IMPACT OF BANK INTERNAL FACTORS ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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DECLARATION

I declare that this is my own original work and has not been presented for an award to any institution for any award

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This project has been submitted for examination with my approval as the University Supervisor.

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I sincerely give gratitude to my supervisor, Mr. Martin Odipo Khoya for the endless guidance he accorded me throughout the various stages of this study.

DEDICATION

I dedicate this work to both my parents and sister whose interest in this, as in all my ventures, was never less than my own.

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ABSTRACT

Commercial Banks are key players of our economy. They maintain capital by accepting deposits and lending the funds through loans, they promote employment creation and smoothening commerce and trade functions. Key to their survival is profitability which enables them to perform these functions in a robust manner. Several researches have been done which have found that both Bank external and internal factors have an impact on financial performance of commercial banks. The main purpose was to determine the impact of Bank internal factors on the financial performance of commercial banks in Kenya. The ROA represented the dependent variable under the study whereas the independent variables included Capital adequacy, Asset Quality, Management efficiency, Liquidity Management And Bank Size. Data was gathered from the financial statements of the 11 commercial Banks listed at NSE. Descriptive statistics such as mean, maximum and minimum values and standard deviation were used to summarise data. Inferential statistics such as correlation and regression were used to establish the relationship between the variables. The results showed that there were positive link between ROA and all the independent variables. The study found that Liquidity Management and Management efficiency had the greatest impact on the financial performance of commercial banks.The study recommends therefore that management of banking institutions should put up sound policies that would ensure there's operational efficiency and the correct levels of liquidity are maintained at all times.

CHAPTER ONE

INTRODUCTION

1.1 Background Information

Banks are critical components used to monitor financial status of a country and its economic achievement. They act as a medium through which money changes hands between customers and banking institutions (Athanasoglou, Brissimis & Delis, 2008). Moreover, they offer specialist financial services that enable acquiring information on saving and borrowing options more accessible. It facilitates and check the economy progress.

A well-developed financial system aids economic growth, which benefits both the economy and society. As a result, a Commercial Bank is critical to a socioeconomic health. Banks perform a number of critical roles in development of individual countries, including employment generation and industry promotion. Banks maintain capital by receiving deposits from clients and converting into commercial loans. Smoothing Trade and Commerce Functions, Creating Employment Opportunities, and Using Monitory Policy; a regime's monitory policy is a crucial policy. The basic goal of monetary policy is to keep a financial system stable so that it can withstand the negative consequences of inflation, limited liquidity, and other challenges. By limiting and extending loans, dispersing cash piecemeal, and contributing to overall economic stabilization, banks play a significant role in economic management.

1.1.1 Financial Performance of Banking Sector

Ongore and Kusa (2013) noted that a more scalable and resilient banking industry, as well as a healthier and more shock-resistant financial system, result from high profitability Bank runs, banking distress, and a massive financial crisis emerges from underperformance. Banking

industry play a critical role in maximizing system throughput by ensuring a steady flow of funds from clients to enterprises. To ensure economic stability, Ongore and Kusa (2013) suggest that banks should be proactive across the board in order to return capital to shareholders, attract new investments, and actively contribute to economic growth.

Domestic and foreign factors have an influence on growth (Al-Tamimi, 2010; Aburime, 2005). Both bank-specific (intra) traits and global data can be used to characterize such elements. Individual bank characteristics that have an effect on productivity are referred to as internal factors. These characteristics are heavily influenced by administrative and inner-Board decisions. External influences are events that occur outside of a company's control and have an impact on its earnings.

The purpose of a bank is to make money. To do this, all measures must be devised and implemented to aid in the achievement of socioeconomic objectives. The goal of this research, on the other hand, is to determine how profitable banks are. Return on Assets (ROA) is the most frequent metrics used to evaluate bank growth together with Return on Equity (ROE) as determined by Murthy and Sree (2003) and Alexandru and Romanescu (2008), respectively.

The ROA is a profit indicator that measures how much money assets earns. It is a metric that examine the company ability to successfully use its financial resources and assets on its accounting records (Khrawish, 2011). The higher the proportion, the more profitably a company's financial statement is managed (Wen, 2010). Shareholders expect a positive return on their investment as a result of their investment (ROI). As a result, the ROE and profitability are inextricably linked.

1.1.2 Internal Bank Factors

Internal Bank Factors are aspects of a lender's internal performance that can be changed. Every business has its own set of underlying factors that affect its financial performance. These criteria are controlled by the bank, and they differ from one bank to the next and include adequacy of capital, size of the bank among others (Sipho, 2011).

1.1.3 Adequacy of Capital

A capital requirement is the amount of money required by a banking or other commercial regulatory entity. The quantity of capital required by banks to deal with concerns such as loans, industry, and asset quality, as well as absorb losses and safeguard debtors, is known as capital sufficiency (Ongore & Kusa, 2013).

$$\text{CAR} = \frac{\text{Tier One Capital} + \text{Tire Two Capital}}{\text{Risk Weighted Assets}}$$

Tier 1 capital, also known as core capital, is made up of reported buffers (which show up on cash flows) and equity capital. This type of income is the capital that a company uses on a consistent basis to run its operations, and it is the foundation of financial strength.

Tier 2 capital is a sub classification of Tier 1 capital. When a company closes or liquidates, this capital is used to offset liabilities. Tier-2 assets protect depositors and lenders from losses in the event of a failure, but they provide less security. It can be used to make up for losses if the company's Tier-1 assets are all lost.

Risk-Weighted Value (RWV) is a term that refers to the Assets are everything with a risk-weighted value linked to it. Banks and other organizations must meet minimum capital requirements using risk-weighted techniques.

