EFFECT OF CHANGE IN LOAN LOSS PROVISIONING POLICY ON THE FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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DECLARATION

I declare that this is my work and has not been presented to any institution or university other than the University of Nairobi for examination.

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D61/81624/2015

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

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DEDICATION

This research project has been quite fulfilling and delightful to conduct. However, this would not have been possible without the encouragement and sacrifices of time made available to myself by my family. I therefore dedicate this research project to my husband Edgar Asuma and lovely son Ethan Asuma. May you succeed in your endeavours.

I also dedicate this research to my parents who taught me at a very tender age to always aim higher in my academic pursuits. This research is an important milestone in this journey.

Lastly to my siblings, may the completion of this study be an inspiration to you to strive for success in all that you do in life.

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ABBREVIATIONS AND ACRONYMS

APT	Arbitrage Pricing Theory
CAPM	Capital Asset Pricing Model
CBK	Central Bank of Kenya
ECL	Expected Credit Loss
IAS	International Accounting Standard
IFRS	International Financial Reporting Standards
KRA	Kenya Revenue Authority
LLP	Loan Loss Provisions
ROA	Return on Assets
ROAA	Return on Average Assets
ROAE	Return on Average Equity
SPSS	Statistical Package for Social Science
VIF	Variance Inflation Factor

ABSTRACT

The objective of the research was to establish the effect of change in provisioning policy to the financial performance of commercial banks in Kenya. This study also sought to establish how the control variables; asset quality, capital adequacy and management quality affect the financial performance of commercial banks in Kenya. Secondary data was extracted from audited financial statements of banks for the period 2014 to 2018. Descriptive statistics were used to compute the means, standard deviations, skewness as well as kurtosis. The correlation between change in loan loss provisioning and the financial performance of banks was tested using inferential statistics like correlation and regression analysis. All variables recorded Variance Inflation Factor ("VIF") statistics which were less than 3 indicating absence of multi-collinearity between the variables. Further, the data collected was distributed normally evidenced by Kolmogorov-Smirnov and Shapiro-Wilk statistics whose p-values were ≥ 0.05. It was established that a very strong relationship (R=0.844) exists between the financial performance of banks and loan loss provisioning. Loan loss provisioning when moderated against asset quality, capital adequacy and management quality influence 70.5% of the total variability in banks' the financial performance as measured by the R-square value of 0.705. This implies that 29.5% of the commercial banks' the financial performance cannot be explained by loan loss provisioning and the control variables. The research concludes that a very strong relationship (R= 0.844) exists between the financial performance of commercial banks and loan loss provisioning among banks in Kenya. The implication is that recognizing loan loss as per IFRS 9 leads to better financial performance by reducing loan losses. The research also concludes that loan loss provisioning under control of asset quality, capital adequacy and management quality influence 70.5% of the total variability in commercial bank the financial performance. This implies that 29.5% of the commercial banks' the financial performance cannot be explained by loan loss provisioning and the control variables. The research concludes that loan loss provisioning ratio, asset quality, capital adequacy and management efficiency influence commercial banks the financial performance positively. This effect is also statistically significant. The research established that loan loss provisioning as per IFRS 9 influences commercial banks the financial performance of positively. The research recommends that in order to avoid loan losses, financial institutions should implement IFRS 9 (ECLs) in totality. However, further research should be conducted to establish the factors influencing commercial banks' the financial performance in Kenya.

CHAPTER ONE: INTRODUCTION

1.1 Background of the research

Banking play a pivotal role in the growth and development of emerging economies through banking service provision which ensures there is adequate supply of credit in the economy. Banks formulate and implement loan-loss provisioning policies to bring about stability of the financial systems. Loan provisioning policies makes it possible for banks to make estimates of gains or losses from loan portfolios even before the banks can determine the actual gain or loss (Beatty & Liao, 2009).Loan provisioning policies have been necessitated by the enactment of global financial regulation referred as International Financial Standards (IFS9) which requires loan provisioning to be done based on expected loan loss rather than realized loan loss (IFRS, 2014).

The relationship between loan provisioning and the financial performance is anchored on four scholarly theories. The Modern Portfolio Theory expounds informed the need for risk management decisions for better financial returns (Markowitz, 1952). CAPM assumes that investors are usually risk-averse and that when they are choosing a portfolio to investing among others, they care about the mean and variance of a onetime investment return only (Lintner, 1965 &Sharpe, 1964). The Arbitrage Pricing Model by Ross (1976) argues that there are independent risk factors (macro-economic variables) that drive the portfolio's expected return. The Transaction Cost Theory by Coase (1937) asserts that transaction costs evolve because assets, investment and other features are transaction-specific.

In Kenya, commercial banks hold a special position in the economy by channelling funds from depositors to borrowers. This has been made possible by financial innovations such as mobile banking (Al-Tamimi, 2010). The Kenyan banking industry has also witnessed turbulence following interest rate capping policy which restricts the rates at 4% above base rate. In the pre-interest rate cap era banks could easily have matched the risk to an appropriate price, the law has taken that option off the table. This has forced some commercial banks to suspend giving of unsecured loans where banks feel the risk is not commensurate to the capped rate (Mwikali, 2018).

1.1.1 Loan Loss Provisioning

Loan provisioning is the amount of funds that banks put aside as mitigation for the expected loan losses as part of their credit risk management practice (Laeven & Majnoni, 2003). Loan provisioning helps lenders to recognise loan losses even before the actual losses have been incurred (Kimathi, 2014). Loan provisioning has been made mandatory by IFRS 9 which requires banks to set aside funds by provisioning in anticipation of loan losses. This is different from the defunct IAS 39 which required loan provisioning to be done only after default had occurred and the loan classified as non-performing. Expected Credit Loss (ECL) impairment framework of the IFRS 9always requires banks to recognise ECLs, given current conditions, past events, and future projected information (IFRS, 2014).

There are three (3) stages of recognizing impaired loans under IFRS 9 and the recognition is done either on a collective basis or on individual basis. Under stage 1, banks are required to make loss allowance immediately the loan has been originated and the likelihood of default has been projected to occur within the next 12 months. Interest income for the 12-month ECL is computed on the loan's gross loan without deducting the ECLs. Changes in credit risk is assessed and updated accordingly over the expected life of the loan. Under stage 2, ECLs are recognized if the credit risk of a loan has been considered to have significantly increased since the initial recognition. Interest income is computed as per in Stage 1. In stage 3, a debt is considered credit-impaired if the credit risk has extensively increased to the point where interest revenue is computed based using amortized cost (IFRS, 2014).

The Kenyan Income Tax Act provides that general bad debts provisions are not allowable in computing the annual corporate income tax. For it to be considered as allowable it must satisfy the bad debt guidelines issued by Kenya Revenue Authority (KRA) and the Commissioner of Domestic Taxes must be satisfied that the debt has become uncollectable after all reasonable effort have been expended ended in collecting it.

1.1.2 The financial performance

The primary objective of every business entity is to maximize profit (Viresh & Velnampy, 2014). The financial performance is the measure show a firm's financial objectives are achieved and indicates the firm's financial health over time (Frich, 2009). The financial performance measures in monetary terms the firm's operations. The financial performance can be enhanced through efficient utilization of firm resources that are available (Kassim, 2011). For a business entity to expand and grow over time, it's necessary for it to have relatively stable earnings. A sound banking sector should be capable of withstanding negative shocks hence leading to financial system stability (Athanasoglou, Brissimis& Delis, 2005). Evaluating the bank performance should involve scrutinising both efficiency measures and risk-taking behaviour. In most instances, credit risk is usually not accounted for hence banks end-up suffering from inefficiencies and operational risks (Hakim & Neaime, 2005).

There are several measures of the financial performance management efficiency, ROA, ROE AND ROI. The ROA as net income to the average equity capital ratio. ROAA forms an important measure of assessing the banks' efficiency. On the other hand, ROA informed owner of equity owners how much profit the bank management has generated using their capital contribution (Kidwell, Blackwell, Whidbee & Peterson).

1.1.3 Loan Loss Provisioning and The financial performance

Loan provisioning is meant to cushion financial institutions from loan losses resulting from customer defaults, bad loans and renegotiated terms of a loan which leads to lower payments than previously estimated. Loan losses would lead to decrease in interest incomes hence lower bank the financial performance. Loan provisioning is meant to prevent such losses hence improving the performance of banks by ensuring that cash flows remain available (IFRS 9, 2014).

The correlation between loan provisioning and the financial performance has also been explained by various empirical studies. Kimathi (2014) investigated how of loan provisioning influences deposit taking SACCOs the financial performance and found out that loan loss provisioning has a negative effect. Fernando and Ekanayake (2015)

studied the influence of loan provisioning on the financial performance of banks in Sri Lanka and concluded that loan loss provisioning and profits before tax are positively related. Tahir, Ahmad and Aziz (2014) and Ul Mustafa, Ansari and Younis (2012) established that loan loss provisioning affects the financial performance in Pakistani banks negatively.

1.1.4 The Kenya Banking Sector

Banking sector is regulated by Central Bank of Kenya (CBK, 2018). By the end of the financial year 2018, there were at total of 42 banks operating in Kenya. The sector has remained resilient despite the challenge posed by the interest rate capping of 2016 and the prolonged electioneering period in 2017. Total net assets of the banks rose from Kshs. 3.68 trillion in 2016 to Kshs. 3.95 trillion in 2017 signalling an 8.3 percent increase. The net assets further increased by 8 percent to Ksh 4.27 trillion in 2018. Total customer deposits recorded by 11 percent increase as the figures improved from Ksh. 2.63 trillion in 2016 to Ksh.2.86 trillion in 2017.The deposit base further expanded by 10.5 percent to 3.16 trillion in 2018. Net loans and advances rose by 3.6 percent to Ksh 2.24 trillion in June 2017 from Ksh2.16 trillion in June 2016. By the end of fiscal year in 2018, net loans and advances had grown by 2.7 percent to Ksh 2.3 trillion in June 2018(CBK Annual Reports, 2016/2017; CBK Annual Reports, 2017/2018).

