning within the region (Munangi & Sibindi, 2020).

The financial performance of Kenyan commercial banks is measured using various indicators, including profitability, asset quality, and capital adequacy. According to the CBK, the return on assets (ROA) for Kenyan banks was 2.3% in 2020, indicating a moderate level of profitability (Central Bank of Kenya, 2020). The return on equity (ROE) was 13.2%, reflecting the efficiency of banks in generating profits from shareholders' equity (Central Bank of Kenya, 2020). The capital adequacy ratio (CAR) for Kenyan banks stood at 18.5%, well above the regulatory minimum of 14.5%, indicating a strong capital base (Central Bank of Kenya, 2020). The asset quality of Kenyan banks, as measured by the NPL ratio, remains a significant concern, highlighting the need for effective credit risk management strategies. In this study financial performance of listed commercial banks will be measured through return on assets and return on equity.

Liquidity management is essential for ensuring that banks can meet their short-term obligations and continue operations without disruption. Effective liquidity management involves maintaining sufficient liquid assets to cover withdrawals and other immediate liabilities, thereby preventing liquidity crises that could lead to insolvency (Asli & Levine, 2020). This strategy is critical for sustaining the trust of depositors and other stakeholders. A key aspect of liquidity management is the maintenance of a diversified portfolio of liquid assets, such as cash, government securities, and other high-quality liquid assets (HQLAs). These assets can be quickly converted to cash with minimal loss in value, providing banks with the necessary liquidity to meet their obligations.

Liquidity ratios, such as the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR), are important tools for measuring and managing liquidity risk. The LCR requires banks to hold enough HQLAs to cover net cash outflows over a 30-day stress period, while the NSFR ensures that banks maintain a stable funding profile over a one-year horizon, (Fan, & Sheridan, 2019). These ratios help banks assess their liquidity position and take corrective actions when necessary. Stress testing and contingency planning are also crucial components of liquidity management. Stress tests simulate various adverse scenarios to assess the bank's ability to withstand liquidity shocks, while contingency plans outline the steps to be taken in response to liquidity crises, (Stijn & Feijen, 2021). Liquidity management is another essential aspect for listed commercial banks. They must ensure they have enough liquid assets to meet short-term obligations and support daily operations. Effective liquidity management is vital for maintaining operational stability and minimizing financial risk. Listed banks benefit from their access to public capital markets, which allow them to raise funds through equity offerings or bond issuances (Pandley, 2019). This access enhances their liquidity position and supports their ability to manage fluctuations in market conditions and customer demands.

### **PROBLEM STATEMENT**

The financial performance of commercial banks in Kenya has been a subject of concern in recent years due to various challenges impacting the sector. Despite efforts to enhance stability and profitability, Kenyan banks continue to face significant issues related to non-performing loans, regulatory compliance, and economic volatility. One of the primary issues affecting the financial performance of Kenyan commercial banks is the high level of non-performing loans (NPLs). According to the Central Bank of Kenya (CBK, 2020), the NPL ratio for Kenyan banks was 14.1%, significantly higher than the recommended threshold of 5%. In 2021, the NPL ratio improved slightly to 12.8%, although it remained above the recommended threshold (CBK, 2021). In 2022 the NPL ratio saw a slight decrease to 11.5%. In 2023 the NPL ratio for Kenyan banks continued to decline to 10.3%. This high NPL ratio indicates poor asset quality and ineffective credit risk management, leading to reduced profitability and financial instability, (CBK, 2023).

The financial performance of Kenyan commercial banks has shown mixed trends over the past few years. In 2020, the return on assets (ROA) for Kenyan banks was reported at 2.3%, indicating a moderate level of profitability. The return on equity (ROE) for the same year

stood at 13.2%, reflecting the efficiency of banks in generating profits from shareholders' equity. The capital adequacy ratio (CAR) for Kenyan banks in 2020 was 18.5%, well above the regulatory minimum of 14.5%, indicating a strong capital base (CBK, 2020). In 2021 the ROA increased to 2.5%, the ROE was reported at 14.5%, the CAR remained robust at 18.8%, (CBK, 2021). In 2022, the ROA increased marginally to 2.7%, the ROE for 2022 stood at 15.2%, the CAR remained strong at 19.2%, (CBK, 2022). In 2023, the ROA further increased to 2.9%, signalling continued growth in profitability, the ROE improved to 16.0%, highlighting banks' enhanced efficiency in utilizing shareholders' equity. The CAR remained stable at 19.0%, maintaining the sector's strong capital adequacy position (CBK, 2023). Despite these positive indicators in profitability and capital adequacy, the persistently high NPL ratio remains a serious challenge, impacting the overall financial performance and stability of the Kenyan banking sector.

