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Bank Characteristics and Financial Performance of Commercial Banks Listed at The Nairobi Securities Exchange in Kenya

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Abstract

Commercial banks in Kenya have recently experienced a steady downturn in their financial performance, mostly as a result of strict regulatory requirements and a changing business environment. The subpar financial performance of numerous lower-tier banks has resulted in significant consequences, including the necessity of placing some of these banks under receivership. The purpose of this study was to look into how various factors influence the financial performance of commercial banks listed on the Nairobi Securities market. In particular, this study looked to see how financial performance was impacted by asset quality and liquidity management. The study employed a descriptive methodology and a target population comprised of 11 commercial banks listed on the NSE were included in the population sample for this study. Secondary data was collected and analyzed using descriptive and inferential statistics. The research exhibited that the financial performance of commercial banks is significantly influenced by quality of their assets. Furthermore, the study revealed a positive and statistically significant impact of liquidity on the financial performance of Kenyan commercial banks The study concluded that financial performance was substantially and positively impacted by the quality of assets and liquidity management practices. Consequently, it is recommended that banks maintain a low level of nonperforming loans, as these loans have adverse effects on bank profitability, which in turn affects overall financial performance. Although the statutory ratio is established at 20%, the central bank might think about increasing this ratio by taking into account the general growth of the banking industry in recent years.

Keywords: *Asset quality, liquidity management, financial performance*

1.0 Introduction

Commercial banks facilitate the steady flow of money from depositors to stockholders, which Ongore and Kusa (2013) argue is a critical part of their role in the allocation of economic resources. Commercial banks in Kenya, being the most obvious source of financial support, continue to be an essential component of both contemporary commerce and economic expansion everywhere in the world. Commercial banks are essential to all economies, including those in the United States and the rest of the world, claims Shoaib (2011). Demirguc-Kunt, Feyen, and Levine (2012) assert that a country's total economic health is significantly influenced by the financial health of its banking sector. Commercial banks are essential to the functioning of economies because they offer deposit and credit services to private individuals and businesses, facilitate access to a country's multiple payment systems, and provide credit

and liquidity in volatile market conditions. This is in addition to the fact that commercial banks can make credit and liquidity available during volatile market conditions. Additionally, commercial banks are employed as vehicles for the transmission of efficient monetary policy set by the economy's central bank (Cetorelli & Goldberg, 2012). According to Kaufman and Mote (1994), throughout the past 20 years, the banking sector has been seen as being in a condition of collapse on a global scale and some participants are concerned about the future of the key players in economies.

Financial performance is the assessment of financial metrics to ascertain how well a business accomplishes its financial objectives (Folan & Browne, 2005). In the realm of banking, the evaluation of a bank's performance typically entails the utilization of basic analysis, a method that predominantly centres on the scrutiny of its financial statements (Thoraneenitiyan, 2010).

Numerous authors have assessed the financial strengths and weaknesses of financial organizations using a range of models. CAMEL is the most well-known of the models. The CAMEL model relies on five key criteria to evaluate the financial performance of a bank. These criteria include the adequacy of capital, the quality of assets, the management of assets, the quality of earnings, and the level of liquidity. Researchers regularly use it. As a result, the literature has a variety of supporting information. A competitive analysis of the financial outcomes of Indian private-sector banks was carried out by Gupta and Verma (2018). They concluded that managing non-performing assets and risks brought on by unfavorable events is the key to Indian banks becoming more profitable and that transparency and good governance will be the main guiding principles for Indian banks.

1.1 Problem Statement

Commercial banks are essential to the economic development of emerging countries like Kenya. They gather idle savings from people and make them available for investments. In a similar manner, they provide new demand deposits while providing credit and purchasing investment securities. Through the acceptance and discounting of bills of exchange, they encourage trade both inside and beyond the country. The mobility of capital is also improved by commercial banks (Kavvadia & Savvides, 2019). particularly in a developing nation like Kenya. They are also the best tool for enabling the market's flow of credit.

Lower-tier banks have been notably impacted by the recent fall in commercial banks' performance in Kenya (Waweru & Kalani, 2019; Onuonga, 2020). Because of this, numerous low-tier banks, including Chase Bank, Dubai Bank of Kenya, and Imperial Bank, have declared bankruptcy over the past two years. The sector reforms that have been enacted have resulted in inconsistent performance from individual players. Most banks that operate in the second and third tiers saw a decline in profits during the fiscal year 2017, and in some cases, they even recorded financial losses. Sidian Bank and Family Bank of Kenya both declared losses for the fiscal year 2016–2017, with losses of 307 million and 259.57 million respectively.