Credit risk increased in 2017 due to protracted electioneering which slowed down the economic activities. This was mirrored in the increased level of non-performing loans from 2016's 9.3 percent to 2017's 12.3 percent. In 2017, the CBK issued a cybersecurity Guidance Note to set out the regulatory standards for the banking to enable them to assess and mitigate the threats of cybersecurity as a result of increased financial service digitization. The adoption of IFRS 9 by all banks was aimed at reducing loan losses by recognizing the losses even before they have been incurred (IFRS, 2014).

1.2 Research Problem

Financial health and stability of any banking institution depends on the loan portfolio quality. The core business of the commercial banks is deposit taking and lending of the same implying loans and advances are the biggest assets in the banks' balance

sheets (Kimathi, 2014). Therefore, by offering financial intermediation services the banks play a pivotal role in economic growth by ensuring adequate supply of credit in the economy. In the process of supplying credit, banks have made losses from repayment defaults. To address the issue, banks implement loan loss provisioning policies to recognise loan losses long before they have been incurred in readiness for write-off (Beatty & Liao, 2009). To standardise loan loss provisioning policies, banks are required to implement IFRS 9 which requires loan provisioning to be done based on expected loan loss (IFRS, 2014).

The Kenyan banking sector has been through tough times since the capping of interest rate at 4 per cent above the base rate in 2016. While in the pre-interest rate cap era banks could easily have matched the risk to an appropriate price, the law has taken that option off the table. This increate provision of risky loan product and inform the loan loss provision (Mwikali, 2018). The extent to which change in LLP affect bank profitability remain inadequately researched.

Globally, Fernando and Ekanayake (2015) examines effect of loan provisioning on financial returns of banks in Sri Lanka between 2003 and 2012 and concluded that they are positively related. Alhadab and Alsahawneh (2016) examined the relationship between the financial performance and loan loss provisioning among 13 Jordanian banks quoted on Amman Stock Exchange (ASE) between 2004-2014 and concluded that loan loss provisioning impacts the profitability negatively. Tahir, Ahmad and Aziz (2014) examined how loan provisioning affects the financial performance of banks in Pakistan. Ul Mustafa, Younis and Ansari (2012) also studied the influence of loan provisioning on financial performance of Pakistani banks between 2001–2009 and they established that LLP has a negative effect on the financial performance. Global studies show mixed results on the association between the financial performance and loan provision hence leaving room for more research.

Regionally, Apire (2016) analysed the impact of risk management practices on the bank returns of Uganda's domestic banks and established that provision for credit loss influences bank the financial performance negatively. Mbekomize and Mapharing (2017) established that management of risk positively influences the financial performance of Botswana banks. Serwadda (2018) studied the impact of credit risk

management systems on Uganda's bank profitability and concluded that loan loss provision impacts banks' performance positively and significantly. Regional studies also recorded mixed results on effect of LLP and the return on assets and leaving a knowledge gap that needs further scrutiny.

Locally, Kimathi (2014) investigated how loan loss provisioning influences the financial returns of DTSs and found out that loan loss provisioning negatively influences the SACCOs the financial performance. This implies that increasing loan loss provision ultimately leads to reduction in SACCO profits. Gatakaa (2014) investigated the nexus between financial performance and loan policy among commercial banks in Kenya concluded that provision for doubtful and bad debts influences banks performance positively. In his study, Keitany (2013) found out that the financial performance and loan default of SACCOs in Nairobi are strongly and negatively related. Mwangi (2010) noted that an effect between the financial performance and credit risk management measured using non-performing loans. No similar study has been done in Kenya since the deadline of effective mandatory implementation of IFRS 9 in 1stJanuary 2018. The research aims answering the research question; how does change in loan provisioning policy influence commercial banks the financial performance in Kenya?

1.3 Research Objective

1.3.1 General Objective

The main purpose of this research was to establish the effect of change in loan provisioning policy to the financial performance of commercial banks in Kenya.

1.3.2 Specific Objectives

i) Determine the effect of asset quality on the financial performance of commercial banks in Kenya.
ii) To assess the effect of capital adequacy ratio on the financial performance of commercial banks in Kenya.
iii) Analyze the influence of quality management practices on the financial performance of commercial banks in Kenya.

1.4 Value of the research

With a mandatory requirement by financial institutions to adopt IFRS 9 on and after 1 January 2018, the findings of this study will be worthwhile to banks, policy and regulators. This study sought to identify the effect of the new loan loss provisioning policy has had on the financial performance and thus enable stakeholders to put up measures to mitigate any shortcomings.

The research results are noteworthy to the banks' management. The results of the survey will enable the banks 'management to formulate and implement strategies that will enhance the banks performance.

This study forms part of the empirical pool of studies done on the association between profitability and loan provisioning. This may reconcile theory to reality while its finding may be used for further studies in the field in future. This may be of great interest to scholars and researched in the field of credit and finance.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section summarises literature regarding loan loss provisioning and the financial performance of commercial banks. The section discusses the theories plus empirical studies upon which this study is based.

2.2 Theoretical Review

Theories relevant to loan loss provisioning and the financial performance are discussed. The theories discussed include: portfolio theory, CAPM and arbitrage pricing model theory.

2.2.1 Portfolio Theory

The theory was suggested by Markowitz (1952). The theory assumes that every security has an inherent risk and that a portfolio consisting of diverse securities lowers the risk compared to a single security. Since the theory puts emphasize on diversifying securities to reduce risk, an attempt should be done to maximise the expected return portfolio risk or alternately attempt to minimise risk. This involves selecting the securities to invest in cautiously (Markowitz, 1952).

The Portfolio Theory was improved by Tobin (1958) through the introduction of the efficient frontier. Tobin (1958) opined that the standard deviation of a given portfolio of securities and their expected returns can be plotted on a graph showing the best possible combinations of the securities. The portfolios which fall on efficient frontier of the graph should be regarded as the most efficient portfolios since they have the lowest risk.

The Portfolio Theory form the foundation for the research since it expounds on the relationship between risk and reward when investing. It emphasizes on the significance risk management. Implementation of IFRS 9 by commercial banks is a strategy aimed at reducing the risk of loan loss by commercial banks through recognising and making provisions for loan loss even before the actual loss has been realised.

2.2.2 The Capital Asset Pricing Model Theory (CAPM)

CAPM was proposed by Lintner (1965) and Sharpe (1964) as an extension of Markowitz's (1952) Portfolio Theory. CAPM computes the rate of return given a risky asset by considering the sensitivity of the asset to non-diversifiable risk (systematic risk), the expected market returns as well as the expected return of a risk-free theoretical asset. Lintner (1965) and Sharpe (1964) redefine expected return in terms of risk-free using beta as the measure of risk.

According to the Portfolio Theory upon which CAPM is based, an investor should select a "mean variance-efficient "portfolios since this maximizes expected returns and minimizes the variance. The model offers a verifiable prediction of the association between risk and expected return by choosing most efficient portfolios (Famaand French, 2004).

CAPM inform the best risk management model that foster asset earning. The concept is applicable in the banking sector where commercial banks have evaluated the risk of lending money to different borrowers. The banks aim at giving credit to the low-risk borrowers.

2.2.3 Arbitrage Pricing Model Theory

Arbitrage Pricing Theory (APT) was proposed by Ross (1976). The theory explores what asset prices should be in order to eliminate arbitrage opportunities since prices change when arbitrage exists. Arbitrage opportunities are investments with some likelihood of yielding returns that are positive but doesn't need net outflow of cash and carries no likelihood of money loss. According to this theory, several risk factors influence a portfolio's expected return (Ross, 1976).

APT's heuristic argument is anchored on arbitrage preclusion. In order to maximize certain types of utilities, then a linear pricing relation are necessary for market equilibrium to be attained. This theory is relevant to this research. Commercial banks just like arbitrageurs use APT to identify and profit from mispriced securities. The banks identify potential borrowers and award loans to the lowest risk who are less likely to default. The banks must choose between lending to a low-risk borrower at a small interest rate or lend to a high-risk borrower at a high interest rate.

2.3 Determinants of the financial performance

Returns in banking sector a function of various determinants such as asset quality, capital adequacy and management quality. These factors are discussed below.

2.3.1 Asset Quality

An asset to a bank is a specific variable that influences bank's financial performance. These assets include fixed assets, credit portfolio, current assets, investments among others. Loan book constitutes banks' largest asset as it determines the level of interest income.

Better credit facility influences the returns on assets of banks. According to Dang (2011), losses derived from delinquent loans are the highest risks faced by banks. Therefore, NPLs is used to determine the bank management efficiency. Greater profits are an indication of lower ratios (Sangmiand Nazir, 2010). LLP to net-interest income determine the quality asset and linked to financial returns on assets (Dang, 2011).

2.3.2 Capital Adequacy

This is an instrument and a determinant of institution's financial muscle, in regard of its capacity to withstand financial crisis. Due to the debt-like nature of liabilities in commercial banks, they have an incentive to engage in asset substitution or risk shifting. To avoid this, regulators require them to retain a minimal ratio total capital to reduce their sensitivity to risk (Kongiro, 2012).

Capital adequacy indicates a bank's capability to undertake extra business. The size of a bank's available capital gives banks financial flexibility. High capital ratio usually earns more profit (Ayele, 2012). The ratio indicates stamina of the bank to withstand losses incurred as a result of crisis. Capital adequacy determines a bank's resilience during financial difficulties. According to Ongore& Kusa (2013), the ratio has a direct effect on bank the financial performance.

2.3.3 Management Quality

Management quality in commercial bank is determined by the management who ensures that there is efficient running of operations. Management quality is

compromised by the agency problem where managers of banks puts their personal interest first rather than maximizing the shareholder wealth (Ogilo, 2012).

Efficiency of management is measured using loan growth rate, asset growth rate and total earnings growth rate. Earnings is qualitatively expressed by use of subjective assessment of a firm's management systems, staff quality and control systems among other parameters. The capability of the firm to efficiently deploy assets to earn profits is an indicator of asset quality (Ongore& Kusa, 2013).

2.4 Empirical Review

The section discusses both international studies and local studies that delve into the interrelation between LLP and commercial banks the financial performance.

2.4.1 Global Studies

Alhadab and Alsahawneh (2016) examined the relationship between loan loss provisioning and the earnings among Jordanian banks. The research was carried over a period from 2004 to 2014.Regression model was used to show how loan loss provisioning and the financial performance are related. The research concluded that loan loss provisioning negatively influences the financial performance. This study was done in Jordan, a foreign country.