1.1.4 Asset Quality

Banks frequently use this phrase to assess how some of their investments are prone to economic loss and how much of a loss provision they must generate. Loans are the most prevalent assets that require a thorough analysis of growth prospects. Loans can become non-performing assets if borrowers fail to meet their repayment obligations.

Typically, the loan book is the primary source of revenue. The income of a loan portfolio is determined by its quality. The most serious threat to a bank is a defaulted loan. The year 2011 has come to an end (Dang and Uyen). Hence, examining non-performing loan percentages is the most effective method for determining asset quality. Commercial banks are eager to reduce their non-performing loan portfolios since it reduces stock returns. As a result, a bank's portfolio with a low non-performing loan (NPL) to total loan ratio is thought to be strong. The lower the equivalent, the finer the performance (Sangmi & Nazir, 2010).

1.1.5 Management Efficiency

One of the most important aspects that affects profitability is administrative reliability. Various measures, such as overall asset projected growth and earnings inflation rate, are used to illustrate it. Despite this, utilizing financial ratios to describe it is one of the most difficult tasks. Another aspect of management excellence is operational efficacy in monitoring operational costs. Performance of management systems, institutional discipline, process control, personnel quality among other aspects are all critical. On the other side, financial information in financial statements could be used as a gauge for strategy implementation.

Financial ratios can be employed to assess a company's capacity to effectively deploy resources, maximize income, and cut expenditures. Operating income to income ratios are one

of the measures used to assess management excellence. Ongore and Kusa, (2013) argued that administrative performance is frequently expressed qualitatively using subjective judgements and other characteristics. In addition, other financial ratios are used to supplement management performance. According to Palepu and Healy (2008), effective leadership can help a company achieve a relatively high profit margin. Companies can use the efficiency strategy to produce high-volume standard products or services at the lowest possible cost for their customers.

The higher the operating income as a percentage of total revenue, the more productive the organization in terms of operational adequacy and revenue output. According to Ongore and Kusa (2013), the rate of operating expenses has a significant impact on management effectiveness, which in turn determines the viability.

1.1.6 Liquidity Management

It is a set of procedures, strategies, and techniques used to ensure that a company or bank has access to cash when and where it is needed. This money can be utilized to purchase goods and services, pay salaries, or create new companies.

Depending on how liquidity is defined, liquidity management can take one of two forms. The capacity to exchange an item at its market value, such as a share or a bond, is referred to as liquidity. Large organizations, such as financial institutions, use a different definition. The ability to meet capital and security responsibilities even in the event of significant failures, is assessed on a regular basis. Liquidity management refers to shareholders efforts to mitigate liquidity risk exposure in any situation.

Adequate level of liquidity, as per (Dang 2011), strongly correlates with profitability. According to the aforementioned source, the most commonly used financial ratios for determining liquidity are client deposits to total assets and total loan to client deposits.

The capacity to meet short-term financial responsibilities is measured by liquidity. As stated by Athanasoglou, Brissimis, and Delis (2008), Dang (2011) and Demirguc-Kunt and Huizinga (1999), businesses with minimal liquid assets may find themselves unable to support their operations.

1.1.7 The Bank Size

Commercial banks are distinguished by their sizes. Scholars in Nigeria conducted studies concerning the same issue such as Weerasinghe and Ravinda (2013), Sufian and Chong (2008) and Staikouras and Wood (2004).

1.1.8 Bank Internal Factors and Financial Performance

Banking industry tend be the best option in mobilization, savings, credit and financial resource allocation. Consequently, these roles are regulated by central bank and make them a significant element in growth and development of the economy. In accomplishing this role, it must be realized that banks have specific internal factors such as bank size, capital adequacy, management efficiency and liquidity that determine their profitability (Thair et al 2011). Banks size are determined by the assets they hold and their profitability is determined by deposits and credits. Banks make loans and advances to businesses, individuals and governments in order to enable them to engage in investment and development activities that will improve their performance (Felicia, 2011).

Most world economies including Kenya attempt to focus their effort in growing and stabilizing the performance of their banking industry. In this case, the Government of Kenya has put in place several reforms to boost the profitability of banking sector. Despite this, some banks are still under statutory management, and this calls for identification of internal factors which determine the profitability of the banking industry (Onuonga 2014).

1.2 Research Problem

Banking industry is dictated by a variety of internal and external variables. A study by Olweny and Shipho (2011). Banks function in a variety of macroeconomic environments, which differ by country. This indicates that the elements that influence firm performance cannot be copied or compared in another country. Liquidity was a concern for both and Almazari (2014). Two studies reached diametrically opposed conclusions, with the former claiming that liquidity has no bearing on financial success and the latter claiming that liquidity has a positively significant correlation. Osoro (2013) investigated financial reconfiguration as a factor influencing bank capital structure.

In contrast to Shipho (2011), Onuonga (2014) focused on top banking institutions. A comparable study was conducted by Ongore and Kusa (2013), however they focused on external factors that proved out to have negligible results. Liquidity should be examined further, according to Lukorito, Muturi, and Nyangau (2014), however Ongore and Kusa (2013) determined the contrary. As a result, liquidity is a criterion used to evaluate a company's capacity to meet short-term goals and liabilities. According to studies, if the value is assessed to be substantial, the bank incurs an opportunity cost due to the additional cash that could be invested. The existing literature does not primarily focus on recognizing banking aspects that

affect profitability in underdeveloped nations, with Kenya as a case example. Clearly, Kenya's accounting standards and methodologies for determining banks growth are inadequate.

1.3 Study Objectives

1.3.1 Overall Objective

The goal of this study is to find out how internal bank features influence Kenyan commercial financial firms.