According to Onuonga (2019), there was a decrease in the average growth rate of Profits before Tax (PBT) for commercial banks throughout the financial years 2018-2022, indicating a deteriorating trend. The growth rate was found to be less than 20 percent on average. In the fiscal year 2012/2013, the pre-tax profit (PBT) of Kenyan commercial banks experienced a growth of 16.6 percent. In comparison to the prior fiscal year 2020–2021, which had a record of 20.60%, there was a decline. The Profit Before Tax (PBT) for the fiscal year 2018/2019 also showed a significant growth of 12.90%. The statistic shows a decline from the record-breaking profit before tax (PBT) of 13.40 percent in the fiscal year 2017/2018.Additionally, over the

previous four years, the valuations of the banking sector have significantly decreased, according to Ruriga and Hussein (2016).

Studies examining the link between CAMEL traits and commercial banks' profitability have yielded contradictory results. Ogilo (2012), Uzhegova (2015), Ongore and Kusa (2013), and Echeboka et al. (2015) are a few papers from relevant studies from 2014 that are worth mentioning. The results of several of these studies show that using the CAMEL criteria has a considerable impact on banks' overall performance. Ogilo (2012) conducted a study to examine the impact of credit risk management on the profitability of Kenyan commercial banks. The CAMEL paradigm was used in this study. Several previous studies have demonstrated the significant effect of CAMEL components on the overall performance of financial institutions, using correlation and regression analysis. Liquidity, management effectiveness, adequate capital, and asset quality all had some link with commercial banks' financial performance, but earnings had the strongest relationship. A substantial correlation between the two variables is found via statistical significance tests. However, these predictions have been questioned by Uzhegova (2015), Ongore and Kusa (2013), and Echeboka et al. (2015). Although the aforementioned study aids in our understanding of bank performance, there are still areas where we lack information. The purpose of this research was to examine the influence of asset quality and liquidity management on the performance of commercial banks listed on the NSE.

1.2 Study Objectives

i. To establish the impact of asset quality on financial performance of commercial banks quoted at the NSE.

ii. To find out the impact of liquidity management on financial performance of commercial banks listed in NSE.

2.0 Literature Review

2.1 Theoretical Review

Information Sharing Theory

In his 1970 paper "Lemon," Quality Uncertainty and the Market Mechanism, Akerlof first proposed the theory of knowledge sharing. The author argues that vendors have an incentive to provide subpar goods when their customers lack the same degree of understanding that they have on a certain topic. Because of this information gap, financial organizations are unable to completely comprehend the intentions, preferences, or previous behaviors of loan applicants (Jagongo & Kerage, 2015). If lenders have access to information on borrowers' credit scores, there is a decreased possibility of credit risk and write-offs.

The more information that is exchanged across various financial institutions, the less stringently those institutions will need to vet potential employees, and the more amicable the rivalry will become (Boyd & Hakenes, 2013). Despite extensive research, the impact of information sharing in an asymmetrically informed market is often seen as either a moral hazard or a negative selection (Boyd & Hakenes, 2013). The fact that borrowers and lenders have access to different sets of information creates an atmosphere of uncertainty in the credit lending industry. When deciding whether to provide credit, both consumers and lenders place a significant amount of weight on their ability to access their credit reports (Jagongo & Kerage, 2015).

Borrowers should be aware of their financial capacities to reduce the likelihood of experiencing financial hardship because of loan repayment, and lenders should have ample access to both good and negative information on customers' credit ratings. According to the positive feedback

loops and the negative feedback loops, there are three separate categories of borrowers. To begin, borrowers who are prohibited from enrolling into multiple loan contracts are deemed to be exposed since they are placed in a precarious position in comparison to their contract which is based on flawless information. In the second category are those who have not paid back their loans, and in the third category are people who have perfect credit (McIntosh & Wydick, 2007). Conversely, "adverse selection" and "moral hazard" occur when creditors do not have access to the data that they need to evaluate loan applications and monitor borrower behavior. Commercial banks place a high value on the profitability of their lending activities, making information exchange a fundamental principle. If banks make lending decisions without having full information on the underlying economic conditions, a lack of access to relevant data could raise the percentage of loans labeled as non-performing. This study's examination of the asset quality of publicly traded commercial banks demonstrated an implementation of the theory.