Fernando and Ekanayake (2015) empirical evidence among the Sri Lankan banks to determine if the Sri Lanka banks apply provisions for loan to streamline their revenue between 2003 and 2012. The research used eight bank specific variables. They concluded that loan loss provisioning and profits before tax are positively related. While this study is like the Sri Lankan one, banks in Kenya operate in a different business environment hence the need for a local study.

Tahir, Ahmad and Aziz (2014) examined how provisioning influence ROA in banks in Pakistan loan. The study targeted thirteen schedule banks operating in Pakistan between 2009-2012. The research we used a panel data approach with data being collected over a four-year period (2009-2012). The results revealed negative effect between LLP and financial performance in Banks in Pakistan. The results being for

commercial banks in Pakistan may not be applicable in Kenya hence the need for a Kenyan study.

Ul Mustafa, Younis and Ansari (2012) assessed effect of loan loss provisioning on the ROA in Parkistan. Their target population was 15 Pakistani banks in operation in between 2001 and 2009.They used an econometric approach with panel data being preferred because it allows detection and measurement of effects that are not usually detectable and measurable in pure time-series data. They established that loan loss provisioning reduces ROA of Pakistani banks. The results were based on the Pakistani banks and therefore doesn't necessarily reflect the reality among commercial Kenyan.

2.4.2 Regional studies

Apire (2016) analysed the effects of CRM on ROA of Uganda's domestic banks. The study focused on Centenary Bank Uganda. Data was collected over 5 years ranging between 2010 and 2015. Descriptive and econometrics analytical techniques were used and revealed that NPLs has no effect on ROA in banks. Further, provision for credit loss was found to influences bank the financial performance negatively. The research was conducted in Uganda may therefore not be the reality in the Kenyan banking sector.

Mbekomize and Mapharing (2017) sought the determinants of Botswana banks the financial performance. The financial performance was measured using R.O.A., R.O.E. and N.I.M. The independent variables consisted of internal factors (credit risk, capital adequacy, bank liquidity, bank diversification, bank size, cost efficiency and market profit opportunity,) and external factors (inflation, bank interest and economic growth). They targeted ten (10) Botswana's commercial banks. They established that LLP positively influence ROA. The research was done in Botswana and therefore may not represent what's happening in Kenya.

Serwadda (2018) researched on the effect CRM on bank profitability on the Uganda's. The research was conducted between 2006 and 2015. It was noted that loan loss provision influences banks' performance positively and significantly. The research was conducted in Uganda may therefore not be the reality in the Kenyan banking sector.

2.4.3 Local Studies

Kimathi (2014) investigated the influence of LLP on the Nairobi County DTSs the ROA. The objective was to assess relationship between loan-loss provisioning and financial performance. Secondary data was gotten from 45 DTS registered under SASRA between 2010 to 2013. He concluded that loan loss provisioning negatively influences the SACCO's the financial performance. This implies that increasing loan loss provision ultimately leads to reduction in SACCO profits. This study was carried out in 2014 before IFRS 9 was implemented among Kenyan banks. This creates a research gap that this study aims at bridging.

Gatakaa (2014) investigated the nexus between Kenya's commercial banks financial performance and loan policy. He employed a descriptive research design. Thirteen (13) banks out 43 banks in Kenya were selected using simple random sampling. The research spanned five years between 2009 and 2013. Regression analysis was done and it was concluded that provision for bad and doubtful debts influences commercial banks performance positively. This study was also conducted in 2014 before IFRS 9 was implemented among Kenya's commercial banks.

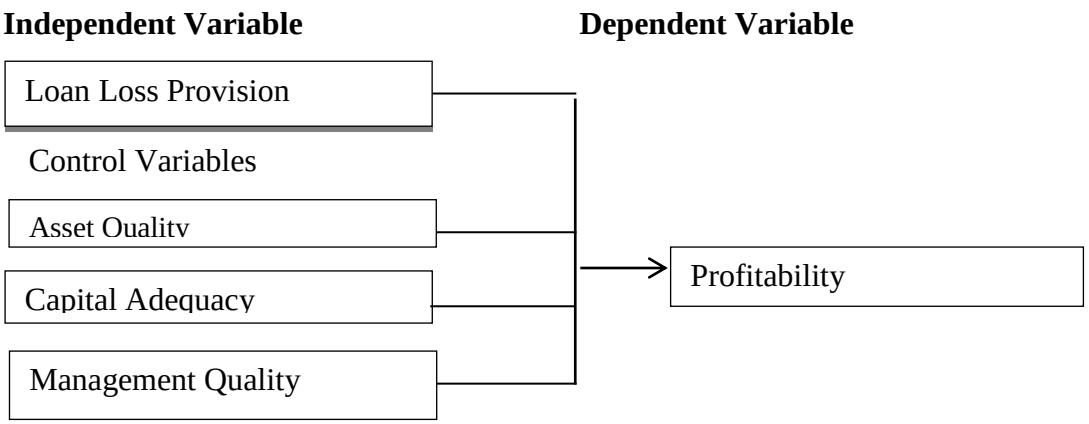
Keitany (2013) researched on how credit default affects turnover growth among SACCOS registered under SARSA. The design for this research was descriptive survey. Data obtained from 35 SACCOs that were purposively sampled from a total target population of 135. Credit default was linearly regressed against turnover. The findings revealed that the financial performance and loan default of SASRA regulated SACCOs in Nairobi are strongly and negatively related. This study looked at credit default and not loan loss provisioning. Further, the research focused on Saccos rather than commercial banks. This leaves a knowledge gap.

Mwangi (2010) in his study descriptive research design to describe how CRM and commercial banks ROA are related. The research used secondary data from 26 commercial banks over a period of 5 years (2007-2011). It was concluded an interrelation exists between the financial performance and CRM measured. This study was done before mandatory implementation of IFRS 9 hence can't explain the influence change in loan loss provisioning has on bank's the financial performance.

2.5 Conceptual Framework

This model encompasses the IVs as well as the dependent variable presented diagrammatically. The financial performance forms the dependent variable while change in loan loss provision forms the independent factor. Figure 2.1shows the conceptual framework.

Figure 2.1: Conceptual Model



2.6 Summary of Empirical Studies

The prior studies indicate mixed results on the relations between loan loss provision and the financial performance. Further, no similar study has been done in Kenya since the deadline of effective mandatory implementation of IFRS 9 in 1st January 2018. This study will answer the question; how does change in loan loss provisioning policy influence Kenya's commercial banks the financial performance?

Table 2.1: Summary of Empirical Studies and Research Gap

Researchers	Study Focus	Methodology	Major Findings	Knowledge Gap	Focus of the current study
Alhadab & Alsahawneh (2016)	The interrelation between the ROA and LLP among Jordanian banks.	Descriptive analysis and inferential statistics.	LLP has a negatively influences the financial performance.	This study was done in Jordan a foreign country hence applicable among commercial banks listed in Kenya.	Determining the effect of change in LLP on the ROA of banks listed at the NSE.
Fernando & Ekanayake (2015)	To determine if banks in Sri Lanka use loan loss provisions to smooth their income.	Regression analysis.	LLP and profits before tax among of commercial banks in Sri Lanka are positively related.	Sri Lankan commercial banks operate in a different business environment than Kenya hence the need to a local study.	Determining the effect of change in LLP on the ROA of banks listed at the NSE.
Tahir, Ahmad & Aziz (2014)	The financial performance and LLP among Pakistani banks.	Panel data.	The ROA of Pakistani banks was negatively related to loan loss provisioning.	The results being for commercial banks in Pakistan may not be applicable in Kenya hence the need for a Kenyan study.	Determining the effect of change in LLP on the ROA of banks listed at the NSE.
Ul Mustafa, Ansari and Younis (2012)	The effect of LLP on the performance of banks in Pakistan.	Econometric approach.	They established that LLP has a negative relationship with the ROA of Pakistani banks.	The research was Pakistan based and therefore doesn't necessarily reflect the reality among commercial Kenyan.	Determining the effect of change in LLP on the ROA of banks listed at the NSE.

Kimathi (2014)	Influence of LLP on SACCO the financial performance in Nairobi County.	Regression analysis.	LLP influences SACCO's the ROA negatively.	This study was carried out in 2014 before IFRS 9 was implemented among commercial banks in Kenya.	Determining the effect of change in LLP on the ROA of banks listed at the NSE.
Gatakaa (2014)	The nexus between bank ROA and loan policy.	Regression analysis.	Bad and doubtful debt provisions influence banks performance positively.	The research was conducted in 2014 before IFRS 9 was implemented among commercial banks in Kenya.	Determining the effect of change in LLP on the ROA of banks listed at the NSE.
Keitany (2013)	The effect of credit default on the turnover growth among Saccos regulated by saccos.	Regression analysis.	Loan default and the ROA of SASRA regulated SACCOs in Nairobi are strongly and negatively related	This study looked at credit default and not loan-loss provisioning. The focus was also on Saccos rather than commercial banks. This leaves a knowledge gap.	Determining the effect of change in LLP on the ROA of banks listed at the NSE.

Source: Researcher (2019)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section discussed research methodology. It described the plan on how objective was to be achieved.

3.2 Research Design

The research design used was a combination of both descriptive and correlation research design. Descriptive design portray extent study variable varies. Correlation design was used to establish the effect of changes in provisioning policy to Kenya commercial banks the financial performance. Therefore, it is justified to use both descriptive and correlation research design to describe and establish how change in provisioning policy influences the financial performance.

3.3 Target Population

The target population was 40 banks in Kenya (CBK, 2019). Since this population was small, the research was a census.

3.4 Data Collection

The study collected data from audited report from commercial banks and supervisory reports from banks. Secondary data was obtained from the audited financial statements which were available from individual company websites, Capital Markets Authority and even CBK supervisory annual reports. The specific data that was extracted include; net income, TA, NA, TE, total capital, annual LLP, NPLs and advances, and expense incurred. The data was collected over a five-year period starting 2014 to 2018.

3.5 Data Analysis

The study deployed descriptive and inferential data analysis techniques to analyse data. Tables and charts were used to visualize the trend of the variables over the research period (2014-2018).

