Factors Affecting Financial Performance of Commercial Banks in Kenya

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Abstract

Commercial banks are crucial in determining a nation's economic growth and stability. The study objective was to determine the variables that affect Kenya's commercial banks financial performance. ROA measurement of financial performance served as the dependent variable. The independent factors included bank size, managerial effectiveness, asset quality, liquidity, and capital adequacy. To explain the relationship between the dependent and independent variables, the study employed a descriptive research approach. The analysis was done using a multiple linear regression model with secondary data obtained from banks audited yearly financial statements. The findings revealed that the predictor variables accounted for 40.6% of changes in financial performance while 59.4% changes in financial performance could be explained by other internal factors not considered in this study. Additionally, it was established that AQ and SZ had a favorable impact on ROA, supporting the idea that a rise in AQ and SZ causes an increase in ROA. On the other hand, CA, LR and ME had negative effect on ROA leading to the conclusion an increase in CA, LR and ME leads to a decrease in ROA. The study recommended that the CBK adopt flexible policy to match the prevailing economic and market conditions in determining the minimum capital adequacy and liquidity ratios to caution banks from holding excessive capital and assets. A study on the impact of CAMEL indicators on financial performance including all commercial banks in Kenya was recommended because the study left out earning capacity as an internal factor.

Keywords: *Financial Performance, Capital Adequacy, Asset Quality, Management Efficiency, Size & Liquidity*

1.1 Background

Commercial banks are essential in allocating the nation's economic resources because they transfer money from savers to investors. Efficient performance of banks creates confidence in the financial system of a country leading to sustainable development. Internal factors are a major determinant of profitability in banks (Kamande, 2017). The internal factors are the individual bank characteristics and are largely influenced by top management and board of directors' decisions. These elements make up the CAMEL framework, which also includes capital sufficiency, liquidity, asset quality, management effectiveness, and earning capacity (Mulualem, 2015). Since the management controls the variables, they vary from one bank to another.

Efficiency Structure theory and Market Power theory have been used to conduct organized research on financial performance in commercial banks since 1980's (Athanasoglou *et al*, 2008). According to the Efficiency Structure Theory, increasing management scale capability leads to enhanced financial performance. On the other hand, Market Power theory explains the extent to which an organization determines prices by controlling demands and supply in the market. The theory argues that firms that have diversified portfolios and market shares have a competitive edge over their rivals and earn monopolistic profits.

1.2 Effect of Internal Factors on Financial Performance of Commercial Banks

Ongore and Kusa (2013) evaluated the impact of internal variables on profitability of commercial banks in Kenya between 2001 and 2010.The study found that management efficiency, capital adequacy and asset quality had significant influence on ROE and ROA while liquidity had insignificant impact on profitability. Menicucci and Paolucci (2016) studied the impact of internal variables on profitability of banks in Europe between 2019-2013. The study revealed that CA and SZ had a significant influence on banks financial performance while liquidity had insignificant impact on financial productivity of banks.

Kamande (2017) conducted a study to establish the effect of bank specific variables on financial performance of commercial banks in Kenya for the period between 2011 and 2015.The study findings revealed that a positive association exists between CAMEL framework variables and financial performance of banks. The study further found that asset quality and capital adequacy affects financial performance of banks. Ali and Puah (2018) evaluated the impact of CAMEL indicators on productivity of commercial banks in Malaysia over the period 2007 to 2015. The result of the study indicated that a significant relationship exists between bank size, fund risk, credit risk and bank performance while liquidity had insignificant effect on bank performance. In contrast, Arif and Anees (2012) investigated the effect of liquidity on profitability of commercial banks in Pakistan for the period between 2004-2009. The findings of the study showed that significant relationship exists between liquidity and profitability of commercial banks.

Sathyamoorthi *et al*., (2017) used CAMEL model to determine the financial performance of listed banks in Botswana over the period 2011 to 2015. The results of the study revealed a positive correlation between leverage ratio and equity to assets ratios while the other CAMEL ratios had no significant relationship with financial performance of commercial banks. Thisaranga and Ariyasena (2021) examined the effect of CAMEL model on performance of listed commercial banks in Sri Lanka. The results of the study showed that earning ability had significant influence on accounting-based performance, management efficiency was negatively related with

accounting-based performance. There was also a finding that other CAMEL indicators had insignificant effect on accounting-based performance of listed commercial banks in Sri Lanka.