Studies such as Njanike (2014) examined the general impact of credit risk on financial performance but did not differentiate specific factors like capital adequacy, loan loss provisions, or management efficiency. This study addressed the conceptual gap by focusing on individual components of credit risk management, such as capital adequacy and loan loss provisions, and their distinct relationships with financial performance. Kioko (2018) used descriptive analysis without fully accounting for causal relationships between variables like capital adequacy and financial performance. This study aimed to fill this gap by employing an explanatory analysis to establish the direct relationships between credit risk management indicators and financial outcomes in listed commercial banks. Kithinji (2021) focused on microfinance, limiting the application of findings to listed commercial banks in Kenya. This study specifically addresses this contextual gap by concentrating on listed commercial banks, providing relevant data for Kenyan financial institutions. The varied results from the studies thus underpins the need for the present study that assessed the influence of liquidity ratio on financial performance.

## **RESEARCH OBJECTIVE**

To determine the relationship between liquidity and financial performance of listed commercial banks in Kenya.

## **RESEARCH HYPOTHESIS**

**H0:** There is no statistically significant relationship between liquidity and financial performance of listed commercial banks in Kenya.

## **JUSTIFICATION OF THE STUDY**

The level of non-performing loans in the banking system is a cause for concern to different stakeholders including bank management which granted the loans, depositors whose funds have been misappropriated and trapped and regulatory agencies responsible for protecting the banking system. Kenyan banks have continued to invest huge sums of funds to credit risk management modelling with a view of maximizing returns and minimizing bank's risk exposure through provision for potential loan losses.

Meanwhile, empirical studies that examine the actual impact of credit risk management on bank's financial performance in Kenya have not captured capital adequacy in a unified framework according to Basel I, II and III accord. This notwithstanding, the results and findings from these studies produced mixed results thereby leaving the academia and policy makers in quandary. Some studies on this topic show that credit risk management impact on banks financial performance, but the impacts are of highly uncertain magnitude and conflicting direction. The implication that emerges from these studies is that the impacts of credit risk management on banks performance are theoretically ambiguous. This necessitates a study that may bring recent development on the influence of liquidity on financial performance of commercial banks listed by the National Security Exchange in Kenya.

## **THEORETICAL REVIEW**

The study was anchored on liquidity preference theory. The liquidity preference theory was formulated by Keynes in 1936. The theory focuses on the demand for liquid assets as a function of uncertainty and the preference for certainty. It posits that individuals and investors prefer holding cash and liquid assets (money) rather than illiquid assets due to the uncertainty of future needs and the cost of converting assets into money. Tobin (1958) introduced the concept of liquidity preference to understand how interest rates adjust to equate money supply and demand. He argued that monetary policy can influence interest rates to manage economic stability.

The strengths of liquidity preference theory lie in its explanatory power regarding individuals' and investors' behaviour in holding liquid assets. It provides insights into how changes in monetary policy, such as interest rate adjustments by central banks, impact the demand for money and overall economic activity, (Kahneman, & Tversky, 2014). The theory underscores the importance of liquidity management in financial markets and highlights the role of central banks in maintaining economic stability through monetary policy tools.

Critics argue that liquidity preference theory oversimplifies the complexities of modern financial markets and investor behaviour. Gilt (2014) suggested that factors beyond liquidity preferences, such as expectations about future inflation and economic conditions, also influence asset demands. Moreover, the theory's reliance on interest rate adjustments as the primary tool for managing economic activity may not adequately address financial market dynamics characterized by global interconnections and non-traditional monetary policy measures. Barrett (2016) critiqued aspects of liquidity preference theory, suggesting that the velocity of money and expectations about future interest rates are more critical in determining asset demands than the current interest rate alone.

For commercial banks listed on the NSE, liquidity preference theory influences their liquidity management strategies. Banks must balance the demand for liquid assets, such as cash and short-term securities, with profitability considerations. High liquidity preferences among depositors and investors may necessitate banks to hold higher reserves, affecting their liquidity ratios and profitability margins. Central bank policies, influenced by liquidity preference theory, impact banks' cost of funds and lending rates, thereby shaping their overall financial performance and ability to meet regulatory liquidity requirements. Therefore, the theory helps in explaining the relationship between liquidity and financial performance of listed commercial banks in Kenya.