1.3.2 The Specific Objectives

i. To investigate the impact of adequacy of capital on the financial performance of banking institutions.
ii. To ascertain the influence of asset quality on the profitability of banking institutions.
iii. To investigate the impact of Management effectiveness on the financial performance of banking institutions
iv. To ascertain the impact of liquidity on the profitability of a banking institution.
v. To ascertain the impact of liquidity on the financial performance of a banking institution.
vi. To investigate the effect of Bank size on profitability.

1.4 Significance of the Study

The general goal of this research is to determine the elements that influence Kenyan banking institution profitability. This is in line with the overall goal of elucidating some of the most critical factors influencing bank financial success.

The conclusions of the study would help CBK, the industry's regulating authority, by laying the groundwork for inconsistent regulation and supervisory methods. The findings of this research

gives insight on how banks are controlled depending on their financial performance, with the Central Bank being in charge of establishing minimal requirements.

This can be used by stockholders to evaluate their financial stability in terms of profitability depending on a number of attributes. Individual financial performance drivers were studied. The indicators were expanded to include specific information on each component involved in the creation of awareness. The findings may give students and scholars more insight into the finance industry while enriching the scholarly articles.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

The section offers a conceptual framework and a literature review summary, as well as theoretical and empirical reviews of components that affect financial performance banking institutions.

2.2 Theoretical Review

There are numerous theories for investigating the attributes that influence financial performance of banking institutions. Two industrial organization models emerged in the late 1970s and early 1980s, sparking interest in commercial banks: The Theory of Portfolio in the study of commercial bank financial performance plays a role in the analysis of returns.

2.2.1 Market Power Theory (MPT)

Market power is defined as the capacity to influence a product's retail price through manipulating supply, demand, or both. According to MPT, the market structure of a bank determines its performance (Tregenna, 2009). Two MPT techniques are Relative Market Power (RMP) and Structure-Conduct-Performance (SCP) Because of the incentives in place, firms operating in highly concentrated markets are much more lucrative than firms operating in less concentrated markets, according to SCP theory (Tregenna, 2009). Market share has an impact on profitability, according to the RMP hypothesis, because only institutions with new goods can manage expenses, wield market power, and operate at a non-competitive level (Tregenna, 2009).

2.2.2 Theory of Efficiency Structure

Banks generate a lot of money, according to the theory, because they are more productive than the rest of the economy. The notion of efficiency theory and the concept of efficiency theory are two different approaches to efficiency theory. In contrast, the scale orientation accentuates economies of scale rather than disparities in administrative or industrial processes. Economies of scale enable large corporations to achieve lower unit costs and higher profits. They frequently control a sizable portion of the market, increasing concentrations and production (Athanasoglou, Delis & Staikouras, 2006).

2.2.3 Portfolio Theory for the Twenty-First Century

This strategy is founded on two basic principles: each investment seeks to maximize returns while avoiding risk, and uncertainty may be reduced by diversifying a portfolio with a variety of independent stocks. MPT denotes that these investors are risk cautious, preferring a lower-risk portfolio in exchange for a higher return. In this environment, investors can only consider taking bigger risks if they expect a bigger payout.

2.2.4 The Theory of the Risk-Return Trade-Off

The risk return is the link between uncertainties and returns that an investor considers while making investment decisions. Partners are more willing to take risks in order to maximize their expected returns and decrease their costs. According to finance theory, the equity-to-asset ratio rises as firms take greater risks and the anticipated return rises. The transaction in exchange for risk is what it is termed swap (Van Ommeren, 2011).

A bank that surpasses the statutory regulatory capital ratio may be able to raise risk while avoiding regulatory sanctions associated with capital collapse, as affirmed by Calmen and Rob

(1996). Banks with insufficient capital, on the other hand, are more prone to take on more risk in order to raise capital. As a result, there are a variety of methods for calculating regulatory burden.

2.3 Bank Internal Financial Performance Determinants

Banking institution success is influenced by a number of factors. The Great Recession demonstrated that when the banking industry suffers from structural profit and capital issues, the entire economy suffers (Sufian & Chong, 2009). Consequently, it was not be able to lend to the economy.

2.3.1 Capital Adequacy

Capital is a critical component in limiting client damages in the event of a business failure, which is why bank capital structures are strictly regulated. Highly leveraged firms are more prone to take unnecessary risks while deriving maximum profit at the expense of lenders. Kamau (2009) and Jha and Hui (2012) looked into the financial growth of a number of banks utilizing Nepalese financial metrics. Using the CAMEL template, the evaluation revealed the quality indicators discovered via financial rationing. Okoth and Gemechu (2013) conducted a factor study of Kenyan financial institutions between 2001 and 2010, finding that bank-specific factors have a substantial effect on companies.

2.3.2 Asset Quality

Credits account for a significant portion of commercial banks' revenue. Banks, on the other hand, are still vulnerable to fraudulent mortgage loans (Dang, 2011). Non-performing loans should be kept to a bare minimum because they have a negative influence on productivity and financial success (Sangmi & Nazir, 2010). High-quality loans had higher rates of profitability

than low-quality loans, according to Ilhomovich (2009). Anyike and Nwosi (2015) discovered a substantial correlation with asset quality and bank profitability.

2.3.3 Management Efficiency

Nimalathasan (2008), assert that management is likely the most important step toward financial success and development. According to Echeboka et al. (2014), management quality is described as a manager's ability to identify and monitor operational risks, as well as ensure regulatory compliance in the effective execution of banking activities. Poor management, according to Nasserinia, Ariff, and Fan-Fah (2014), increases a bank's chance of failure, and additional research appear to back this up. According to Ongore and Kusa (2013), the amount of operating profit allocated to overall revenue has a considerable effect on profitability in bank performance. Low bank income, as argued by Nasserinia et al. (2014), is an indication of poor leadership. Operating expenses are inversely related to profitability and inversely link to cost control activities, as noted by Athanasoglou et al. (2008).