1.3 Research Problem

Commercial banks play an integral part in the economic growth and development of a nation by focusing resources from those who have surplus to those who have shortages. The depositors of funds need assurance that their money is safe. There is also the need for assurance of accessibility of deposits in case of need. Profitability of commercial banks build confidence which attracts direct foreign investments. The government is interested in the financial performance of banks since they play a crucial role in maintaining economic growth and stability. Thus, different stakeholders including the government, depositors, and investors are interested in understanding the factors influencing profitability in banks (Gutu, 2015). Therefore, it is essential to investigate internal variables that affects financial output of commercial banks to allow the various parties to make informed decisions.

The banking sector in Kenya has experienced seven mergers and acquisitions in the last five years. The most acknowledged mergers and acquisitions deals were among Commercial Bank of Africa and NIC Bank and Kenya Commercial Bank and National Bank of Kenya. During this period, Giro Commercial Bank Limited was acquired by I&M Bank Limited, Jamii Bora Bank Limited was acquired by Cooperative Bank, Transnational Bank Plc was acquired by Access Bank Plc, Fidelity Commercial Bank Ltd was acquired by SBM Bank Kenya Ltd, Habib Bank Kenya Ltd was acquired by Diamond Trust Bank Kenya Ltd .The dynamic regulatory environment and need for business stability in the banking sector has played a crucial role in the mergers and acquisitions. The adoption of Basel III framework necessitated the change of regulations in the banking sector to meet new capital and liquidity standards. Under Basel III requirements commercial banks in the country are required to maintain a core capital of Kenya shilling one billion (Kippra, 2020). This has made small and weak banks to be acquired by large banks to comply with this requirement. Therefore, banks need to understand internal factors that affect financial performance to avoid being subjected to mergers and acquisition and remedial actions from the regulator due to failure to comply with minimum capital and liquidity requirements.

Ongore and Kusa (2013) investigated the factors influencing performance of banks in Kenya. The study found out that management and board decisions significantly influence performance of commercial banks in Kenya while macro-economic factors have minimal effect on financial performance. However, the study did not study the effect of bank specific factors on financial performance. King'oo (2015) studied the impact of selected internal factors on financial performance of listed banks in Kenya. The results of the study revealed that management efficiency, capital adequacy and size of the bank significantly impact financial performance of commercial banks while income diversification and liquidity had insignificant effect on financial performance of commercial banks. The study omitted the effect of earning ability on performance of banks. Kamande (2017), examined the effect of bank specific factors on listed commercial banks in Kenya and found that asset quality has the highest effect on profitability of commercial banks. However, the study focused on quantitative factors only and omitted qualitative internal factors. In addition, the study focused on listed commercial banks and ignored other banks. The different studies on factors affecting financial performance of commercial banks are inconclusive showing that there is knowledge gap. In Kenya, scarce literature exists on the determinants of financial

performance in commercial banks. This study sought to fill this knowledge gap by answering the question: What determines financial performance of commercial banks in Kenya?

1.4 Research Objective

The objective of this study was to determine the factors that affect financial performance of commercial banks in Kenya.

2.1 Literature Review
2.2 Theoretical Review

Athanasoglou et al, 2008 asserts that structured studies on bank financial performance using Market Power (MP) and Efficiency Structure (ES) theories started in the 1980s.

2.2.1 Efficiency Structure Theory

The Efficiency Structure theory was advanced by Demsetz (1973), and it asserts that operational efficiency allows firms to sell at low prices and this increases sales culminating to high profits. The X-efficiency and scale-efficiency theories are the foundation of the theory. The X-efficiency theory claims, better management in banks results in operational efficiency which cut costs leading to increased profitability. On the other hand, scale-efficiency posits that commercial banks with better scale of operations incurs lower costs resulting in increased profits and faster growth. Shipho (2011), asserted that internal efficiency influences financial performance of banks which supports Efficient Structure hypothesis. Banks with high operational and managerial efficiency earn more profit (King'oo, 2015). Nguyen and Stewart (2013) did not find any evidence to support this in their study of the impact of bank concentration and efficiency on their financial performance in Vietnam. The Efficiency Structure theory will be supported in this study by a favorable association between internal components and financial performance.