## **EMPIRICAL LITERATURE REVIEW**

In South Africa, Khumalo and Ndaba (2023) examined the determinants of bank liquidity management strategies. Adopting a quantitative approach, the study analysed data from 15 commercial banks using regression analysis. The independent variables included liquidity ratios and market liquidity conditions, while the dependent variable was banks' liquidity positions. A stratified random sampling technique was employed to ensure representation across different bank sizes and ownership structures. The findings indicated that banks with

proactive liquidity management policies, including holding higher liquid assets, were more resilient to liquidity shocks and market volatility. However, the primary emphasis was on proactive liquidity management policies and market conditions affecting liquidity positions. The gap in comparison to the current is that while it investigates liquidity management, it does not address the broader context of credit risk management or include capital adequacy and loan loss provisions as additional variables impacting financial performance.

Chowdhury et al. (2022) investigated the impact of liquidity risk on financial performance in Bangladeshi banks. Employing a longitudinal research design, the study analysed data over five years to examine how variations in liquidity risk affected profitability metrics such as ROA and net interest margins. A sample of 20 banks was selected using systematic random sampling from publicly available financial statements. Statistical techniques, including regression analysis, were applied to assess the relationship between liquidity risk and financial performance indicators. The findings indicated that effective liquidity risk management strategies were crucial for maintaining profitability and stability in the Bangladeshi banking sector. However, the study lacks an analysis of capital adequacy and loan loss provisions, which are crucial components of credit risk management. In contrast, the current research which integrated these elements, providing a more comprehensive framework to assess how various credit risk management strategies collectively affect financial performance in Kenyan commercial banks.

Ouedraogo et al. (2021) explored the determinants of liquidity management practices in Burkina Faso's banking sector. Using a qualitative research design, the study conducted interviews with senior bank managers and regulators. The independent variables included regulatory requirements and internal liquidity policies, while the dependent variable was the adequacy of banks' liquidity buffers. Purposive sampling was employed to select 10 banks representing different ownership structures and market shares. Qualitative data analysis techniques were used to identify themes and patterns in liquidity management strategies. The findings underscored the importance of regulatory compliance and proactive liquidity planning in enhancing banks' resilience to financial shocks. However, the findings emphasized the importance of regulatory frameworks but do not include quantitative measures or the impact of loan loss provisions and management efficiency on financial performance. The current study addressed these factors, enabling a more detailed



understanding of how these components influence overall financial performance in listed commercial banks in Kenya.

Kamau et al., (2021) examined the relationship between liquidity and financial performance of commercial banks in Kenya. The study used descriptive and correlational research design on a sample of 39 commercial banks in Kenya. The researcher obtained data from commercial banks annual reports and central bank annual financial reports. Panel data analysis was used on financial data between 2017 to 2021. The results yielded a correlation coefficient of -0.1063 indicating a negative relationship between firms' liquidity and financial performance. This study found a positive correlation (Corr=0.6068) on the relationship between firm size and financial performance. The relationship between capital adequacy and financial performance was weak. The study advised commercial banks to reduce total liabilities and liquidity to optimal levels. In relation to credit the banks were advised to increase gross loans extended to customer, sell off non-performing loans to collection agencies and issue more shareholders capital. While it finds a negative correlation between liquidity and performance, it does not explore the moderating effects of capital adequacy or loan loss provisions. The current study aimed to fill this gap by examining how these elements interact and contribute to financial performance, focusing specifically on listed banks, thereby offering insights that are relevant to the Kenyan context.

Muthoga (2019) carried out a study on liquidity risks and profitability of commercial banks listed in Nairobi Securities Exchange. This study analysed the effect of net loan holdings, asset quality, and liquid assets holdings on the profitability of listed commercial banks at the Nairobi Securities Exchange, Kenya. The research adopted a causal research design where the study population comprised all the 11 listed commercial banks at the Nairobi Securities Exchange, Kenya, as of December 2018. The research used descriptive analysis and panel regression analysis for the data analysis. The panel regression analysis indicated that net loans holdings have a negative and significant effect on the profitability of commercial banks. Similarly, with respect to asset quality and profitability of commercial banks, the regression output revealed that the effect of asset quality on profitability is negative and significant. While this study provided insights into liquidity risks, it failed to incorporate capital adequacy and loan loss provisions, which are critical in assessing credit risk management. The current research addressed this oversight by exploring these factors and their combined effect on the financial performance of listed banks in Kenya.