According to a poll performed by Ugandan banks, operating costs have a detrimental impact on productivity, and cost effective cost conservation is crucial for banks to improve their performance. Echeboka et al. (2014), Muhmad and Hashim (2015) and Sufian and Kamarudin (2012) found mixed results, whereas Obamuyi (2013) and Rao and Lakew (2012) found comparable results.

2.3.4 Liquidity Management

Banks are often categorised based on their capacity to meet cash and collateral criteria, as well as their liquidity, according to Bodla and Richa (2010). As a result, bank managers must exercise extreme caution when it comes to liquidity management. This relationship's inverse is

also true. As a result, banks with high liquidity ratios risk going bankrupt. Consequently, governance is torn amid the need for profit and the necessity for liquidity (Uzhegova, 2010).

2.3.5 Size of the Bank

When it comes to ordinary activities, the size of a bank matters (Davis, 2012). Keeping all other variables constant, the bank's size influences the level of risk its partners face. Larger debt is more likely to be repaid than smaller debt because larger banks have more assets to keep them solvent during economic downturns. According to Smirlock (2010), a bank's size and earnings are inextricably linked. Large banks benefit greatly from lower borrowing costs as a result. According to Black (2001), there is a poor association between rates of return and business size whenever scale and product mix are factored.

When it came to small business financing, Davis (2012) discovered an asymmetric relationship between net return and the size of the firm. As a result, smaller financial institutions are more likely to accept lending from multiple sources. Because of the close proximity of the branches and the higher deposits, a financial institution with multiple branches can easily network with its clients. However, if capital investments are not properly managed, these networks' operational costs may have a negative impact on profitability (Smirlock, 2010). Established financial institutions have more freedom to operate in a wide range of markets than smaller institutions, allowing them to capitalize on market activities that may necessitate significant fixed costs while still benefiting from economies of scale. Because securities can be used as collateral in repos, market-based activities, according to Davis (2012), may result in unstable funding and increased debt.

2.4 Empirical Assessment

This section conducted a literature review on the factors that influence commercial bank financial performance. Short first looked into the relationship between profit level and bank concentration in 1979, when he looked into the factors that influence bank profitability. According to Said and Tumin (2011), three types of factors influence bank profitability: those tailored to the bank, those tailored to the industry, and those tailored to macroeconomic variables (Said & Tumin, 2011).

Using a sample of 17 financial institutions, a Malaysian study evaluated the reasons of bank growth from 1986 to 1995 and identified that internal and external factors are the two main types of antecedents (Guru, Staunton & Balashanmugam, 2002). Proper expenditure allocation has been identified as one of the most important and critical factors in determining robust growth.

Kosmidou, Pasiouras, and Tsaklanganos (2005) conducted a study in UK business banks using 224 observations between 1995 and 2002, and the findings revealed that capital strength was a critical factor in growth.

Olweny and Shipho (2011) used CBK and a survey of the 38 audited accounts collected in 2009 to investigate the role of the banking industry on the agility of Kenyan banking institutions. While no market dynamics had a proportionally significant effect on financial stability, the study discovered that all of the specific characteristics did.

Liu (2011) investigated the CAMEL factors in 13 Shanghai Stock Exchange-listed banks between 2008 and 2011 and noted a positive correlation between ROA and ROE with the study

variables. Additionally, it has been discovered that management performance is a primary predictor of bank outcomes, and thus has a significant impact on the study initiatives success.

The CBK assesses asset quality by looking at the proportion of marginally NPL and the total loans. Tesfai (2015) investigated the financial performance of Habib Bank AG Zurich in Kenya by interpolating different variables and discovered a strong correlation between profitability and liquidity. The banking institution profits were influenced by liquidity. It was discovered that liquidity was a factor in Habib Bank's financial growth. According to the study, liquidity management should be strengthened by detecting, evaluating, tracking, and mitigating liquidity risk. Financial managers should also identify all issues affecting their firms' liquidity in order to develop mitigation strategies. Investors may raise their investments in high liquidity commercial banks, according to the survey, as their financial growth is predicted to expand by 2.3 percent.

2.5 The Summary of Literature Review

The reviewed literature focused on international research rather than studies conducted locally. This is because research in the study region of Kenya has been limited. Several empirical studies show a variety of factors that influence bank financial performance. The ROA has been used to evaluate financial performance in all of the studies. Among the parameters examined are capital sufficiency, the size of bank, quality of asset, liquidity, revenue diversification, and operating cost efficiency.

2.4 Conceptual Framework

The model explains the relationship between the variables under consideration by interpolating both dependent and independent variables.