2.2.2 Market Power Theory

An explanation of the connection between market power and profitability is provided by the market power (MP) theory. The theory was developed by Baumol (1982) and Bain (1951), and it comprises two hypotheses: relative-market power and structured-conduct-performance (SCP) (RMP). The SCP hypothesis states that market structures affect price decisions which ultimately affects profitability. Further the SCP hypothesis posits that collusion among dominant firms with high market power leads to high prices translating to improved performance. On the other hand, the Relative Market Power hypothesis asserts that improved financial performance is a result of dominant firms' ability to offer quality and differentiated products. Berger and Hannan (1998) contrasts Market Power Theory and argues that improved financial performance in banks is affected by management efficiency. Application of MP theory in the banking sector suggests that banks with market power collude to maximize income by charging higher fees on loans, advances and other services while paying low rates to customer deposits (Alhassan et al., 2016). In this study, the Market Power theory will assist in demonstrating the relationship between bank-specific characteristics and the financial performance of commercial banks in Kenya.

2.3 Empirical Studies

A review of the literature on the impact of independent variables on the financial performance of commercial banks is be presented in this section. The literature review includes both global and local research that look into the variables influencing a bank's financial performance.

2.3.1 Global Studies

Thisaranga and Ariyaena (2021) conducted a study to look into how CAMEL variables affected the market-based and accounting-based performance of banks listed on the Sri Lankan stock exchange between 2014 and 2019. Earning capacity, capital adequacy, management effectiveness, liquidity, and asset quality were the study's independent variables. The researcher used secondary data from the listed commercial banks' audited annual financial statements. Multiple regression approaches were used by the researcher to analyze the data. The results indicated that Management Efficiency has a considerable detrimental impact on accounting-based performance. Additionally, it was discovered that earning potential had a large beneficial impact on the accounting-based performance of commercial banks listed in Sri Lanka, while other CAMEL criteria had a negligible impact. Similar research on the internal and external factors affecting the profitability of commercial banks in Sri Lanka was suggested by the researcher. The study concentrated on both accounting-based and market-based performance, which may have impacted the accuracy of the data analysis and conclusions. More objective findings would come from a study that was solely concerned with the impact of CAMEL indicators on the financial performance of commercial banks.

In order to better understand the variables influencing the financial performance of commercial banks in Albania, Cekrezi et al. (2015) performed a study. The survey covered sixteen commercial banks throughout the nation and was conducted between 2010 and 2013. The study made use of cross-sectional time series data that was gathered from the annual reports of commercial banks. Return on assets was the dependent variable, and CAMEL model variables made up the independent variables. The results showed that the size of the bank had a statistically negligible and adverse effect on financial performance. Commercial banks' performance was found to be negatively impacted by liquidity and capital adequacy. It was suggested that a policy on effective management be put into place. The study failed to provide information on how to use resources in the best way.

2.3.2 Local Studies

King'oo (2015) conducted a study to determine the effects of specific internal factors on the financial performance of commercial banks trading on the Nairobi Stock Exchange. Return on Asset was the study's dependent variable, and the bank's size, capital adequacy, operational cost effectiveness, and liquidity were its independent variables. The investigation was carried out by the researcher from 2010 to 2014 over a five-year period. The study made use of secondary data that was gathered from the websites of the different banks, the World Bank, the International Monetary Fund, the Nairobi Securities Exchange, and the Central Bank of Kenya. The study used a descriptive research design, and ANOVA, Pearson correlation, descriptive statistics, and regression analysis were used to examine the data. According to the results, operational cost effectiveness, capital adequacy and liquidity, and bank size have all increased. Further, the findings concluded the selected internal factor accounted for 53% of financial performance in listed

commercial banks and thus there was need for further research to investigate the remaining 47%. The study omitted earning ability and asset quality which are core internal factors that affects financial performance of commercial banks. In addition, the study focused on listed banks which forms a portion of banks in Kenya ignoring other banks that play an equally important role of financial intermediation in the economy.