A study by Muchiri (2023) determined the effect of liquidity capacity on the financial performance of commercial banks in Kenya. The study analysed the effect of net stable funding, liquidity coverage, liquidity gap, and provisioning for non-performing loans on the financial performance of banks in Kenya. This study was anchored on positivism philosophy and designed using explanatory research design. The applied panel data models (random effects) based on the outcome of Hausman specification tests to determine the effect of liquidity capacity on the financial performance of commercial banks in Kenya was used. The regression results revealed that net stable funding and liquidity coverage have a significant positive effect on financial performance of commercial banks in Kenya. Provisioning for non-performing loans liquidity gap and provisioning for non-performing loans had a significant negative effect on the financial performance of commercial banks in Kenya. However, the study failed to address the interplay between credit risk management components like capital adequacy and loan loss provisions. The current research integrated these elements, allowing for a more nuanced understanding of how liquidity interacts with other risk management strategies to impact financial performance in listed Kenyan banks.

### CONCEPTUAL FRAMEWORK

The independent variable of the study was liquidity, while the dependent variable of the study was financial performance. Figure 1 shows the conceptual framework for the study.



**Figure 1**

*Conceptual Framework*

**Source: Researcher, (2024)**

### METHODOLOGY

The study adopted longitudinal explanatory research design. The design allowed tracking changes in the variables across multiple time points (2019–2023) and observing how these changes affect financial performance. This was crucial in understanding the temporal nature

of credit risk management strategies and their long-term impact on financial performance, providing a more nuanced understanding. In addition the design helped to better establish causality between credit risk management practices and financial performance. Since financial performance (ROA) is influenced by long-term strategies. The study targeted listed commercial banks in NSE, Kenya for a period of five (5 years) covering between 2019 and 2023. As of 31<sup>st</sup> December 2023, eleven (11) commercial banks were listed in the Nairobi Securities Exchange; the study targeted 11 banks which are Absa Bank Kenya, CFC Stanbic of Kenya Holdings Ltd, Diamond Trust Bank Kenya Ltd, Equity Bank Ltd, Housing Finance Co. Kenya Ltd, I & M Holdings Ltd, Kenya Commercial Bank Ltd, NCBA group PLC, Bank of Kigali, Standard Chartered Bank Kenya Ltd, the Co-operative Bank of Kenya Ltd.

The study conducted a census of all the eleven (11) listed commercial banks in NSE, Kenya. The justification is on the basis that there were only eleven listed commercial banks, and therefore, there is no need to sample since the population is manageable. Census also enhances the accuracy and reliability of a study. The researcher used data collection sheet to extract and compile the required secondary data. The study collected secondary data relating to capital adequacy, liquidity, loan loss provision, management efficiency and financial performance of commercial banks Listed in NSE, Kenya. Secondary data entails information gathered from already existing sources (Mugenda & Mugenda, 2012). This set of data was acquired from published annual reports (Annual Audited Reports, 2019-2023) of the 11 listed commercial banks in Kenya. The study was limited to a time scope of 5 years starting 2019 to the year 2023.

Data analysis involves reduction of accumulated data to a manageable size, developing summaries, looking for patterns and applying statistical techniques. The study used both inferential and descriptive statistics. This was done with the aid of statistical software. Inferential statistics involved the use of correlation and regression analysis to identify the relationship between independent and dependent variables. All inferential statistics were tested at  $\alpha = 0.05$  significance level. Descriptive statistics involved the use of standard deviation and mean. The results were presented in tables, graphs, and charts.

### **Statistical Model**

A statistical model is a formal representation of relationships between variables in the form of mathematical equations or rules. It is used to describe, understand, and predict behaviors or

outcomes based on data collected through observation or experimentation, (Agresti & Finlay, 2019). The following model guided the study.

$$Y_{it} = \beta_0 + \beta X_{it} + e$$

Where.