3.5.1 Diagnostic Tests

Data collected was subjected to stationarity and normality tests. Stationarity tests the statistical data for autocorrelation (serially correlated). Normality tests whether the distribution of the data is normal. This was done using Shapiro-walk and Kolmogorov-Smirnov tests.

3.5.2 Analytical Model

. Regression model used to establish the relationship between LLP change and bank performance is as presented below:

"$Y_i = \beta_0 + \beta_1 LLP + \beta_2 AQ + \beta_3 CA + \beta_4 MQ + \varepsilon$"

Y_i= Profitability (Dependent variable)

LLP = Loan Loss Provisioning

AQ = Asset Quality

CA=Capital Adequacy

MQ=Management Quality

β_0 – Model Intercept

$\beta_1 - \beta_5$= Coefficients of determinations

ε – Stochastic error term estimate

3.5.3 Measurement of the Variables

Bank performance measured using ROA was linked to LLP a measure of risk management and improvement in management efficiency. Operationalization of LLP was done using asset quality, management quality as well as capital adequacy. The variables in the analytical model were measured as described in table 3.1.

Table 3.1: Measurement of the Variables

No.	Variable	Measurement
Y	The financial performance	"Measured as using R.O.A."
LLP	Loan Loss Provisioning	"Measured as the loan loss provisioning to total non-performing loans and advances ratio."
AQ	Asset Quality	"Measured as the equity to net assets ratio."
CA	Capital Adequacy	Measured as the total capital to total assets ratio."
MQ	Management Quality	"Measured as the total expenses to total income

3.5.4 Test of Significance

Statistical significance of the correlation between provisioning policy and commercial banks the financial performance was tested using a p-value of 5% where all the computations were done at 95% confidence interval. The regression model goodness of fit was checked using ANOVA where the level of significance was tested using an F statistic of 5%.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

This section outlines the interpretation of the results of data analysis with regards to the effect of change in provisioning policy on ROA in banks in Kenya. The researcher managed to get data for thirty-six (36) banks translating to ninety per cent (90%) response rate. Descriptive statistics was used to compute the means, standard deviations, skewness and kurtosis. The correlation between change in loan loss provisioning and the returns in banks was tested using inferential statistics such as correlation and regression analysis.

4.2 Diagnostic and Multi-collinearity Tests

4.2.1 Test of Multi-collinearity

Presence of multi-collinearity issues between the variables was tested using Variance Inflation Factor (VIF) statistics. Table 4.1 shows the results of multi-collinearity tests.

Table 4.1: Test of Multi-collinearity

Multi-collinearity Coefficients[a]			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Loan Loss Provisioning	.989	1.033
	AQQ	.964	1.028
	CA	.975	1.036
	MQ	.969	1.034

a. Dependent Variable: The ROA

Source: Research Findings (2019).

The VIF for all the variables were less than three indicating absence of multi-collinearity.

4.2.2 Test of Normality

Table 4.2: Test of Normality

Variables	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
The financial performance	.072	179	.112	.971	179	.101
Loan Loss Provisioning	.069	179	.109	.988	179	.113
AQ	.071	179	.114	.991	179	.114
CA	.057	179	.200*	.989	179	.109
MQ	.069	179	.133	.977	179	.105

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: Research Findings (2019).

The financial performance, loan loss provisioning, AQ, CA and MQ all recorded Kolmogorov-Smirnov and Shapiro-Wilk statistics with p-values ≥ 0.05. These results indicate that the data collected by the researcher was normally distributed.

4.3 Descriptive Analysis

4.3.1 Summary Statistics

Descriptive statistics was done to come up with the minimum, maximum, average, standard deviations, skewness and kurtosis of the variables. The results are tabulated in 4.3.

Table 4.3. Summary Statistics

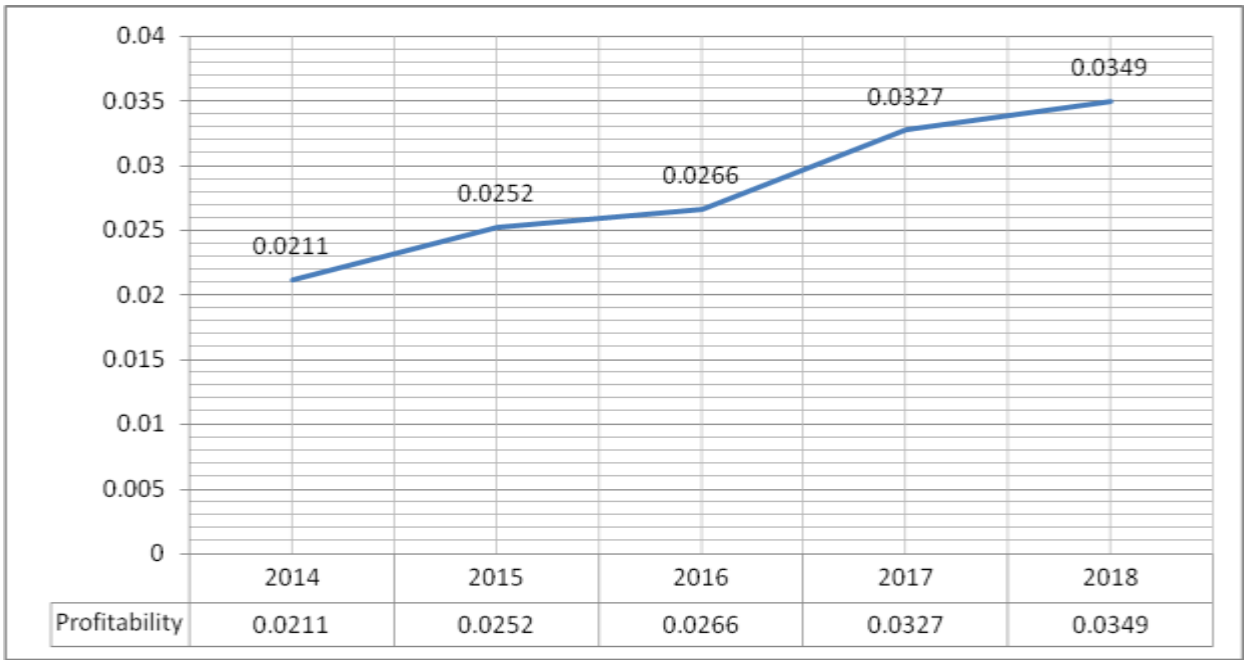
Variables	**Mean**	**Stdev**	**Skewness**	**Kurtosis**
The financial performance	0.028	0.0212	0.095	-1.728
Loan Loss Provisioning	0.352	0.032	-0.245	-2.373
Asset Quality	0.189	0.0156	0.092	-1.823
Capital Adequacy	0.156	0.047	-1.905	2.029
Management Efficiency	0.189	0.0850	0.753	-0.683

Source: Research Findings (2019).

The mean for ROA was 0.028 with a standard deviation of 0.0212, the mean for LLP was 0.352 with a SD=0.032. The mean for AQ was 0.189 with SD= 0.0156 while mean for CA was 0.156 with SD=0.047 while MQ had a mean of 0.189 with a SD= 0.085. Skewness plus kurtosis recorded statistics within the range of ±3 for all the variables further corroborating the findings that the used data is distributed normally.

4.3.2 The financial performance

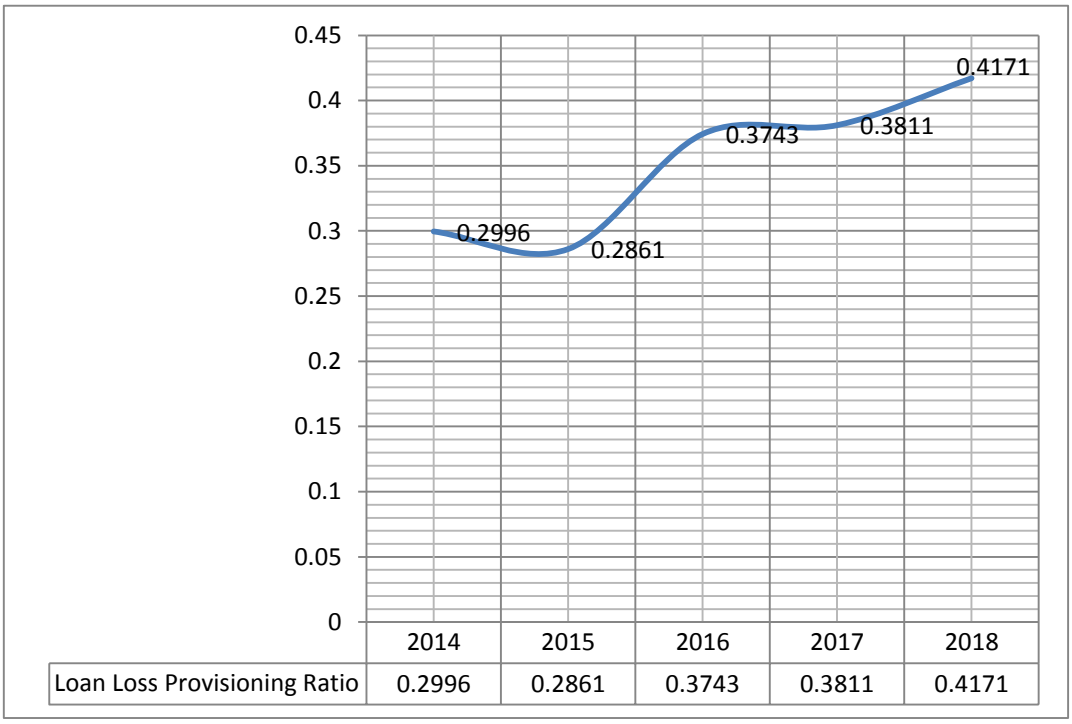
Figure 4.1: The financial performance



The findings indicate a positive trend in the profitability of the banks over the period of study. The ROA increased from an average ROA of 0.0211in 2014 to an average of 0.0349 in 2017.