Kamande (2017) conducted study to determine the impact of bank-specific characteristics on Kenya's commercial banks. The analysis focuses on publicly traded commercial banks in the nation over a five-year period, from 2011 to 2015. Return on Asset was the dependent variable that was being studied, while the independent variables were bank-specific elements including Capital Adequacy, Asset Quality, Management Efficiency, Earning Ability, and Liquidity. The impact of bank-specific characteristics on the profitability of commercial banks in Kenya was examined using an exploratory study approach and panel data. The eleven banks under investigation's public financial statements served as the study's primary source of secondary data. The researcher adopted multiple regression to analyze data and the results was presented in tables and narratives. The findings indicated that there was a positive and significant relationship between all the independent variables and the financial performance. However, the study concluded that Asset Quality had the highest impact on return of assets. The researcher recommended banks to adopt efficient and effective management to avoid becoming insolvent. The study omitted banks that are not listed on Nairobi exchange when investigating the factors that influence financial performance. Additionally, the study neglected the impact of internal qualitative elements on the financial performance of commercial banks in favor of CAMEL variables, which are of a quantitative nature.

2.4 Conceptual Framework

An explanation of the links between the dependent and independent variables in a study is shown graphically in a conceptual framework. The reader is helped in understanding the suggested relationship by a graphic representation of the relationship between independent and dependent variables. The conceptual framework in Figure 2.1 illustrates how the independent variables, including size, liquidity, asset quality, and management efficiency, affect the financial performance of commercial banks.
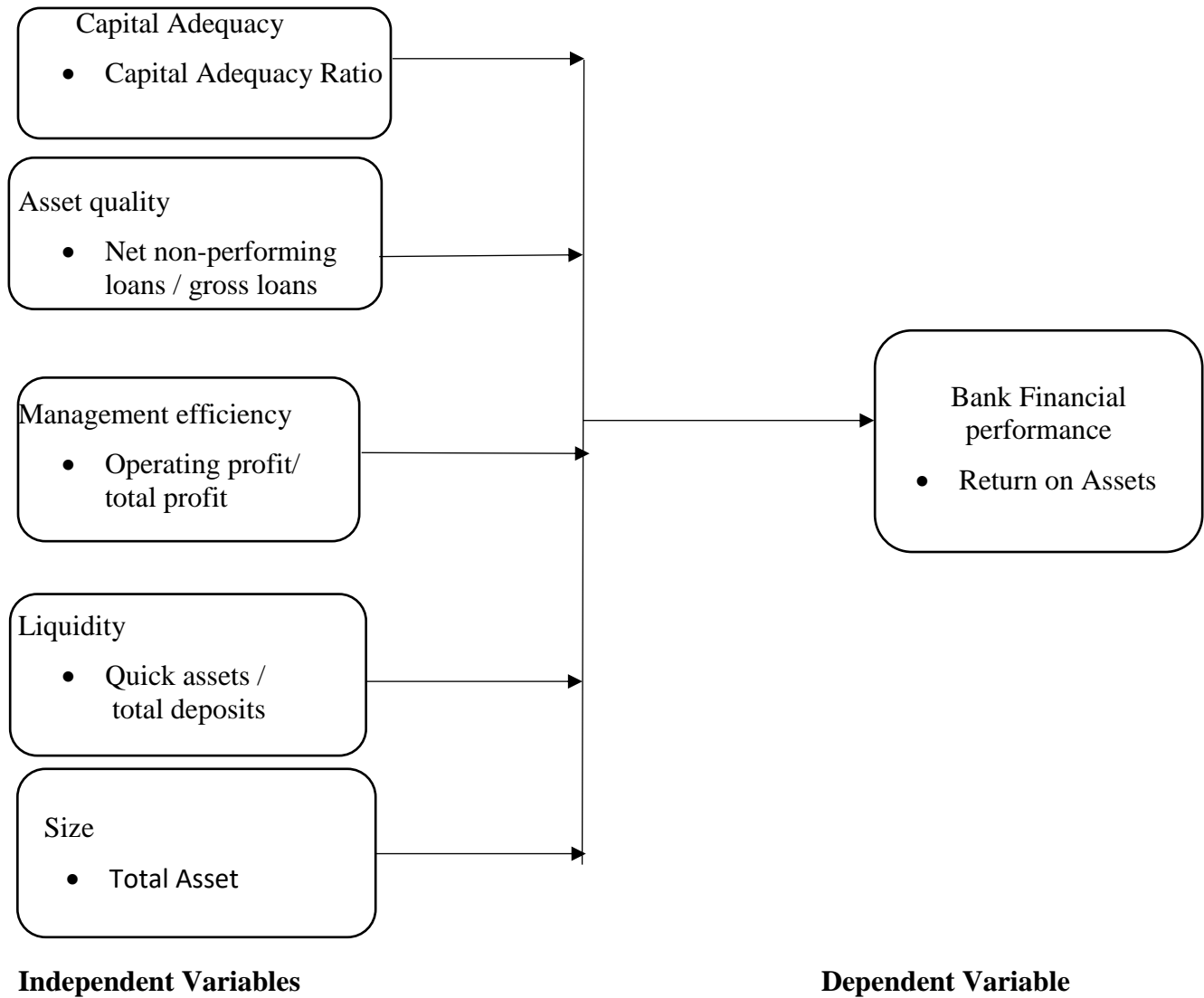
Independent Variables   **Dependent Variable**