$Y_{it}$  = Financial Performance (ROA)

$X_{it}$  = Liquidity Ratio

### Descriptive Statistics

The study sought to ascertain the relationship between liquidity and financial performance of listed commercial banks in Kenya. The references included Annual Audited Reports of listed commercial banks in Kenya for a period of five (5 years) covering between 2019 and 2023.

### Liquidity Ratio

Liquidity ratio was calculated by dividing current assets by current liabilities. Liquidity refers to the ability of a bank to meet its short-term financial obligations without having to sell off assets at a significant loss. It reflects how easily a bank can access cash or liquid assets to fulfil withdrawal demands by depositors or to cover other immediate financial needs. Commercial banks are required to maintain a minimum liquidity ratio of 20%. This ratio is calculated as the proportion of a bank's liquid assets (such as cash, reserves, and highly liquid securities) to its short-term liabilities. The research sought to establish the mean, maximum and minimum liquidity ratio of each of the 11 listed commercial banks in Kenya. The findings are indicated in Table 1.

**Table 1**

#### *Liquidity Ratio*

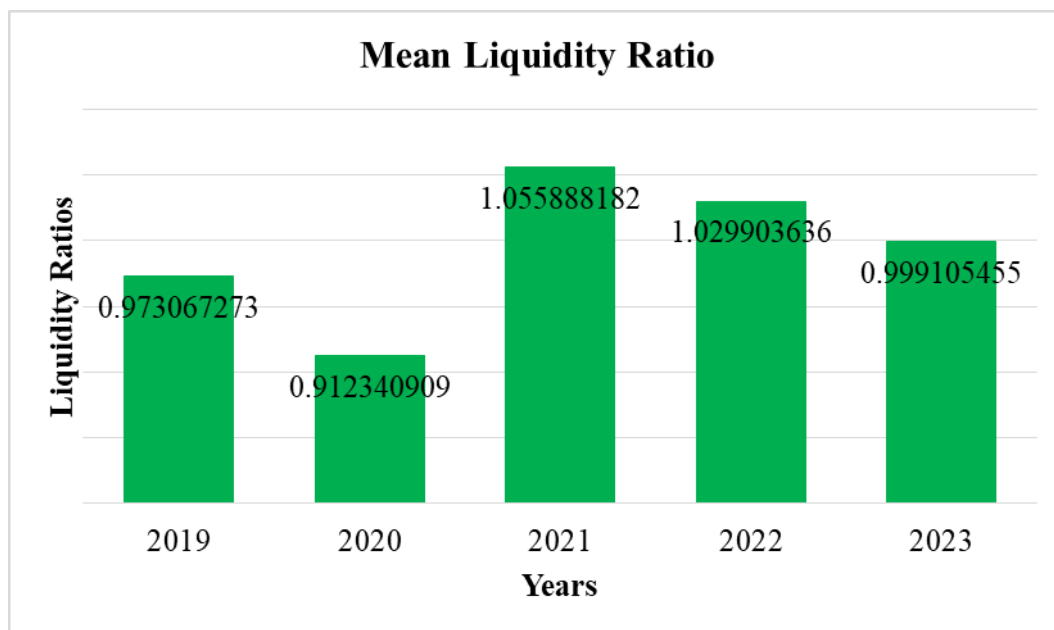
Liquidity Ratio		
N	Valid	55
	Missing	0
Mean		.9940614
Std. Deviation		.52978033
Minimum		.01380
Maximum		1.88893

**Source: Research Data, 2024**

According to the findings of the study, the average Liquidity Ratio of the listed commercial banks was approximately 0.99, which suggests that, on average, commercial banks have near equilibrium between their liquid assets and short-term liabilities. The significant standard deviation of 0.53 indicates considerable variation in liquidity among the commercial banks. The range from 0.01 to 1.89 shows that while some commercial banks are close to having sufficient liquidity, others may have liquidity ratios that are either barely adequate or considerably higher. According to Nyaga et al. (2020), some commercial banks in Kenya are presently facing liquidity challenges, such as the National Bank, Consolidated Bank, and Development Bank of Kenya. To facilitate commercial banks' liquidity management, commercial banks are currently required to maintain their CRR based on a daily average level from the 15th of the previous month to the 14th of the current month and not to fall below a CRR of 3 percent on any day.

**Trend of the Liquidity Ratio of Listed Commercial Banks for 5 years (2019-2023)**

In addition, the study sought to determine the trend of the liquidity of the 11 listed commercial banks in Kenya for 5 years. The findings are indicated in Figure 2.