4.3.3 Loan Loss Provisioning

Figure 4.2: Loan Loss Provisioning

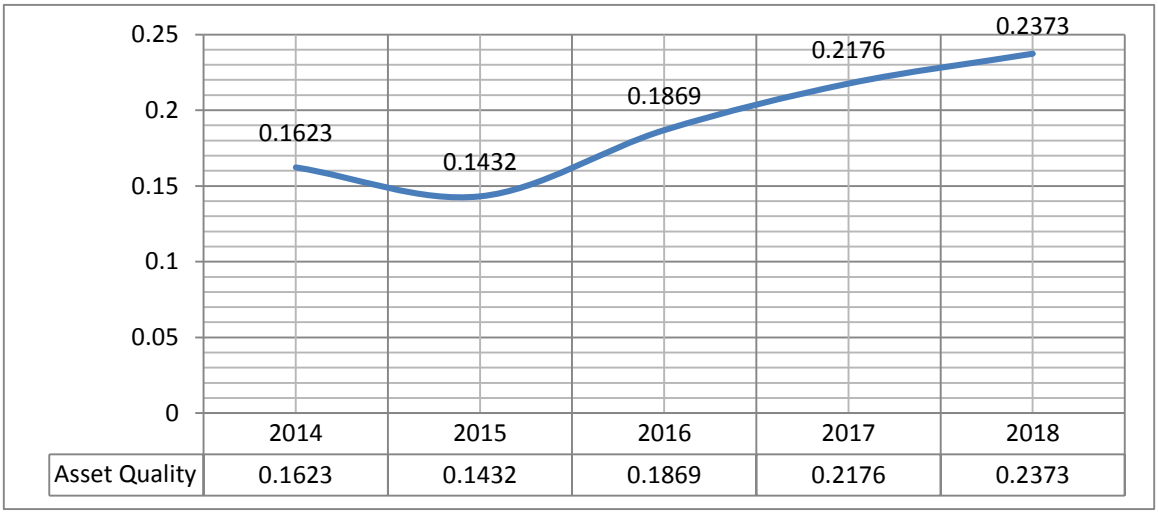


Loan loss provisioning exhibited an increasing trend increasing from 0.2996 in 2014 to 0.4171 in 2018. Increasing in LLP revealed that commercial banks have been setting aside more funds to guard against loan losses each consecutive year.

4.3.4 Asset Quality

Trend analysis on asset quality was done. Figure 4.3.4 indicates the trend of asset quality between 2014 and 2018.

Figure 4.3: Asset Quality



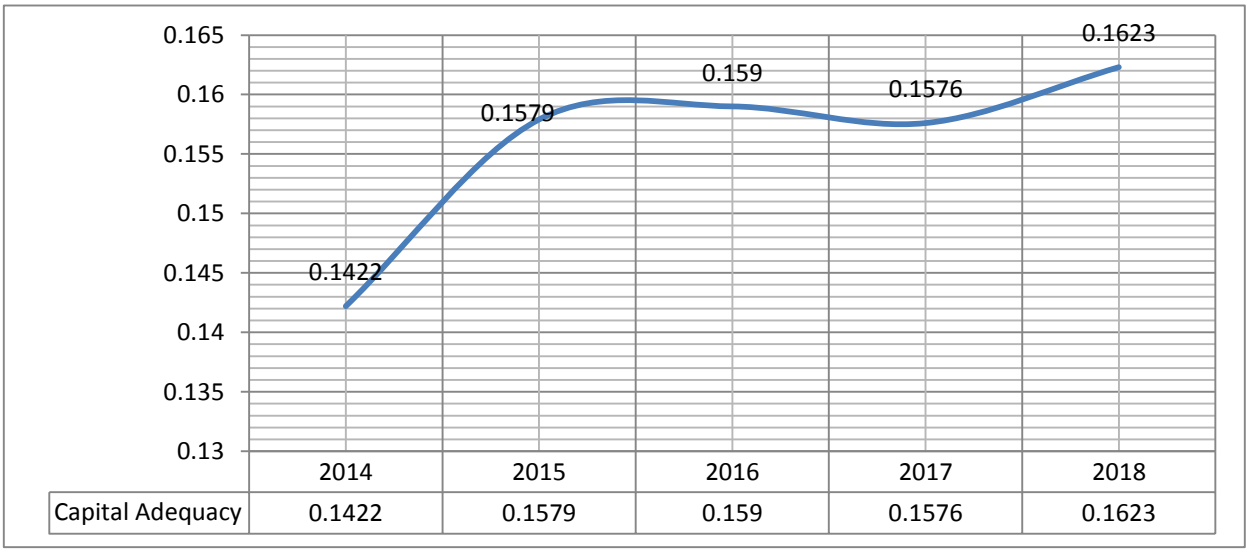
Source: Research Findings (2019).

The study revealed an invariable trend in asset quality in banks. There was a decrease in asset quality from 0.1623 in year 2014 to 0.1432 in year 2015, then an increasing trend was recorded from 0.1869 in 2016 to 0.2373 in 2018. This indicates that the asset quality of commercial banks in Kenya has been improving over the period of study.

4.3.5 Capital Adequacy

The study sought to establish the capital adequacy of the commercial banks in Kenya. Figure 4.4. indicates the trend of capital adequacy between 2014 and 2018.

Figure 4.4: Capital Adequacy



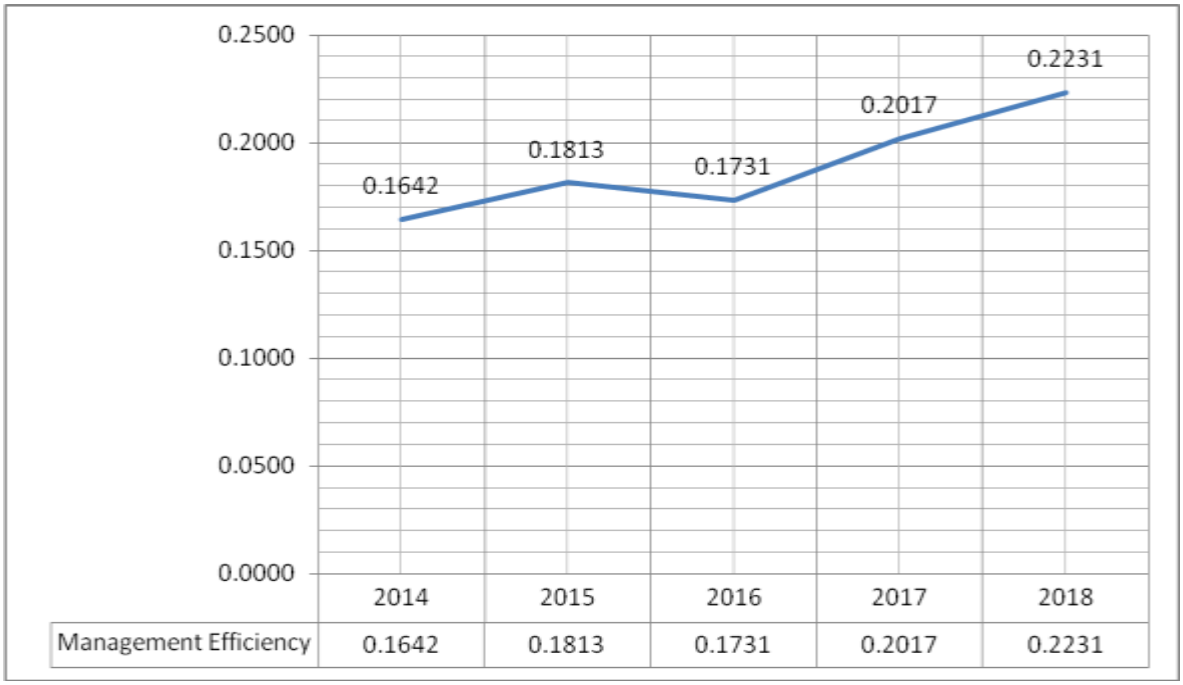
Source: Research Findings (2019).

The findings were that there was a steady increase in capital adequacy of the commercial banks over the period of study. 2014 recorded the lowest capital adequacy ratio of 0.1422 while the year 2018 reported the highest capital adequacy ratio of 0.1623. These findings present the ability of the commercial banks in Kenya to absorb reasonable operational and functional losses without risking the banks' stability had been improving over the between 2014 and 2018.

4.3.6 Management Efficiency

Finally, the research sought to establish management efficiency of commercial banks in Kenya between 2014 and 2018. Figure 4.3.6 shows the trend of management efficiency over the research period.

Figure 4.5:Management Efficiency



	2014	2015	2016	2017	2018
Management Efficiency	0.1642	0.1813	0.1731	0.2017	0.2231

Source: Research Findings (2019).

The research established a steady increase in management efficiency over the research period (2014-2018). The increase started from a low of 0.1642 in 2014 to a high of 0.2231 in 2018 indicating that the ability of banks in Kenya to manage assets and manage liabilities effectively has been improving over the research duration.

4.4 Pearson Correlation Analysis

Table 4.4: Correlation Matrix

		The financial performance
Loan Loss Provisioning	r	.242
	PV	.000
Asset Quality	r	.135
	PV	.035
Capital Adequacy	r	.280
	PV	.043
Management Quality	r	.234
	PV	.002

Source: Research Findings (2019).

The results exhibited that financial performance was positively correlated to loan loss provisioning (r = .242, pv = .000), Asset Quality (r = .135, pv = .035), Capital Adequacy (r = .280, p = .043) and Management Quality (r = .234, pv = .002).

4.5 Regression Analysis

This analysis was used to establish the effect of change in provisioning policyon the financial performance of commercial banks in Kenya. Profitability was regressed against loan loss provision, asset quality, capital adequacy and management quality.

4.5.1 Model Summary

Table 4.5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.844[a]	.712	.705	.011126914

Predictors: (Constant), LLP, AQ, CA, MQ

The results revealed that there existed a variation of 70.5% between change in LLP and ROA in commercial banks in Kenya.

4.5.2 Analysis of Variance

Table 4.6. Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	112	4	28	4.167	.003[b]
	Residual	1176	175	6.720		
	Total	1288	179			

Dependent Variable: The financial performance

Source: Research Findings (2019).

The total variance was 1288 while the F-statistics was 4.167 and a significant value of 0.003. The indicated that there existed a goodness of fit of the model between change in LLP and ROA in banks. Analysis of Variance (ANOVA) was used to test the regression model's goodness of fit. Analysis of Variance recorded a p-value of 0.003 and an F-statistic of 4.167. It is therefore evident that the regression model used in this study is fit for the data collected with regards to the relationship between loan loss provisioning and the financial performance of commercial banks in Kenya.