Figure 1: Conceptual Model

Source (Author, 2022)

3.1 Research Methodology

3.2 Research Design

The study used a descriptive research survey design, which entails gathering data to offer insights into the study's participants. When a researcher wants to accurately describe settings, people, and events that aid in drawing conclusions about the target populations, this strategy is ideal (Saunders et al., 2013). The use of descriptive research design was useful to the researcher to report findings as observed and provide statistical data that can guide the decision-making process of various stakeholders in the banking sector.

3.3 Population

The study's target population consisted of all Kenyan commercial banks. There are 38 licensed banks in the nation, according to the CBK Directory of Licensed Commercial Banks, Mortgage Finance Institutions, and Authorized Non-Operating Holding Companies (Central Bank of Kenya, 2022).

3.4 Data Collection

The study made use of secondary data that included the annual audited financial statements of Kenyan commercial banks. This comprised the income statements and statements of financial position from the specific banks' audited financial statements for the years 2017 through 2021. The information was obtained from the websites of individual banks and the CBK. Different forms of data were gathered for both the independent and dependent variables from the financial statements. The researcher gathered the following data on the specific variables: net income and net asset to measure financial performance, total assets to determine size of banks, total capital and total risk weighted assets to measure Capital Adequacy, nonperforming loans and gross loan advances to measure Asset Quality, total operating revenue and total profit to measure Management Efficiency, net liquid assets and total deposits to measure Liquidity. This data aided in the analysis of the variables influencing the financial performance of Kenyan commercial banks.

3.5 Data Analysis

Using SPSS version 25, the data collected from the secondary sources was analyzed. The data was analyzed using descriptive statistics including mean, median, standard deviation, minimum and maximum values. A multivariate linear regression model was used in the study to examine how internal factors affected banks' financial performance. The study model is as follows:

$$ROA = \alpha + \beta_1 CA_{it} + \beta_2 AQ_{it} + \beta_3 ME_{it} + \beta_4 LR_{it} + \beta_5 SZ_{it} + \varepsilon_i \ldots\ldots\ldots\ldots\ldots 1$$

Where: ROA = Net Income/Total Average Assets and it shows performance of bank i at time t; α = Intercept/constant;nβ_1, β_2, β_3, β_4, β_5 = regression coefficients

CA_{it} = Total capital / Total risk weighted assets; AQ_{it} = Non-performing loans to total loans; ME_{it} = Total Cost/Total Income; LR_{it} = Quick Assets/Total deposits; SZ_{it} = Total Assets; ε_i = Error term

Return on Asset was measured as a ratio of net income to total average assets.

Capital Adequacy (CA) was measured as a ratio of total capital to total risk weighted assets Asset Quality (AQ) was measured as a ratio of non-performing loans to total loans.

Management Efficiency (ME) was measured as a ratio of total cost to total income

Liquidity Ratio (LR) was measured as a ratio of quick assets to total customer deposits. It will indicate the ability of a commercial bank to pay its short-term obligations.

Size (SZ) of the bank was measured as a natural log of the total assets to be consistent with other ratios in the model.

3.5.1 Diagnostic Test

Diagnostic tests were used to gauge the type and strength of the association between the independent and dependent variables.