**Figure 2**

*Mean Liquidity Ratio*

From the findings, in 2021, the liquidity ratio of the 11 listed commercial banks in Kenya increased to 1.05 percent from 0.91 percent in the preceding years (2019 and 2020). In 2023, the liquidity ratio decreased to approximately 0.99 percent from 1.03 percent in 2022. The shrinking indicated a slight reduction in the proportion of liquid assets held by the commercial banks in Kenya relative to their short-term liabilities, suggesting a potential decline in their ability to meet immediate financial obligations.

### Return on Assets

Return on Assets (ROA) is a financial metric used to evaluate how effectively a company, including commercial banks, utilizes its assets to generate profits. For commercial banks, ROA is particularly important as it reflects the bank's ability to earn profits from its assets, such as loans and investments. According to Birken and Adams (2021), an ROA of 5% or better is typically considered good, while 20% or better is considered great. In general, the higher the ROA, the more efficient the company is at generating profits. The researcher further sought to determine the mean, maximum and minimum management efficiency of the 11 listed commercial banks in Kenya for the 5 years. The findings are indicated in table 2.

**Table 2**

*Return on Assets*

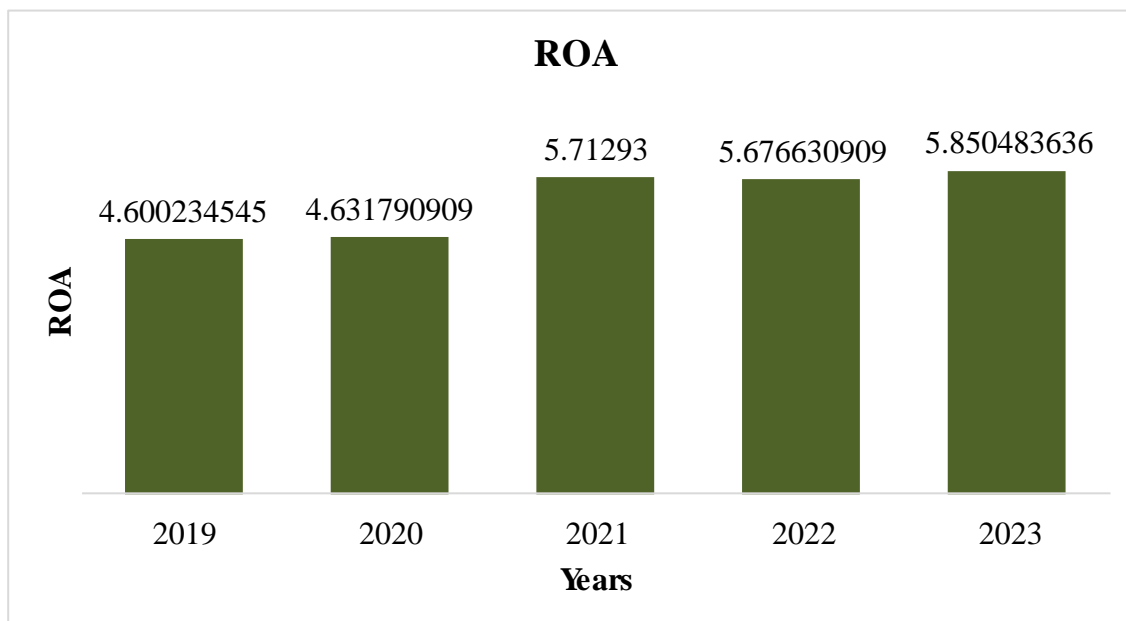
<b>Return on Assets</b>		
N	Valid	55
	Missing	0
Mean		5.2944136
Std. Deviation		4.62010825
Minimum		.45386
Maximum		19.66356

### Source: Research Data (2024)

From the findings of the study, the average Return on Assets (ROA) was approximately 5.29%. This suggests that, on average, commercial banks have achieved a moderate level of profitability relative to their assets over the past five years. The high standard deviation of 4.62 indicates substantial variation in ROA among the banks, with some achieving significantly higher returns while others perform much lower. The range from 0.45% to 19.66% highlights this difference, with a few banks demonstrating exceptional profitability and others struggling to generate returns.

### Trend of the ROA Listed Commercial Banks for 5 years (2019-2023)

The study further sought to establish the trend of Return on Asset for the 11 listed commercial banks in Kenya for the 5 years. The findings are indicated in Figure 3.