4.5.3 Regression Co-efficients

Table 4.7: Regression Co-efficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.122	0.021		-5.810	.000
	Loan Loss Provisioning	0.470	0.072	.245	6.528	.000
	Asset Quality	0.392	0.096	.167	4.083	.000
	Capital Adequacy	0.407	0.101	.181	4.030	.000
	Management Efficiency	0.389	0.096	.157	4.052	.000
a. Dependent Variable: The financial performance						

The results indicate that loan loss provisioning (0.470), asset quality (0.392), capital adequacy (0.407) and management efficiency (0.389) had a positive effect on ROA in banks. Further, high t-stat and p-values ≤ 0.05 (Loan loss provisioning (t= 6.528, p= 0.000), asset quality (t= 4.083, p= 0.000), capital adequacy (t= 4.030, p= 0.000) and management efficiency (t= 4.052, p= 0.000) revealed that the positive effect was statistically significant. The regression equation is as represented below:

$Y_i = -0.122 + 0.470X_1 + 0.392X_2 + 0.407X_3 + 0.389X_4$

The constant value of -0.122 indicates that in the absence of loan loss provisioning, asset quality, capital adequacy and management efficiency, the profitability of commercial banks would be a loss. Increasing LLP by 1 unit would improve the financial performance by 0.470, 0.392, 0.407 and 0.389 respectively.

4.6 Discussion of Findings

It was established that change in LLP (R= 0.844) led to change in ROA of commercial banks and loan loss provisioning among commercial banks in Kenya. Loan loss provisioning when moderated by asset quality, capital adequacy and management quality was found to influence 70.5% of the total variability in

commercial bank the financial performance. Further, it was established that change in loan loss provisioning influence the financial performance of commercial banks in Kenya positively and in a significant manner.

The findings of this study both supported and contradicted existing literature. The research established that loan loss provision affects banks' financial performance. The findings supported were those of Fernando and Ekanayake (2015), Mbekomize and Mapharing (2017) and Serwadda (2018). Fernando and Ekanayake (2015) sought empirical evidence among the Sri Lankan banks to determine if the Sri Lanka banks use provisions of LL to streamline their income between 2003 and 2012 and concluded that loan loss provisioning and profits before tax are positively correlated. Mbekomize and Mapharing (2017) revealed that management of risk using LLP contribute to increase in ROA in banks. Serwadda (2018) established that loan loss provision influences banks' performance positively and significantly. The findings that contradicted were those of Alhadab and Alsahawneh (2016), Tahir, Ahmad and Aziz (2014) and Ul Mustafa, Younis and Ansari (2012) that LLP has a negative effect on financial returns in banks.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of results, conclusion and recommendations

5.2 Summary of Findings

Descriptive results indicated that there was an increase trends for LLP, ROA, management quality, capital adequacy and asset quality. The research established that there was a steady improvement in the ROA of banks. LLP was also increasing over the period of study with 2015 recorded the lowest ratio and 2018 recording the ratio. Equity to net assets ratio of the commercial banks. The research period was on a steady decline indicating that the asset quality of commercial banks in Kenya has been improving over the period of study. CA of the commercial banks was over increasing over. The research period with the year 2014 recorded the lowest capital adequacy ratio while 2018 recorded the highest ratio. Further, the research commercial banks recorded a steady increase in the management efficiency over the research period.

It was established that a very strong relationship (R= 0.844) exists between the financial performance of commercial banks and loan loss provisioning among commercial banks in Kenya. Loan loss provisioning when moderated by asset quality, capital adequacy and management quality was found to influence 70.5% of the total variability in commercial bank the financial performance as evidenced by the R-square value of 0.705. This implies that 29.5% of the commercial banks' the financial performance cannot be explained by loan loss provisioning and the control variables. Further, it was established that loan LLP, AQ, CA, and MQ influence the ROA of commercial banks in Kenya positively and in a statistically significant manner.

5.3 Conclusions

The research concludes that there was positive relationship between the financial performance of commercial banks and change in loan loss provisioning among commercial banks in Kenya. The results demonstrated that loan loss provisioning

under control of asset quality, capital adequacy and management quality influence increased ROA in banks. This effect is also statistically significant. This implies that increasing loan loss provisioning under control of asset quality, capital adequacy and management quality influence increased ROA in banks.

The research also concludes that the findings of this study both supports and contradicts existing literature. The findings support the findings of Fernando and Ekanayake (2015), Mbekomize and Mapharing (2017) and Serwadda (2018). They also established that LLP has a positive influence on commercial banks the financial performance. The results contradict the findings of Alhadab and Alsahawneh (2016), Tahir, Ahmad and Aziz (2014) and Ul Mustafa, Younis and Ansari (2012) who established that LLP has a negative relationship on the financial performance.

5.4 Recommendations

The research established that loan loss provisioning as per IFRS 9 influences commercial banks the financial performance positively. The research recommends that in order to avoid loan losses, commercial banks and other financial institutions should implement IFRS 9 in totality.

The research also established that asset quality, capital adequacy, and management efficiency influence commercial banks the financial performance positively and in a statistically significant way. The research recommends that commercial banks should work towards improving their asset quality, capital adequacy, and management efficiency as this will significantly influence the bank's the financial performance.

5.5 Limitations of the research

Data extraction was very tedious and cumbersome which delayed the research process. The detrimental effect of this challenge was that the researcher was not able to get data from all the commercial banks. The researcher put in sufficient effort to extract and analyse the data on time in order to meet the set academic deadline.

The research was however only able to get data from only 36 commercial banks and not the 40 banks as intended. The researcher was not sure if the absence of the data from the other four commercial banks may have affected the results of this study.

Further, the research was done under tight academic deadline which may have a negative influence on the quality of the research. In order to make more adequate conclusions, further studies should be allocated more time as this will give researchers adequate time to obtain and analyse quality data. This may alter the findings and recommendations made in this study.

5.6 Suggestions for Further Studies

Loan loss provisioning under control of asset quality, capital adequacy and management quality only influenced 70.5% of the total variability in commercial bank the financial performance. This implies that 29.5% of the commercial banks the financial performance cannot be explained by loan loss provisioning and the control variables. Further research should be carried out to establish the other factors influencing commercial banks the financial performance.

The year 2018 was the first year of compulsory implementation of IFRS 9 by all financial institutions. It would be important to assess this in the next five years as this will give a better illustration on the impact of IFRS 9 implementation on financial performance. Further, the research narrowed the scope to only commercial banks. The results may not be applicable to other financial institutions. Therefore, a future study should consider other commercial banks.

A further empirical study could be done and consider longer period of time such as 10 to 15 years. The research period for this study was only 5 years and the findings might therefore not be applicable over longer periods of time such as 10 or 15 years. Therefore, the research suggests that a similar study should be done over a longer duration such as 10 years as this might give different insights on the effect of firm size on stock returns for firms listed at the bourse. The researcher might also be able to make different adequate conclusions and make different recommendations.

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APPENDICES

Appendix I: List of commercial banks in Kenya

1. Barclay Bank of Kenya
2. Co-operative Bank of Kenya Limited
3. Diamond Trust Bank Kenya Limited
4. Equity Bank Limited
5. Housing Finance Company Ltd
6. I&M Holdings Ltd
7. Kenya Commercial Bank Limited
8. National Bank of Kenya Ltd
9. NIC Bank Ltd
10. Stanbic Bank Holdings Limited
11. Standard Chartered Bank Limited
12. ABC Bank Kenya
13. Bank of Africa
14. Bank of Baroda
15. Bank of India
16. City Bank
17. Consolidated Bank of Kenya
18. Credit Bank
19. Development Bank of Kenya
20. Dubai Islamic Bank
21. Ecobank Kenya
22. Family Bank
23. First Community Bank
24. Guaranty Trust Bank Kenya
25. Guardian Bank
26. Gulf African Bank
27. Habib Bank AG Zurich
28. Imperial Bank of Kenya
29. Jamii Bora Bank
30. Mayfair Bank
31. Middle East Bank Kenya
32. NCBA Bank Kenya Plc
33. Oriental Commercial Bank
34. Paramount Universal Bank
35. Prime Bank(Kenya)
36. SBM Bank Kenya Limited
37. Spire Bank
38. Sidian Bank
39. Transnational Bank Kenya
40. United Bank of Africa
41. Victoria Commercial Bank

Appendix II: Data Collection Sheet

#	Bank	**Years**	**The financial performance (ROA)**	**Loan Loss Provisioning**	**Asset Quality**	**Capital Adequacy**	**Management Efficiency**	**Liquidity**
1.	Bank 1	2014						
		2015						
		2016						
		2017						
		2018						
2	Bank 2	2014						
		2015						
		2016						
		2017						
		2018						
..	……...	……	…….	……	…….	……...	…….	
40	Bank 11	2014						
		2015						
		2016						
		2017						
		2018						

Source: Researcher (2019).