3.5.1.1 Multicollinearity Test

When two or more explanatory variables in a multiple regression model have a strong linear relationship, multicollinearity is said to exist. Multicollinearity, according to Tabachick and Fidell (2007), occurs when the correlation between the explanatory factors is more than 0.9. The five independent variables were tested for multicollinearity.

3.5.1.2 Heteroscedasticity Test

When the variance in the error term is not constant, the situation is said to be heteroscedastic. The homoscedasticity assumption is made by the traditional linear regression model, which assumes constant error term variation. In contrast when the errors are not constant the condition is known as heteroscedasticity. To check for heteroscedasticity, the researcher used F-statistic. It is evident that error terms are constant when the probability value is greater than 0.05.

3.5.2 Test of significance

Analysis of Variance was used in this study's significance test (ANOVA). The 5% level of significance and 95% confidence interval will determine the regression model's significance. To ascertain how changes in the independent variables have affected the financial performance, adjusted R^2 will be employed.

4.1 Data Analysis, Results and Discussion

4.2. Analysis of Correlation

Table 1: Results of Correlation

		ROA	CA	AQ	LR	ME	SZ
ROA	**Pearson Correlation**	1	-.188[**]	-.112	-.083	-.490[**]	.530[**]
	Sig. (2-tailed)		.009	.125	.253	.000	.000
CA	**Pearson Correlation**	-.188[**]	1	-.066	.198[**]	.103	-.057
	Sig. (2-tailed)	.009		.365	.006	.158	.437
AQ	**Pearson Correlation**	-.112	-.066	1	.075	.396[**]	-.110
	Sig. (2-tailed)	.125	.365		.303	.000	.131
LR	**Pearson Correlation**	-.083	.198[**]	.075	1	.021	.036
	Sig. (2-tailed)	.253	.006	.303		.778	.627
ME	**Pearson Correlation**	-.490[**]	.103	.396[**]	.021	1	-.376[**]
	Sig. (2-tailed)	.000	.158	.000	.778		.000
SZ	**Pearson Correlation**	.530[**]	-.057	-.110	.036	-.376[**]	1
	Sig. (2-tailed)	.000	.437	.131	.627	.000	

(Source Author, 2022)

The results indicate a moderate positive correlation between ROA and bank SZ at 0.53 that is statistically significant. This means that bank size moves in the same direction with profitability. The higher the total assets of bank the higher its ability to generate profitability. In contrast ROA has a negative correlation with CAR (-0.188), AQ (-0.112), LR (-0.083) and ME (-0.490). Liquidity indicated the weakest correlation with ROA at -0, whereas ROA and bank size showed the highest correlation at 0.530. 083. Capital adequacy and ROA have a -0.188 connection that is statistically significant at 0. 009. This implies when capital increase the profitability of bank decreases since more resources are held up as capital instead of lending to borrowers or investing in modern infrastructure that helps in income generation. Asset Quality has negative correlation with ROA at -0.112 which is statistically insignificant. This means that as non-performing loans rise, banks' financial performance falls. Liquidity has a weak negative association with ROA at -0.083 which is statistically insignificant. This implies that when liquidity increase the profitability of banks decreases. Management Efficiency has a weak negative correlation with ROA at -0.490 which is statistically significant. This means that when operational costs of a bank increase the amount used to lending reduces leading to low profits.

4.3 Regression Analysis

This study's objective was to identify the variables influencing Kenya's commercial banks' financial performance. In order to achieve this goal, the researcher conducted a regression study that demonstrates the association between the predictor variables CA, SZ, LR, ME, and AQ and the dependent variable financial performance as assessed by ROA. The conclusions of the regression analysis are discussed below.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.637a	.406	.390	1.9668	.406	25.011	5	183	.000
a. Predictors: (Constant), SZ, LR, AQ, CA, ME									
b. Dependent Variable: ROA									

(Source Author, 2022)

The multiple linear regression correlation coefficients are represented by the R value, which also shows how strongly the dependent and explanatory variables are correlated. A moderate correlation between financial performance and the independent variables square, which stands for the coefficient of determination, was found in this study with a R value of 0.637. The R square in this study is 0. 406. Accordingly, 40.6% of the financial performance of Kenya's commercial banks may be explained by CA, SZ, LR, ME, and AQ. To check for heteroscedasticity in the study, F-statistics were performed. The critical value of F 2.0630 was greater than 0.05, indicating that the model is credible because the error factors remain constant.