**Figure 3**

*Trend of the ROA Listed Commercial Banks for 5 years (2019-2023)*

Over the last five years, the ROA ratio of the 11 listed commercial banks in Kenya showed a steady increase from 4.6 percent in 2019 to 5.85 in 2023. This implies that commercial banks have had a consistent improvement in their ability to generate profit from their assets, reflecting enhanced operational efficiency and profitability over the past five years.

### Correlation Analysis

The researcher did a correlation analysis to establish the correlation between independent and dependent variables. Correlation analysis shows the direction and strength of relationship between independent variable and dependent variable.

**Table 4**

*Correlation Analysis*

	<b>ROA</b>	<b>Liquidity Ratio</b>
Liquidity Ratio	Pearson Correlation	1
	Sig. (2-tailed)	
	N	55

The findings revealed that there was a strong negative and statistically significant correlation between liquidity and financial performance of listed commercial banks in Kenya ( $r = -0.568$ ;  $p < 0.05$ ). This implies that an increase in liquidity reduces the financial performance of listed commercial banks in Kenya.

**Multiple Regression**

Table 5 shows the overall significant test results for the hypothesized research model.

**Table 5**

*Regression Coefficient*

<b>ROA</b>	<b>Coef</b>	<b>Std. Err.</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf.Interval]</b>	
(Constant)	20.167	5.505	3.66	0.001	9.109	31.227
Liquidity Ratio	-5.251	0.942	-5.57	0.000	-7.144	-3.358

Furthermore, the liquidity ratio exhibits a significant negative relationship with ROA, with a coefficient of -5.251 and a p-value of 0.000. This implies there is a statistically significant; showing that a 1-unit increase in the liquidity ratio among listed commercial banks leads to a decrease of 5.251 units in ROA. This implies that banks with higher liquidity ratios tend to have lower financial performance, suggesting that liquidity management plays a critical role in the profitability of commercial banks. The study findings are in line with those of Kamau, et al., (2021) which revealed that banks with higher liquidity ratio might retain more earnings to strengthen their capital base, potentially reducing short-term ROA but leading to greater financial stability and higher long-term profitability. A thinner capital buffer, increasing the risk of financial distress in adverse conditions, which could negatively impact ROA

From the findings the p-value for Liquidity Ratio was 0.001 which is less than the standard significant level of 0.05 therefore the study rejected the null hypothesis and concluded there



is a statistically significant relationship between liquidity and financial performance of listed commercial banks in Kenya. This finding is consistent with Bausch and Pils (2019), who revealed that banks with higher liquidity ratios might retain earnings to strengthen their capital base, potentially reducing short-term ROA but enhancing long-term financial stability.

### **CONCLUSIONS OF THE STUDY**

The study concluded that liquidity ratio has a statistically significant relationship with the financial performance of listed commercial banks in Kenya. Banks with higher liquidity ratios may experience lower short-term profitability due to the conservative approach to maintaining liquid assets. However, this ensures greater financial stability and can enhance long-term profitability. Therefore, maintaining an optimal liquidity level is crucial for balancing profitability and stability.

### **RECOMMENDATIONS**

The Central Bank of Kenya (CBK) should continue to enforce the minimum Capital Adequacy Ratio (CAR) to ensure the stability of the banking system. However, regulatory bodies might consider introducing more flexible guidelines that allow banks to optimize capital allocation based on their risk profile, enabling them to pursue growth while maintaining safety buffers. The CBK should continue to enforce liquidity requirements but could offer incentives for banks to diversify their asset portfolios to include higher yielding but relatively safe investments. This can help banks maintain adequate liquidity while boosting profitability. Policymakers and regulators should promote policies that encourage operational efficiency in banks, such as investing in technological infrastructure and innovation. Government initiatives could support digital transformation in banking to enhance efficiency, particularly in areas such as transaction processing, risk management, and customer service.

Furthermore, banks should implement liquidity optimization strategies by adopting a more active asset-liability management (ALM) approach. This involves better aligning liquid assets with short-term obligations while strategically reallocating excess liquidity to higher-yielding investments. Banks can also employ liquidity forecasting models to better anticipate liquidity needs, allowing them to invest a portion of their liquidity in moderate-risk, high-return assets without jeopardizing their ability to meet immediate obligations.

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