Liquidity Management Preference Theory

According to John Maynard Keynes' Liquidity Preference Theory, the interest rate is the cost of borrowing money. This illustrates the relationship between interest rates and the quantity of money that the general public wants to own. John Maynard Keynes first presented and elaborated on the theory in 1936. Keynes's and Bilbow's (2005) "liquidity preference hypothesis" is the idea that individuals value ready access to finances for both immediate spending and long-term savings. To that purpose, they will forfeit the possibility of earning interest on money they have on hand but are both eager to spend and keep in reserve. When interest rates rise, people are less likely to keep cash on hand for these reasons. Elgar (1999) argues that having access to cash is crucial. One should preserve at least part of their resources in the form of pure buying power since they have future spending plans to finance, is placing a gamble on the future direction of the interest rate, and can never be sure of what the future may hold.

According to macroeconomic theory, the desire for liquidity is indicated by the need for money. This theory explains the relationship between interest rates and the amount of cash that the general public wants to keep. The interest rate determines the cost of borrowing money, as per the liquidity preference hypothesis. This only indicates that when money is sought, it isn't done so to borrow money but rather to maintain liquidity. Cash is the most commonly used liquid asset, and more liquid investments may be promptly and easily withdrawn for their full worth, according to the theory.

To understand why banks, keep assets, the Liquidity Preference Theory is a crucial framework. Customers shy away from financial institutions with high liquidity risk and instead place their cash holdings in institutions with low risk (Bonfim & Kim, 2011). Therefore, commercial banks' profitability and performance improve together with their liquidity. Due to investors' strong demand for liquidity, Nikolaou (2009) proposed a connection between liquidity risk and bank liquidity. Cash is in demand for a variety of reasons, including everyday transactions, emergency savings, and financial speculation.

2.2 Empirical Review

Asset Quality and Financial Performance

In his study, Said (2018) looked at how the asset quality of a group of US commercial small banks affected their profitability. This study found that the correlation between asset quality measures and ROA and ROE has been deteriorating over time. It seems that interest rate control is to blame for the negative association between the two variables. As the United States

financial system is more advanced than Kenya's, the findings may not be transferable to the current audit being conducted in Kenya.

Ahamed (2017) looked at the connections between asset quality, noninterest income, and bank profitability, with an emphasis on evidence from Indian banks. Only commercial banks in India were examined for this report; this includes banks with both foreign and domestic ownership and management. Secondary sources of data were gathered from the previously available industry reports. Estimate results showed that commercial banks did better financially when attempts to increase income diversity resulted in a decline in asset quality. It's important to cite this phrase.

Anjili looked into how ineffective asset and liability management affected Kenyan commercial banks' profits in 2014 using descriptive research techniques. To analyze the data, numerous statistical methods including regression, analysis of variance, and correlation were applied. The findings suggested that increasing the quality of assets and diversifying revenue sources while decreasing credit risk exposure might considerably boost the financial performance of Kenyan commercial banks. Unlike prior investigations, which included all commercial banks, this investigation focused just on those that are publicly traded.

Liquidity Management and Financial Performance

Bassey (2017) examines the liquidity management techniques of Nigeria's Deposit Money Banks between 1986 and 2011. According to the study, liquidity management variables have a positive link with return on equity (liquidity and cash reserve ratios), whereas liquidity management factors have a negative relationship with loan-to-deposit ratio. Yet, the most significant research suggests that only highly liquid DMBs may deliver the highest profits. The researchers believe, based on their results, that illiquidity and excess liquidity represent a considerable obstacle to DMB management operations. The study suggests that the Board of Directors and the top levels of management use the optimum liquidity model to provide an efficient liquidity management procedure.

Ibe (2013) conducted research to determine how the management of liquidity impacted the profitability of Nigerian financial institutions. These three financial firms were chosen at random to represent the banking industry. For liquidity management, we used cash on hand, bank deposits, and government bills and certificates as proxies; to measure financial performance, we used net income as a proxy. According to the results of this study, the banking system in Nigeria has a serious problem with how liquidity is handled. Findings suggest that financial institutions need to employ skilled and experienced people to make the best choices, particularly those pertaining to the optimum degree of liquidity while maximizing profitability. This is so because, without such personnel, these organizations cannot make the best judgments feasible.

Majakusi (2016) conducted research to determine how Kenyan commercial banks' success is related to their use of liquidity management. The results show that maintaining high equity to net assets to total assets and liquid assets to total assets ratios is an indicator of good liquidity management and bank operations. These ratios were calculated as a proportion of the bank's total assets. To put it differently, having a consistent and significant amount of savings over time is a strong indicator of future financial success.