APPENDIX III: DATA COLLECTION SHEET

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
ABC Bank	0.1003	0.3400	0.1798	4.1530	0.02607	0.1642
ABC Bank	0.1247	0.3600	0.1719	4.9230	0.03068	0.1813
ABC Bank	0.1805	0.3100	0.1592	5.6810	0.01958	0.1731
ABC Bank	0.1993	0.3200	0.5637	2.7480	0.03568	0.2017
ABC Bank	0.1003	0.3400	0.1798	4.1530	0.00494	0.2231
Bank of Africa	0.0597	1.2300	0.2806	4.0850	0.01733	0.2716
Bank of Africa	0.0489	1.5400	0.1911	3.1400	0.03770	0.2854
Bank of Africa	0.0293	1.4100	0.1922	2.9220	0.03161	0.258
Bank of Africa	0.0616	1.5000	0.1366	3.9780	0.04579	0.2992
Bank of Africa	0.0592	0.8900	0.1442	3.0900	0.02485	0.3131
Bank of Baroda	0.0576	0.8700	0.2563	2.9980	0.02371	0.1334
Bank of Baroda	0.0458	0.8000	0.2363	2.9470	0.02361	0.1472
Bank of Baroda	0.0562	1.0400	0.2416	3.1280	0.02351	0.120
Bank of Baroda	0.0484	0.8500	0.3113	0.6300	0.02341	0.1642
Barclays Bank	0.0456	3.6000	0.5116	1.5000	0.02331	0.1642
Barclays Bank	0.0643	1.5200	0.7917	1.1500	0.02321	0.1813
Barclays Bank	0.0790	0.9100	0.1648	0.6300	0.02311	0.1731
Barclays Bank	0.2578	0.8700	0.5318	2.2000	0.02302	0.2017

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Barclays Bank	0.2351	1.0600	0.3842	2.7200	0.02292	0.2231
Barclays Bank	0.2815	0.9200	0.2315	2.8200	0.02282	0.189
Bank of India	0.3521	0.4000	0.7915	5.6210	0.02203	0.189
Bank of India	0.3765	0.4445	0.2313	5.4310	0.02193	0.2245
Bank of India	0.3860	0.2439	0.7614	5.3960	0.02183	0.2359
Bank of India	0.0919	0.1738	0.7614	3.7540	0.02173	0.2473
Bank of India	0.0948	0.2842	0.1824	3.8670	0.02164	0.2587
Citibank	0.3571	0.8534	0.2322	4.5550	0.02154	0.2701
Citibank	0.3507	0.5233	0.2222	4.6680	0.02144	0.2815
Citibank	0.2123	0.2734	0.1721	6.6570	0.02134	0.259
Citibank	0.0393	0.2326	0.2179	1.2100	0.02124	2.0781
Commercial Bank of Africa	0.0971	0.2936	0.2218	1.5940	0.02016	0.3270
Commercial Bank of Africa	0.0783	0.2729	0.1127	1.3060	0.02006	0.3384
Commercial Bank of Africa	0.0693	0.8134	0.8932	1.2900	0.01996	0.3498
Commercial Bank of Africa	0.0526	0.5738	1.5215	1.2570	0.01986	0.327
Consolidated bank	0.0053	0.2430	0.8719	1.2910	0.01927	0.3407
Consolidated bank	0.0052	0.4328	1.9516	1.2910	0.01917	0.3545
Consolidated bank	0.0204	0.4269	1.9713	1.4260	0.01907	0.327
Consolidated bank	0.0094	0.3343	0.0469	1.0810	0.01897	0.3612

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Credit bank	0.0228	2.1729	0.0592	1.2150	0.01887	0.3726
Credit bank	0.0403	0.2830	0.1328	3.6390	0.01878	0.2301
Credit bank	0.0465	0.3227	0.1020	3.7920	0.01868	0.2440
Credit bank	0.0477	0.6926	0.0791	4.2780	0.01858	0.2578
Credit bank	0.0458	0.4428	0.1956	4.2600	0.01848	0.2716
Credit bank	0.0486	0.6748	0.3862	4.2470	0.01838	0.2854
Development Bank	0.0613	0.2341	0.0355	2.8700	0.01670	0.1749
Development Bank	0.0856	2.3139	0.0480	3.6000	0.01661	0.1887
Development Bank	0.0816	1.6156	0.0387	4.9400	0.01651	0.2025
Development Bank	0.0934	1.5414	0.0298	4.7200	0.01641	0.2163
Development Bank	0.0681	1.2114	0.0439	2.7400	0.01631	0.189
Diamond Trust Bank	0.0904	1.4100	0.1320	5.6090	0.01572	0.2815
Diamond Trust Bank	0.2248	1.5000	0.1045	2.2480	0.01562	0.259
Diamond Trust Bank	0.2578	0.8900	0.1221	2.3950	0.01552	2.0781
Diamond Trust Bank	0.2697	0.8700	0.0717	2.4250	0.01542	0.629
Dubai bank	0.0645	0.8000	0.2611	3.0930	0.01532	0.2301
Dubai bank	0.0617	1.0400	0.1928	3.2530	0.01523	0.2440
Dubai bank	0.0436	0.8500	0.1975	2.9870	0.01513	0.2578
Dubai bank	0.0412	3.6000	0.2511	3.2290	0.01503	0.2716

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Dubai bank	0.0664	0.9200	0.3572	3.0600	0.01493	0.2854
Ecobank	0.1993	0.3200	0.5637	2.7480	0.01404	3.0781
Ecobank	0.2002	0.3400	0.1798	4.1530	0.01394	0.884
Ecobank	0.1996	0.3600	0.1719	4.9230	0.01385	0.2992
Ecobank	0.2134	0.3100	0.1592	5.6810	0.01375	0.3131
Ecobank	0.2392	0.3200	0.5637	2.7480	0.01365	0.3269
Equity Bank	0.2351	0.8900	0.1442	3.0900	0.01306	0.3840
Equity Bank	0.2815	1.5400	0.1911	3.1400	0.01296	0.3954
Equity Bank	0.1511	1.4100	0.1922	2.9220	0.01286	0.4068
Equity Bank	0.3313	1.5000	0.1366	3.9780	0.01276	0.4182
Family bank	0.0393	0.5900	0.1341	3.7930	0.01237	0.3683
Family bank	0.0700	1.1300	0.1291	5.1310	0.01227	0.3822
Family bank	0.0762	1.2150	0.7515	4.1830	0.01217	0.3960
First Community Bank	0.0052	1.0600	0.3842	2.7200	0.01661	0.3407
First Community Bank	0.0204	0.9200	0.2315	2.8200	0.01651	0.3545
First Community Bank	0.0094	0.9200	0.2117	1.4900	0.01641	0.327
First Community Bank	0.0228	0.9200	0.2117	2.4600	0.01631	0.3683
Guaranty Trust Bank	0.0502	0.4445	0.2313	5.4310	0.01030	-0.3621
Guaranty Trust Bank	0.0367	0.2439	0.7614	5.3960	0.01020	-0.4026

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Guaranty Trust Bank	0.0518	0.1738	0.7614	3.7540	0.01010	-0.4431
Guardian Bank	0.0768	0.2326	0.2179	1.2100	0.00961	0.2301
Guardian Bank	0.0749	0.4222	0.1419	2.0220	0.00951	0.2440
Guardian Bank	0.0436	0.2626	0.3316	1.9690	0.00941	0.2578
Guardian Bank	0.0412	0.2118	0.5813	1.4670	0.00931	0.2716
Guardian Bank	0.0664	0.6729	0.5810	1.3380	0.00921	0.2854
Gulf African Bank	0.0597	0.6343	0.8410	6.3520	0.00911	0.258
Gulf African Bank	0.0489	0.2528	0.8211	6.4300	0.00901	0.2928
Gulf African Bank	0.0293	0.2443	0.8311	7.0740	0.00891	0.3042
Habib Bank Ltd	0.0945	0.2616	0.9713	8.0790	0.00803	0.3131
Habib Bank Ltd	0.0743	0.2844	0.5127	3.8860	0.00793	0.3269
Habib Bank Ltd	0.0836	0.3142	1.3115	4.0310	0.00783	0.3407
Habib Bank Ltd	0.0835	0.5345	1.7715	4.1930	0.00773	0.3545
Housing finance Company ltd	0.2224	0.6926	0.0791	4.2780	0.00694	0.395
Housing finance Company ltd	0.2363	0.4428	0.1956	4.2600	0.00684	4.0781
Housing finance Company ltd	0.2528	0.6748	0.3862	4.2470	0.00675	1.139
Housing finance Company ltd	0.2769	0.2845	0.0765	1.2050	0.00665	0.3683
Housing finance Company ltd	0.2947	0.3398	0.0473	1.1430	0.00655	0.3822
I&M Bank	0.0409	0.1255	0.0046	1.3510	0.00645	0.3960

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
I&M Bank	0.0415	0.3487	0.0359	1.2940	0.00635	0.4098
I&M Bank	0.0394	0.4743	0.0639	1.2060	0.00625	0.4236
I&M Bank	0.0403	0.2933	0.3858	4.2660	0.00615	0.396
I&M Bank	0.0465	0.3633	0.3079	4.4940	0.00606	0.4296
I&M Bank	0.0477	0.2730	0.2621	4.6250	0.00596	0.4410
Jamii Bora Bank Ltd	0.0934	1.5414	0.0298	4.7200	0.00477	0.4927
KCB Bank	0.0873	1.2114	0.0439	2.7400	0.00467	0.465
KCB Bank	0.2780	1.1141	0.0969	0.3000	0.00418	0.3960
KCB Bank	0.2943	1.4100	0.1320	5.6090	0.00408	0.4098
KCB Bank	0.2971	1.5000	0.1045	2.2480	0.00398	0.4236
KCB Bank	0.3058	0.8900	0.1221	2.3950	0.00389	0.396
Middle East Bank (K)	0.1805	0.9200	0.3572	3.0600	0.00329	0.465
Middle East Bank (K)	0.1993	0.9200	0.0606	2.5750	0.00320	-0.6050
Middle East Bank (K)	0.2002	0.9100	0.1312	2.6980	0.00310	-0.6455
Middle East Bank (K)	0.1996	0.7200	0.2020	2.7330	0.00300	-0.6859
M-Oriental bank ltd	0.2134	0.7000	0.1112	2.8000	0.00290	-0.7264
M-Oriental bank ltd	0.2392	0.6700	0.0632	3.0860	0.00280	-0.7669
M-Oriental bank ltd	0.2525	0.3400	0.1798	4.1530	0.00270	-0.8073
M-Oriental bank ltd	0.2298	0.3600	0.1719	4.9230	0.00260	-0.8478

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
M-Oriental bank ltd	0.0643	0.3100	0.1592	5.6810	0.00251	-0.767
National Bank	0.0393	1.5000	0.1366	3.9780	0.00152	0.3954
National Bank	0.0700	0.8900	0.1442	3.0900	0.00142	0.4068
National Bank	0.0762	1.5400	0.1911	3.1400	0.00132	0.4182
National Bank	0.0734	1.4100	0.1922	2.9220	0.00122	0.395
NIC Plc bank	0.0686	1.5000	0.1366	3.9780	0.00112	4.0781
NIC Plc bank	0.0932	0.8900	0.1442	3.0900	0.00103	1.139
NIC Plc bank	0.0053	1.2150	0.7515	4.1830	0.00053	0.4236
NIC Plc bank	0.0052	0.8700	0.2563	2.9980	0.00043	0.396
NIC Plc bank	0.0204	0.8000	0.2363	2.9470	0.00034	0.4296
Paramount Bank	0.0094	1.0400	0.2416	3.1280	0.00024	0.4410
Paramount Bank	0.0228	0.8500	0.3113	0.6300	0.00014	0.4524
Paramount Bank	0.0211	1.0600	0.3842	2.7200	0.01235	5.0781
Paramount Bank	0.0445	0.9200	0.2315	2.8200	0.03776	1.393
Paramount Bank	0.0502	0.9200	0.2117	1.4900	0.00348	0.4374
Prime Bank	0.0733	0.4600	0.2513	5.5980	0.02371	0.4979
Prime Bank	0.0768	0.4000	0.7915	5.6210	0.02361	0.5093
Prime Bank	0.0749	0.4445	0.2313	5.4310	0.02351	0.5207
Prime Bank	0.0436	0.2439	0.7614	5.3960	0.02341	0.5321