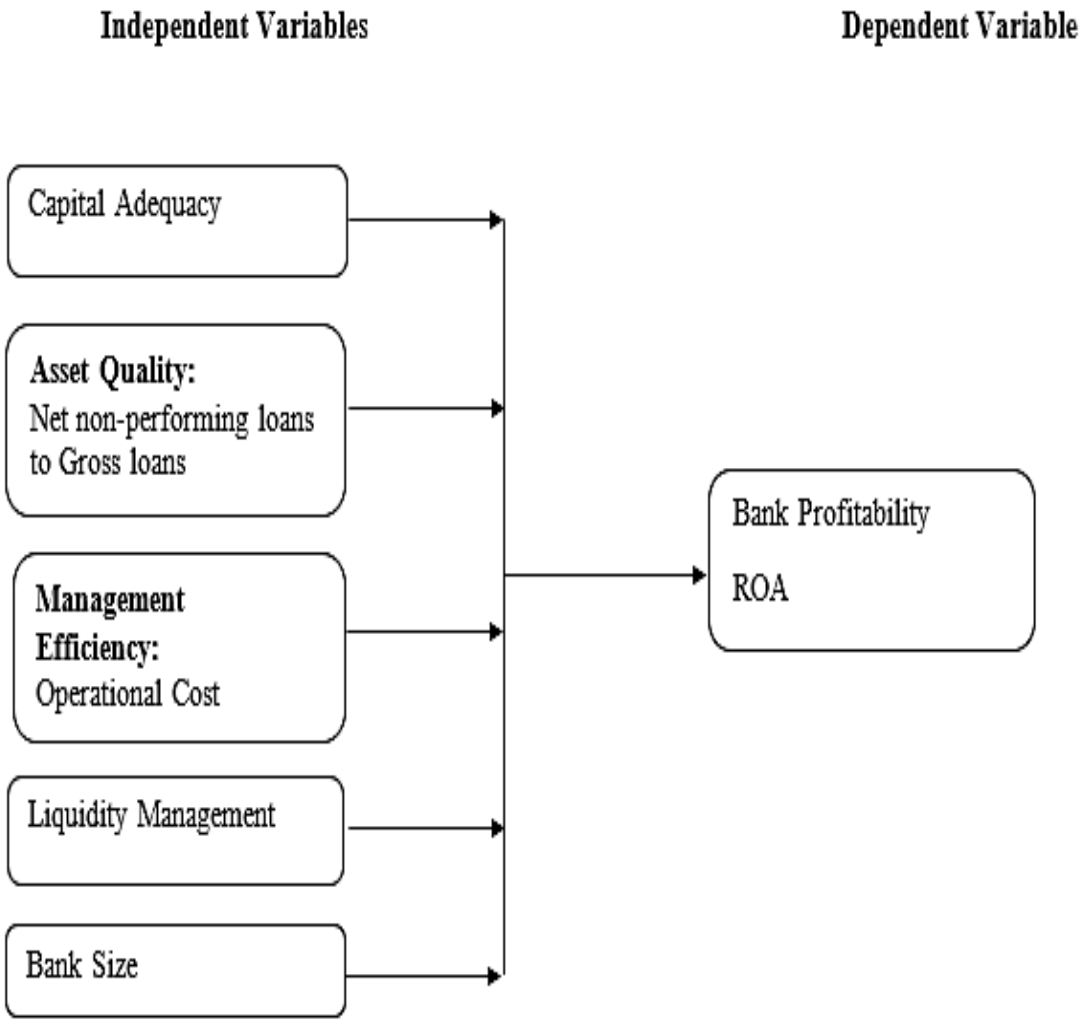

Figure 2.1: Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The study research design, sample design, study population, data collection methods, and analysis procedures was covered in this part.

3.2 Methodology of Research

The data collection and final evaluation methodologies and processes were reported by Borg (2007). Descriptive research, according to Groves (2004), gives trustworthy information on individuals, occurrences, or surroundings. Descriptive approaches assess the relationship between study variables but do not infer causality; rather, they imply that study variables are related (Gill & Johnson, 2006). A good study design, according to Kothari (2011), should generate the most information and allow for the analysis of a variety of areas of the research subject.

The study sought to focus on and characterize the properties of the important variables using a non-distortive technique, which is arguably the most warranted and required for this study. The study delved deeper into the many factors that determine bank expansion in Kenya, as well as the impact these factors have on financial growth. The empirical data acquired determine this. Internal difficulties were important to each of the listed banks in different ways. After that, an assessment and additional calculations were carried out to evaluate the extent to which the identified elements influence the financial institution's success.

3.3 Targeted Population

Cooper and Schindler (2009) describes population as the total number of things from which inferences can be derived, with each member of the population forming a unit. Population is defined by Kothari (2011) as those aspects in any field of investigation, sometimes referred to as the universe. Mugenda and Mugenda (2012) defined population as generalized factors upon which scholars rely on their arguments. The target population consisted of all the 11 commercial Banks listed in the Nairobi Securities Exchange (NSE) in Kenya as at the end of 2020 (Appendix II)

3.4 Data Collection

In order to meet the research objectives, secondary data was adopted in this research. The use of certified financial figures from individual financial institution websites as well as published banking industry reports is one indication.

3.5 Analysis of the Information

A regression model using independent variables such as sufficiency of capital, quality of asset, administrative effectiveness and liquidity were employed to establish their correlation. The regression concept is illustrated in the diagram below:

$$Y = a + \beta_1 CA + \beta_2 AQ + \beta_3 ME + \beta_4 LM + \varepsilon$$

Where:

Y = Financial Performance of Bank i at t as expressed by ROA

α = Constant

β_n = Regression coefficients

$$CA = \text{Capital Adequacy} = \frac{\text{Equity}}{\text{Total Assets of Bank i at time t}}$$

$$AQ = \text{Asset Quality} = \frac{\text{NPLs}}{\text{Total Financing of Bank i at time t}}$$

$$ME = \text{Management Efficiency} = \frac{\text{Operating Expenses}}{\text{Opersting Margin of Bank i at time t}}$$

$$LM = \text{Liquidity Management} = \frac{\text{Net Liquid Assets}}{\text{Total Customer Deposits of Bank i at time t}}$$

BS = Bank Size = Natural log (Total Assets)

ε = Error Term

Coefficients β_1, β_2, β_3, β_4, β_5 will be used to measure the sensitivity of the dependent Variable (ROA_{it}) to unit changes in the five explanatory variables

3.6 Diagnostic Test

The F-test was employed to establish the significance of the regression equation and the T-test was utilized in determining the significance of regression coefficients at the 95 % confidence level for the overall fit of the variables under test.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter entails an analysis of the study findings. The results are premised on the statistical analysis of secondary data obtained from audited financial statements for all the 11 commercial Banks listed in the NSE in Kenya as at the end of 2020.