3.0 Methodology

The study employed a descriptive methodology, which was well-suited for investigating variables that impact bank profitability in Kenya. Through this research, the goal was to gain a

deeper understanding of the factors that are most significant in promoting the success of businesses in their environment. As a result of the data collected, analysts were able to determine the extent to which various factors affect the performance of individual banks. This panel data model established a causal relationship between the features of commercial banks and their financial performance in the NSE. The survey included data from each of the twelve listed commercial banks. A data extraction form was utilized to glean financial information from commercial banks and the CBK's annual reports for the present research. Data was analyzed using descriptive and inferential statistics.

4.0 Results and Discussion

4.1 Descriptive Statistics

Descriptive statistics results are presented in Table 1.

Table 1: Descriptive statistics

	Mean	Std. Deviation
ROA	0.12	0.11
ROE	0.35	0.16
Asset quality	2.86	0.67
Liquidity	16.85	9.54

Source: Researcher (2023)

Table 1 shows that banks had an average ROA of 0.12 (12%) for the study period under consideration. The five-year data period from 2016 to 2020 has an N value of 55, indicating that there were 55 observations from the 11 commercial banks registered on the NSE. With a maximum ROE of 0.67 and a low ROE of 0.10, the average ROE for the observations is 0.35. Table shows that between 2016 and 2020, the 11 commercial banks listed on the NSE collected 55 observations, with an average asset quality of 19.11, a high standard deviation of 2.86, a low standard deviation of 1.63, and a high standard deviation of 109.3.55. The liquidity of these companies is 16.85 on average.

4.2 Regression Analysis for Asset quality on financial performance of commercial banks listed at the NSE.

The present study employed a simple linear regression analysis to examine the impact of asset quality on financial performance. Obtaining the perspectives of the participants held significance. To determine whether asset quality had a substantial or insignificant impact on financial performance, a basic linear regression model was mostly used. The results are displayed through a model summary, ANOVA, and regression coefficients, as depicted in Table 2.

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Table 2: Regression Analysis for Asset quality on financial performance of commercial banks listed at the NSE

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	0.813[a]	0.660	0.656	0.26709

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	25.524	1	25.524	359.493	.000[b]
	Residual	3.763	53	0.071		
	Total	29.287	54			

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.552	0.156		9.949	0.000
Asset quality	0.654	0.035	0.769	18.686	0.000

a. Dependent Variable: Financial performance of commercial banks listed at the NSE
b. Predictors: (Constant), Asset quality

Source: Researcher (2023)

The model summary presented in Table 2 demonstrates a robust positive correlation (R=0.813) between asset quality and financial performance, as indicated by the regression model's predictions. Furthermore, it can be observed that asset quality accounts for 66%.

The study additionally aimed to determine whether the regression model is the most suitable method for predicting the dependent variable. The ANOVA findings presented in Table 4.6 demonstrate that the F statistic (1,53) = 359.493 is significant. The p-value of 0.000, which is below the specified significance limit of 0.05, makes this clear. This shows that the predictor coefficient is not equal to zero and that the regression model greatly enhances performance prediction.

The research also ascertained whether the quality of the assets and financial success were related. The coefficients from the fundamental linear regression analysis demonstrate a statistically significant association between asset quality and financial performance, as shown in Table 2. The study revealed statistical significance for the coefficient of the constant term (0=1.552; P-value=0.0000.05) and the coefficient of asset quality (1=0.654; P-value=0.0000.05). The formula for the asset quality regression model is Y = 1.552 + 0.654X1. This demonstrates that, when all other variables are held equal, a one-unit increase in asset quality results in a positive shift of 0.654 units in financial performance. Consequently, it may be concluded that the asset quality and the dependent variable have a positive and linear association.

The results support a study by Said (2018) that found that a financial outcome is positively impacted by the quality of its assets. According to Bassey (2017), liquidity management affects a firm's monetary success. According to Lekaaso, Cherono, and Rintari (2020), capital adequacy has a considerable impact on a company's profitability. Kimari (2013) shows that management efficiency affects the profitability of SACCOs significantly

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In tandem with the study findings, Said (2018) looked at how the asset quality of a group of US commercial small banks affected their profitability. Many variables, including ROA, the number of delinquent loans and leases, the proportion of loans and leases that are 90 days or more past due, and the percentage of loans that are in nonaccrual status, were analyzed for their correlations using Pearson Product Moment Correlation (PPMC). This research analyzed commercial banks with $100 million to $300 million in total assets during the years of 2010 and 2017. This study found that the correlation between asset quality measures and ROA and ROE has been deteriorating over time. It seems that interest rate control is to blame for the negative association between the two variables. As the United States financial system is more advanced than Kenya's, the findings may not be transferable to the current audit being conducted in Kenya.