4.3.1 Regression Coefficients

The proposed model of the relationship between financial performance as evaluated by ROA and the independent variables was illustrated by the calculation of the regression coefficients and their significant values. The table 3 shows the regression coefficients.

Table 3: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	1.790	1.188		1.507	.134	-.554	4.134		
CA	-.026	.014	-.111	-1.884	.061	-.054	.001	.933	1.072
AQ	.006	.005	.071	1.130	.260	-.004	.016	.822	1.216
LR	-.004	.003	-.075	-1.276	.204	-.011	.002	.949	1.053
ME	-.014	.003	-.355	-5.289	.000	-.020	-.009	.720	1.389
SZ	.630	.097	.400	6.499	.000	.439	.821	.855	1.170

a. Dependent Variable: ROA

(Source Author, 2022)

From the regression results above, the study model:

$$ROA = \alpha + \beta_1 CA_{it} + \beta_2 AQ_{it} + \beta_3 ME_{it} + \beta_4 LR_{it} + \beta_5 SZ_{it} + \varepsilon_i \ldots\ldots\ldots\ldots 1$$

The fitted model was:

$$ROA = 1.790 + -0.026\ CA_{it} + 0.006\ AQ_{it} - 0.004\ ME_{it} - 0.014 LR_{it} + 0.630 SZ_{it} + 1.966$$

The constant in the regression model is 1.790, which can be taken to suggest that the ROA will be 1.790 if all the predictor variables—capital sufficiency, managerial effectiveness, bank size, liquidity, and asset quality—have zero values. Additionally, the model demonstrates that a unit increase in Capital Adequacy results in a -0.026 reduction in ROA. An rise in ROA of 0.006 is produced for every unit increase in asset quality. Increases in Management Efficiency result in a -0.004 reduction in ROA. Liquidity increases by one unit and reduces ROA by -0.014. The ROA increases by 0.630 for every unit increase in bank size. A p-value of 0.260 indicates that asset quality had the greatest influence on commercial banks' financial performance, while management effectiveness and size had the least significant effects.

To assess the significance of the independent variables in the model, the researcher utilized a significance threshold of 5% at a confidence level of 95%. The probability values are compared to the threshold value of 0.05, below which the independent variable is considered significant and above which the predictor variable is considered inconsequential. While capital adequacy, liquidity, and asset quality had p-values more than 0.05, indicating they are not significant in the model, management efficiency and size had p-values less than 0.05, indicating they are significant in the model.

4.3.2 Significance Level

ANOVA was employed in the study to assess whether there are any meaningful correlations between the dependent and explanatory variables. A two-tailed test with a confidence level of 5% and 95% was used to determine the significance level in the model. The table 4 below shows the ANOVA findings.

Table 4: ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	483.762	5	96.752	25.011	.000[b]
	Residual	707.929	183	3.868		
	Total	1191.691	188			
a. Dependent Variable: ROA						
b. Predictors: (Constant), SZ, LR, AQ, CA, ME						

The F statistics is 25.011 with a distribution of F according to the ANOVA table above (5,188). The F-statistics has a probability value of 0.000, which is less than 0.05, and this indicates that there is a significant relationship between the predictor variables capital adequacy, management effectiveness, bank size, liquidity, and asset quality and the dependent variable financial performance as measured by ROA. The model may therefore be trusted to identify the variables influencing the financial performance of commercial banks in Kenya.

4.4 Discussion of Research Findings

The aim of the study was to find out what influences Kenyan commercial banks' financial performance. The findings indicate a weak correlation between CA and ROA at a p value of 0.061, larger than 0.05, and a negative link between CA and ROA at -0.026. This is in contrast to Kamande (2017), who discovered a significant and favorable association between CA and the financial success of commercial banks in Kenya. A decrease in profitability by 2.6% following a unit increase the capital level means that maintaining high levels of capital to meet the regulatory requirements denies bank an opportunity to invest the funds through lending or investing in securities.

The results showed that AQ and ROA have a positive association at 0.006, with a p-value of 0.260, which is more than 0.05, and thus suggests that the relationship between AQ and ROA is negligible. The findings concur with Mumbe (2015) who opined that there exists positive insignificant correlation between AQ and ROA. Because of the positive correlation, an increase in AQ of one-unit results in an increase in earnings of 0.6%. Therefore, banks should disburse quality loans to lower instances of non-performing loans and improve on their recovery efforts to improve their profitability.