4.2 Descriptive Statistics

Table 4.1: Descriptive Statistics

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic
ROA (%)	195	-.3214	.5150	0.0198	.0526
Liquidity Management (%)	195	-1046.3926	9468.3608	94.4815	682.4214
Management Efficiency (%)	195	-929.8332	9930.0877	86.4929	711.0004
Asset Quality (%)	195	0.0000	2.5876	.1064	.20389
Capital Adequacy (%)	195	0.0000	1.7157	.1667	.12904
Valid N (listwise)	195				

Source: Research Findings (2021)

The mean of the return on assets for the period of study was 0.0198 which implies that significant returns were not realized on the assets of commercial Banks listed at NSE. With a maximum value of 0.5150, a minimum value of -0.3214 and a standard deviation of 0.0526 indicates that the deviation of the ROA during the period of study was high. The coefficient of variability was 2.6566 which indicates a high variability in financial performance between the best and least performing banks.

The result also indicates that the mean of total revenue cleared through the Liquidity Management to total bank revenue during the period of study was 94.4815 billion which imply

that banks had a worth noting proportion of revenue from deposits and loan interest obtained through the Liquidity Management as compared to total bank revenue. The minimum and maximum values were -1046.3926 and 9468.3608 billion respectively and the standard deviation was 682.4214 which denote a high deviation. The coefficient of variability was 7.2228 indicating a high variability in revenues from loan interest through the liquidity management for the commercial Banks listed at NSE.

The result further states that the mean of revenue from Management Efficiency to total bank revenue was 86.4929 billion which is relatively high, denoting a fairly large proportion of revenues from Management Efficiency compared to total bank revenue. The minimum value was -929.8332 whereas the maximum value was 9930.0877 billion. The standard deviation was 711.0004 implying a high deviation. The coefficient of variability was 8.2203 indicating a relatively high variability in revenues generated from Management Efficiency.

The mean of NPL to gross loans and advances during the period of study was 0 .1064. This is higher than the mean of ROA by 0.0866 which implies that banks had a higher proportion of non-performing loans compared to total bank assets. The minimum value was 0.0000; maximum value was 2.5876 and the standard deviation was 0 .20389. The results further indicate a coefficient of variability of 1.91626. This means there was a high variability in the proportion of NPL to gross loans and advances among the banks during the period of study.

The total shareholders' funds to total assets had a mean of 0.1667. The minimum value was 0.0000; the maximum value was 1.7157 and the standard deviation was 0.12904. The coefficient of variability was 0.77408 which shows a relatively lower variability in the proportion of shareholders' funds to total bank assets in comparison to other variables used

in the study.

4.3 Correlation Analysis

This uncovers the extent of relationship that exists between variables. Pearson was used to analyse the relationship between the predicted and the predictor variables. The magnitude of the linear relations between the variables was gauged using Pearson product correlation coefficient (r). The value of r lies between -1 and +1. When r = +1, it means there is perfect positive correlation between the variables, zero means there is no correlation, -1 means the variables are perfectly negatively correlated. The closer to +1, the stronger the relationship whereas the closer to -1, the weaker the relationship between the variables.

Table 4.2: Correlations

		ROA	Liquidity Management	Agency Banking	Asset Quality	Capital Adequacy
Pearson	ROA	1.000				
	Liquidity Management	-.017	1.000			
	Management Efficiency	-.017	.998	1.000		
	Asset Quality	-.114	.103	.103	1.000	
	Capital adequacy	.534	-.022	-.024	-.015	1.000
Sig. (1-tailed	ROA					
	Liquidity Management	.404				
	Management Efficiency	.403	.000			
	Asset Quality	.055	.073	.074		
	Capital Adequacy	.502	.376	.369	.414	

Source: Research Findings (2021)

Table 4.2 shows a negative correlation (r) of -0.017 between ROA and the proportion of revenues from loan interest and deposits obtained through Liquidity Management to total

bank revenue. The (r^2) =0.000289 meant that 0.0289% of the ROA was explained by the proportion of revenues through Liquidity Management to total bank revenue. Table 4.2 also shows a negative correlation (r) of -0.017 between ROA and the proportion of revenue from Management Efficiency to total bank revenue. The (r^2) = 0.000289 meant that 0.0289% of the ROA was explained by the proportion of revenue from Management Efficiency to total bank revenue. Table 4.2 further illustrates a correlation coefficient (r) of -0.114 between ROA and the proportion of NPL to gross loans and advances. The (r^2) = 0.012996 meant that 1.2996% of ROA was explained by asset quality. Finally, Table 4.2 display a moderate positive correlation (r) of +0.534 between ROA and Capital adequacy. The (r^2) = 0.285156 meant that 28.5156% of the ROA was explained by capital adequacy.

4.4 Data Validity

Table 4.3: Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.161	4	.040	20.457	.000[b]
	Residual	.381	194	.002		
	Total	.542	198			

a. Dependent Variable: ROA
b. Predictors: (Constant), Capital adequacy, Asset Quality, Management Efficiency, Liquidity Management

Source: Research Findings (2021)

The Anova table above presents information on the variability within the regression model. The significance of the model was tested at 95% confidence level. The table indicates the calculated F statistic of 20. 457. The regression model had an overall p-value of 0.000 which is less than the significant level of 0.05. The null hypothesis, which states that there is no significant relationship between the outcome variable and predictor variables, is

rejected.