4.3 Regression Analysis for Liquidity management and financial performance of commercial banks listed at the NSE

The study employed a simple linear regression analysis to examine the impact of liquidity management on the dependent variable. Obtaining the perspectives of the participants held significance. The purpose of employing a simple linear regression model was to examine the extent to which liquidity management, as an independent variable, had a significant or insignificant impact on financial performance of the NSE-listed commercial banks. The findings are displayed in Table 3, utilizing model summary, ANOVA, and regression coefficient.

Table 3: regression analysis for Liquidity management on Financial performance of commercial banks listed at the NSE

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	0.796[a]	0.634	0.629	0.18952

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	39.485	1	39.485	178.665	0.000[b]
	Residual	11.713	53	0.221		
	Total	51.198	54			

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.770	0.451		8.359	0.000
Liquidity management	0.782	0.121	0.146	6.462	0.000

a. Dependent Variable: Financial performance of commercial banks listed at the NSE
b. Predictors: (Constant), Liquidity management

Source: Researcher (2023)

The model summary shown in Table 3 shows that, as expected by the regression model, there is a strong positive link between liquidity management and the fiscal performance of commercial banks listed on the NSE (R=0.796). Furthermore, liquidity management is responsible for 63.4% of the variation in financial performance.

The research also sought to ascertain whether the regression model is the best technique for forecasting monetary performance. The ANOVA findings shown in Table 3 support the statistical significance of the F statistic (1,191) = 178.665. The p-value of 0.000<0.05. Consequently, we can infer that the predictor coefficient is not equal to zero, indicating that the regression model significantly improves the prediction of banks' performance.

In addition, this research set out to link the financial success to their liquidity management practices. According to the coefficients in Table 3, there appears to be a substantial association between management of liquidity and performance. In addition, the coefficient for liquidity management (1=0.782; P-value=0.0000.05) was determined to be statistically significant, as was the coefficient for the constant term (0=3.77; P-value=0.0000.05). Commercial banks traded on the NSE employ the regression model defined by the equation Y = 3.77 + 0.782X1 to examine their liquidity management. If we plug this equation into a regression analysis, we get a positive 0.782 R-squared change in financial performance for these institutions for every 1 R-squared change in their liquidity management. So, it follows that commercial banks trading on the NSE have a favourable and linear link between liquidity management and financial results.

Like the study findings, Ibe (2013) conducted research to determine how the management of liquidity impacted the profitability of Nigerian financial institutions. These three financial firms were chosen at random to represent the banking industry. For liquidity management, we used cash on hand, bank deposits, and government bills and certificates as proxies; to measure financial performance, we used net income as a proxy. According to the results of this study, the banking system in Nigeria has a serious problem with how liquidity is handled. Findings suggest that financial institutions need to employ skilled and experienced people to make the best choices, particularly those pertaining to the optimum degree of liquidity while maximizing profitability.

5.0 Conclusion

The study concluded that financial performance is substantially and positively impacted by the quality of assets. Commercial banks in Kenya may benefit greatly from careful attention to their liquidity management practices.

6.0 Recommendations

The findings show that an increase in asset quality has a significant favorable effect on bank performance. Consequently, it is recommended that banks maintain a low level of nonperforming loans, as these loans have adverse effects on bank profitability, which in turn affects overall financial performance.

The study further suggests that commercial banks should actively seek opportunities to improve their internal capabilities in effectively managing asset quality. Commercial banks, particularly those that are locally owned, are obligated to explore strategies for mitigating market risks. This may involve the utilization of financial derivatives and asset securitization, which can contribute to the improvement of their asset quality. Risk measurement can be achieved through the application of widely recognized financial concepts and techniques.

As a regulator, the central bank is responsible for keeping a careful eye on the banks' liquidity ratios. Although the statutory ratio is established at 20%, the central bank might think about increasing this ratio by taking into account the general growth of the banking industry in recent years.

The study's findings suggest that the presence of liquidity plays a crucial role in improving the financial capability of commercial banks. Greater levels of liquidity can lead to increased returns; however, it is important to note that the potential for larger losses also exists. The inclusion of liquidity investment in commercial banks introduces heightened volatility in returns, while also accounting for the associated risks

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