The results showed that LR and ROA have a negative connection at -0.004 with a p-value of 0.204, which is more than 0.05, and thus suggests that the relationship between LR and ROA is inconsequential. The results are in opposition to Kamande (2017), who discovered a strong and favorable association between LR and ROA. Because of the inverse link, a rise in LR by one unit

results in a 0.4% drop in profitability. This means that holding high levels of liquid assets leads to opportunity cost of missed profitable investments and lending which results to lower profitability. Therefore, banks should reduce holding high levels of liquid assets beyond the regulatory levels to increase their profits.

The findings revealed a negative association between ME and ROA at -0.014 with a p-value of.000, which is less than 0.05, indicating that there is a significant relationship between ME and ROA. The results support Mumbe's (2015) finding that there is a weak but significant correlation between Kenyan commercial banks' financial performance and management effectiveness. This means that a unit increase in operational costs reduces profitability by 1.4% in banks. Therefore, commercial banks should look for ways of increasing efficiency such as investment in technology and prudent utilization of available resources to increase their profitability.

The study found a significant association between SZ and ROA, with a positive correlation between the two measured at 0.630 and a p-value of 0.000, less than 0.05. A unit increase in bank size results in a 63.0% increase in profitability, according to the positive relationship. The results support Kamande's (2017) observation that SZ and ROA have a positive and substantial association. This suggests that banks need to focus on increasing their assets which comprise of loans, cash and balances with CBK, property and equipment and intangible assets to increase financial performance.

5.1 Conclusions

The objective of the study was to find out what influences Kenyan commercial banks' financial performance. The results of the data analysis form the basis for the conclusions.

The study came to the conclusion that the capital has a weak and insignificant association with ROA. This shows that raising capital levels reduces bank profitability. Therefore, commercial banks should refrain from holding excessive capital beyond the recommended regulatory levels as this could make them forgo viable investment opportunities.

The study finds that Asset Quality and ROA have a favorable but insignificant association. This means that increase in asset quality leads to improved financial performance. In order to increase their profitability, banks should employ tactics that reduce non-performing loans.

The analysis finds that there is a weak and inconsequential correlation between liquidity and ROA. This implies that improving liquidity lowers commercial banks' financial performance. Therefore, banks should avoid holding excessive assets beyond the regulatory requirements and internal limits as stipulated in the risk appetite statements to allow them take advantage of variable investments.

The study comes to the conclusion that Management Efficiency and ROA have a negative and substantial association. This implies that commercial banks' financial performance declines when operating costs rise. Therefore, commercial banks should adopt technology and strategies that improves operational efficiency to save on cost to increase their profitability.

According to the study's findings, there is a positive and significant correlation between bank size and ROA. This implies that improved financial success follows an increase in bank size. Therefore, commercial banks should seek to increase the level of their total assets to improve their ability to generate profits.

5.2 Recommendations

The findings suggest that the government through Central Banks should encourage banks to hold sufficient capital and liquid assets to meet the set regulatory requirements. However, it is recommended that the policy on liquidity and capital adequacy ratios should be flexible to allow the CBK to revise them regularly to align with market dynamics. This will help to avoid holding excessive capital and liquidity when it could have been used for gainful investment without exposing the bank to liquidity risks.

The board and senior management of commercial banks should enshrine in their risk framework to hold adequate capital and liquidity assets to caution the banks from uncertainty. However, the risk appetite should not differ so much with the set regulatory requirements to ensure that the banks do not miss on viable opportunities by holding excessive capital and liquid assets. The top management should also maintain high level of asset while investing in technology to increase efficiency and lower operation costs which will results to increased profitability. In addition, the management should strive to reduce non-performing loans by coming up with policies and strategies that cautions the bank from making losses through lost interest income and failure to recover the principal.

From the findings it was found that the independent variables explained only 40.6% change in ROA. Therefore, the researcher recommends that future studies considering other internal factors should be conducted. In order to undertake an in-depth research, the study also advises that studies be conducted looking at the impact of certain individual variables on financial performance of commercial banks, such as the impact of capital adequacy on the profitability of commercial banks in Kenya.

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