Table 4.4: Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
ROA	.206	195	.000	.584	195	.000
Liquidity Management	.361	195	.000	.142	195	.000
Management Efficiency	.377	195	.000	.119	195	.000
Asset Quality	.301	195	.000	.381	195	.000
Capital Adequacy	.232	195	.000	.433	195	.000

a. Significance Correction
Source: Research Findings (2021)

Table 4.4 entails the result of the test of normality. The numerical test compares a sample score that is normally distributed with the data. The Shapiro-Wilk test was used as a means of confirming the normality of the data. The assumption is that if the significant value of the test result is > 0.05, it means that the data is distributed normally. The instance where significant value is less than 0.05, it implies that the data considerably deviates from normal distribution. From the table above, the significant value of the test was 0.000 which is less than 0.05, suggesting that the data was not normally distributed. This was partly explained by a constant correlation of -0.017 between ROA and the independent variables of Liquidity Management and Management Efficiency. This was further explained by the apportionment of industry revenues from loan interest and deposits obtained through the Liquidity Management as well as revenues from Management Efficiency. These were apportioned basing on the market index for each bank per year during the study period in order to get the values of revenues from loan interest and

deposits obtained through the liquidity management and revenues generated by management efficiency. The values got were divided by the respective total revenues for each bank per year in order to get the proportion of revenues contributed by liquidity management and Management Efficiency.

4.5 Regression Analysis

This presents the findings based on the analytical model used in the study. Table 4.5 below shows the result of the regression analysis of the outcome and response variables as well as the result of the Durbin-Watson test.

Table 4.5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.545[a]	.297	.282	.04432	.297	20.457	4	194	.000	1.158

a. Predictors: (Constant), Capital adequacy, Asset Quality, Management Efficiency, Liquidity Management

b. Dependent Variable: ROA

Source: Research Findings (2021)

The correlation between ROA and the predictor variables (R=0.545 was greater than 0.5) meaning a strong positive correlation between ROA and the predictor variables. The coefficient of the regression analysis denotes the proportion of variation in the predicted variable that is to say ROA that is explained by the predictor variables. The square of R=0.297 means that 29.7% of the variation in ROA was explained by the predictor variables. The Durbin-Watson test statistic was 1.158 which indicated that the residuals in the model were not correlated.

Table 4.6: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-.012	.005		-2.278	.024
	Liquidity management	-1.574E-05	.000	-.206	-.193	.847
	Management Efficiency	1.554E-05	.000	.212	.198	.843
	Asset Quality	-.027	.016	-.106	-1.753	.081
	Capital adequacy	.216	.024	.533	8.846	.000

Source: Research Findings (2021)

The multiple linear regression analysis was done to understand the statistical link between the independent and dependent variables used in the model. The significance of the relationship between the variables was analysed at 5% significance level. The assumption was that if the obtained p value was less than 0.05, the association would be substantial, otherwise, it was insignificant. All the predictor variables except Capital adequacy had p values that were greater than 0.05 thus revealing insignificant relationships.

The analytical model was:

$$Y = a + \beta_1 ROA + \beta_2 LM + \beta_3 AQ + \beta_4 CA + \varepsilon$$

This was re-written as follows:

$$ROA = -0.12 + 0.533CA + 0.005$$

The coefficient of the proportion of revenue from loan interest and deposits through Liquidity Management to total bank revenue was -0.206. The p value was 0.847 at 5% level of significance and 95% confidence interval. The p value of 0.847 was > 0.05, revealing an insignificant negative relationship.

The result also suggests that the proportion of Management Efficiency revenue to total bank revenue had a positive association with ROA, with a coefficient of 0.212 and p value of 0.843 at 5% level of significance and 95% confidence level. The p value of 0.843 was > 0.05 meaning that there was an insignificant positive relationship.

The standardised coefficient of the proportion of NPL to gross loans and advances was -0.106. The p value was 0.081 at 5% significance level and 95% confidence interval. The p value of 0.081 was > 0.05. This means there was an insignificant negative relationship between ROA and the asset quality.

The proportion of shareholders' funds to total bank assets had a coefficient of 0.533 at 5% level of significance. The p value was 0.000, which was less than 0.05. The result implies a significantly positive association between capital adequacy and ROA.

4.6 Discussion of Research Findings

Multiple regression analysis was adopted using SPSS to understand the link between bank internal factors and performance of commercial banks in listed at NSE as at 2020. From findings, 29.7% of the variation in ROA was explained by the predictor variables.

The Pearson Correlation showed a negative correlation (r) of -0.017 between ROA and the proportion of revenues from loan interest and deposits through Liquidity Management to total bank revenue. The p value for the proportion of revenue from cheques and EFTs cleared through liquidity management to total bank revenue was 0.847, which was > 0.05, revealing an insignificant negative link between ROA and the predictor variable.

The findings support the studies conducted by Catherine and Herick (2016), Antonnet (2014) where the results portrayed that there was a negatively and insignificant link between bank internal factors and ROA. The results also support Shirley and Mallick (2006) who conducted a study to evaluate how the adoption of IT as a financial innovation affected the banks' profitability. It was revealed that the banks experienced cost savings although, a higher spend on IT created network effects that reduced profits. The high spend on IT inform of internet servers and routers as well as other costs incurred to run and maintain the Liquidity Management through which cheques and EFTs are automatically processed increases the operational costs that consequently reduce the proportion of profits generated from deposits and loan interest through the Liquidity Management.

Pearson Correlation also shows a negative correlation (r) of -0.017 between ROA and the proportion of revenue from Management Efficiency to total bank revenue. The p value of proportion of revenue from Management Efficiency to total bank revenue was 0.843, which was > 0.05, meaning that there was insignificant negative relationship between ROA and Management Efficiency.

The findings support Alber (2011) who assessed the profit competence of the Saudi Arabian commercial banks for a time span covering 1998-2007. The study revealed a negative impact on profit efficiency by the financial innovations of Management Efficiency, POS (Point of Sale) terminals and Mobile banking. However, the results disagree with the findings of Phelistus (2015) and Zipporah (2015) that indicated a positive and significant link between Management Efficiency and ROA. The findings further disagree with the study results of Aysel and Fatma (2017), Hassan et al., (2010), Patrick (2015), James (2014) and Mwangi (2013) whose results revealed a significant positive link between bank internal factors and

financial performance of commercial banks.

Furthermore, Pearson Correlation shows a correlation coefficient (r) of -0.114 between ROA and the proportion of NPL to gross loans and advances. The p-value was 0.081, which was > 0.05, showing an insignificant negative relationship between ROA and the asset quality of the Kenyan commercial banks during the period of study. The findings disagree with the study results of Patrick (2015) whose results revealed a substantial positive relationship between asset quality and ROA of the commercial banks.

Finally, there was a moderate positive correlation (r) of +0.534 between ROA and capital adequacy. The p value was 0.000, which was less than 0.05. The result implies a significant positive relationship between capital adequacy and ROA.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The overall objective was determining the impact of bank internal factors on the financial performance of commercial banks in Kenya. This chapter contains a summary of the study's findings, conclusions, limitations, and suggestions for future research.

5.2 Summary

The multiple linear regression analysis was done to understand the statistical link between the independent and dependent variables used in the model. The significance of the relationship between the variables was analysed at 5% significance level. The assumption was that if the obtained p value was less than 0.05, the relationship would be significant, otherwise, it was insignificant. All the predictor variables except capital adequacy had p values that were greater than 0.05 thus revealing insignificant relationships.

5.3 Conclusions

The results from the study concludes that Asset Quality, capital adequacy, Liquidity Management and Management Efficiency have an impact on the financial performance of commercial banks in Kenya.

From the regression equation used in this study, Liquidity Management and Management efficiency were the largest contributor to the model with a standardized coefficient of 0.5. From table 4.6 it's evident that Liquidity Management and Management efficiency have a significant impact on the financial performance of commercial banks.

The findings of the study also found that Bank size and capital adequacy negatively impacts financial performance of commercial banks. A decrease in capital adequacy would lead to a negative and significant decrease in profitability of commercial banks.

5.4 Recommendation

An increase in Non-Performing loans negatively impacts on performance of commercial Banks. This is also leads to a higher provisioning which ultimately eats into the profitability of commercial Banks. This study recommends therefore that credit managers should come up with policies that ensured the gross non-performing loans are kept at a desirable level. Commercial Banks may also adopt an aggressive approach towards debt recovery so as to reduce the Net Non-performing loans exposure for their institutions.

Operational efficiency as a factor of management is also a key variable that impacts on the financial performance of commercial banks. Management should therefore employ mechanisms, policies and adoption to technology, which would ensure total costs incurred are not too high which ends up reducing profitability of banks.

Liquidity Management as a variable of this study has been found to impact the profitability of commercial Banks. A mismatch between assets and liabilities leads to liquidity mismanagement. This can easily arise as a result of maturity mismatch. It's therefore prudent for management to maintain satisfactory level of liquidity which enabled the bank to meet its obligations, while at the same time taking advantage of available investment opportunities as a result of being liquid enough.

5.5 Limitations of the Study

This study mainly focused on specific bank internal factors to in determining their impact on the financial performance of commercial banks in Kenya. Financial performance is affected by a myriad of very many other factors which did not form the scope of this study.

In conducting this study, data was gathered from commercial Banks which are listed at the NSE. As a percentage of the total population of Banks operating in Kenya, this number is comparatively low. There's a likelihood of missing out on establishing those aspects of profitability affecting smaller Banks, which are generally classified as Tier 2 and 3 as the majority of them are not listed on NSE.

5.6 Sugestion for Further Research

This study's main focus was on the Bank internal factors affecting performance of commercial Banks in Kenya. There's a need for further studies to focus on both Internal and external factors affecting profitability. This would give a wholesome approach to the findings hence exhausting all the necessary aspects impacting performance. The statutory regulator would find such studies comprehensive in developing policies to govern the sector.

This study mainly focused on commercial Bank that are listed at the NSE. Further studies may be conducted on the whole Banking sector and analyze all the licensed Banks that operate within Kenya. There's also scope for further research to be conducted on other financial institution without focusing on commercial Banks only.

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APPENDICES

Appendix I: Data from Financial Statements

Item/ year	2016	2017	2018	2019	2020
Total Profit After Taxation of the bank					
Total Assets of the bank					
Total Equity of Shareholder					
Total Risk Weighted Assets					
NPL					
Actual Financing					
Operating Expenditure					
Operating Margin					
Liquidity ratios					
Net Profit of the year ending					

Appendix II: List of commercial Banks listed at NSE

1	Absa Bank Kenya PLC
2	Stanbic Holdings Plc
3	I&M Holdings Ltd
4	HF Group Ltd
5	The Co-operative Bank of Kenya Ltd
6	KCB Group Ltd
7	Standard Chartered Bank Ltd
8	Diamond Trust Bank Kenya Ltd
9	National Bank of Kenya Ltd
10	Equity Group Holdings
11	NCBA Group PLC

IMPACT OF BANK INTERNAL FACTORS ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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