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Sidian Bank	0.0592	0.4222	0.1419	2.0220	0.02272	0.5204
Sidian Bank	0.0576	0.2626	0.3316	1.9690	0.04579	0.5342
Sidian Bank	0.0458	0.2118	0.5813	1.4670	0.02485	0.5480
Stanbic Bank Kenya	0.0562	0.6729	0.5810	1.3380	0.03659	0.5618
Stanbic Bank Kenya	0.0484	0.6343	0.8410	6.3520	0.01235	0.534
Stanbic Bank Kenya	0.0456	0.2528	0.8211	6.4300	0.03776	0.4296
Stanbic Bank Kenya	0.0841	0.2443	0.8311	7.0740	0.00348	0.4410
Standard Chartered	0.2363	0.2430	0.8719	1.2910	0.02302	-0.8883
Standard Chartered	0.2528	0.4328	1.9516	1.2910	0.02292	-0.9288
Spire Bank Ltd	0.0394	0.3227	0.1020	3.7920	0.03659	-1.1311
Spire Bank Ltd	0.0403	0.6926	0.0791	4.2780	0.01235	-1.050
Spire Bank Ltd	0.0465	0.4428	0.1956	4.2600	0.03776	0.3683
Spire Bank Ltd	0.0477	0.6748	0.3862	4.2470	0.00348	0.3822
Spire Bank Ltd	0.0458	0.2845	0.0765	1.2050	0.00158	0.3960
Transnational Bank	0.0486	0.3398	0.0473	1.1430	0.02555	0.4098
Transnational Bank	0.0656	0.1255	0.0046	1.3510	0.02255	0.4236
Transnational Bank	0.0742	0.3487	0.0359	1.2940	0.03770	0.396
Transnational Bank	0.1321	0.4743	0.0639	1.2060	0.02380	0.4296
Transnational Bank	0.0906	0.2933	0.3858	4.2660	0.02371	0.4410

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
UBA Kenya Bank	0.2248	0.2634	0.0407	3.1200	0.02282	0.2440
UBA Kenya Bank	0.2578	0.1930	0.3758	2.2600	0.02272	0.2578
UBA Kenya Bank	0.2697	0.2341	0.0355	2.8700	0.04579	0.2716
UBA Kenya Bank	0.2780	2.3139	0.0480	3.6000	0.02485	0.2854
UBA Kenya Bank	0.2943	1.6156	0.0387	4.9400	0.03659	0.258
ABC Bank	0.1246	0.3599	0.17181	4.9229	0.02255	0.0643
ABC Bank	0.1804	0.3099	0.15912	5.6809	0.03770	0.0781
ABC Bank	0.1992	0.3199	0.56356	2.7479	0.02380	0.050
ABC Bank	0.2001	0.3199	0.11046	3.3699	0.02371	0.0919
Bank of Africa	0.0596	1.2299	0.28046	4.0849	0.02361	0.1058
Bank of Africa	0.0488	1.5399	0.19103	3.1399	0.02351	0.1196
Bank of Africa	0.0292	1.4099	0.19207	2.9219	0.02341	0.1334
Bank of Africa	0.0615	1.4999	0.13647	3.9779	0.02331	0.1472
Bank of Africa	0.0591	0.8899	0.14411	3.0899	0.02321	0.120
Bank of Africa	0.0488	1.5399	0.19103	3.1399	0.02311	0.1642
Bank of Baroda	0.0575	0.8699	0.25619	2.9979	0.01235	0.1610
Bank of Baroda	0.0457	0.7999	0.23619	2.9469	0.03776	0.1749
Bank of Baroda	0.0561	1.0399	0.24153	3.1279	0.00348	0.1887
Bank of Baroda	0.0483	0.8499	0.31118	0.6299	0.00158	0.2025

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Barclays Bank	0.0455	3.5999	0.51151	1.4999	0.02555	0.2163
Barclays Bank	0.0642	1.5199	0.79162	1.1499	0.02255	0.189
Barclays Bank	0.0789	0.9099	0.16469	0.6299	0.03770	0.2245
Barclays Bank	0.2577	0.8699	0.53169	2.1999	0.02380	0.2359
Barclays Bank	0.235	1.0599	0.38409	2.7199	0.02371	0.2473
Barclays Bank	0.2814	0.9199	0.23143	2.8199	0.02361	0.2587
Barclays Bank	0.084	0.9199	0.21158	1.4899	0.02351	0.2701
Bank of India	0.3312	0.4599	0.25118	5.5979	0.02292	0.2440
Bank of India	0.352	0.3999	0.79139	5.6209	0.02282	0.2578
Bank of India	0.3764	0.444436	0.23120	5.4309	0.02272	0.2716
Bank of India	0.3859	0.243758	0.76130	5.3959	0.04579	0.2854
Bank of India	0.0918	0.173747	0.76126	3.7539	0.02485	0.258
Bank of India	0.0947	0.284073	0.18233	3.8669	0.03659	0.2928
Citibank	0.0699	0.422085	0.14184	2.0219	0.02555	0.3498
Citibank	0.0761	0.262482	0.33146	1.9689	0.02255	0.327
Citibank	0.0733	0.211738	0.58121	1.4669	0.03770	3.0781
Citibank	0.0685	0.672759	0.58091	1.3379	0.02380	0.884
Commercial Bank of Africa	0.0931	0.354329	0.74195	1.4939	0.02321	0.327
Commercial Bank of Africa	0.097	0.293489	0.22173	1.5939	0.02311	0.3612

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Commercial Bank of Africa	0.0782	0.272805	0.11259	1.3059	0.02302	0.3726
Commercial Bank of Africa	0.0692	0.813317	0.89307	1.2899	0.02292	0.2301
Commercial Bank of Africa	0.0525	0.573731	1.52137	1.2569	0.02282	0.2440
Consolidated bank	0.0051	0.43273	1.95154	1.2909	0.00348	0.3269
Consolidated bank	0.0203	0.426822	1.97115	1.4259	0.00158	0.3407
Consolidated bank	0.0093	0.33422	0.04682	1.0809	0.02555	0.3545
Credit bank	0.0227	2.172771	0.05909	1.2149	0.02255	0.327
Credit bank	0.0402	0.282913	0.13272	3.6389	0.03770	-0.0384
Credit bank	0.0141	0.28439	0.07638	1.2049	0.02341	-0.2407
Credit bank	0.0117	0.339739	0.04721	1.1429	0.02331	-0.2812
Credit bank	0.0248	0.125433	0.00450	1.3509	0.02321	-0.200
Co-operative bank	0.0309	0.348605	0.03580	1.2939	0.02311	0.1610
Co-operative bank	0.021	0.474234	0.06377	1.2059	0.02302	0.1749
Co-operative bank	0.0655	0.293242	0.38568	4.2659	0.02292	0.1887
Co-operative bank	0.0741	0.363242	0.30783	4.4939	0.02282	0.2025
Co-operative bank	0.132	0.27285	0.26195	4.6249	0.02272	0.2163
Development Bank	0.0612	0.234003	0.03535	2.8699	0.02255	2.0781
Development Bank	0.0855	2.313775	0.04790	3.5999	0.03770	0.629
Development Bank	0.0815	1.615535	0.03861	4.9399	0.02380	0.2301

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Development Bank	0.0933	1.541312	0.02968	4.7199	0.02371	0.2440
Development Bank	0.068	1.211291	0.04376	2.7399	0.02361	0.2578
Diamond Trust Bank	0.0903	1.4099	0.13193	5.6089	0.02302	0.3156
Diamond Trust Bank	0.2247	1.4999	0.10438	2.2479	0.02292	0.3270
Diamond Trust Bank	0.2577	0.8899	0.12199	2.3949	0.02282	0.3384
Diamond Trust Bank	0.2696	0.8699	0.07165	2.4249	0.02272	0.3498
Dubai bank	0.0644	0.7999	0.26100	3.0929	0.04579	0.327
Dubai bank	0.0616	1.0399	0.19271	3.2529	0.02485	3.0781
Dubai bank	0.0435	0.8499	0.19743	2.9869	0.03659	0.884
Dubai bank	0.0411	3.5999	0.25096	3.2289	0.01235	0.2992
Dubai bank	0.0663	0.9199	0.35713	3.0599	0.03776	0.3131
Ecobank	0.1995	0.3599	0.17181	4.9229	0.02331	0.395
Ecobank	0.2133	0.3099	0.15912	5.6809	0.02321	4.0781
Ecobank	0.2391	0.3199	0.56356	2.7479	0.02311	1.139
Equity Bank	0.2524	0.3199	0.11046	3.3699	0.02302	0.3683
Equity Bank	0.2814	1.5399	0.19103	3.1399	0.02072	0.3840
Equity Bank	0.151	1.4099	0.19207	2.9219	0.02048	0.3954
Equity Bank	0.3312	1.4999	0.13647	3.9779	0.02024	0.2992
Family bank	0.352	0.8899	0.14411	3.0899	0.02000	0.3131

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Family bank	0.3764	0.3999	0.10551	3.6519	0.01976	0.3269
Family bank	0.3859	0.6399	0.10021	3.4889	0.02361	0.3407
Family bank	0.0392	0.5899	0.13404	3.7929	0.02351	0.3545
Family bank	0.0699	1.1299	0.12903	5.1309	0.02341	0.327
First Community Bank	0.0051	1.0599	0.38409	2.7199	0.02072	-0.4431
First Community Bank	0.0203	0.9199	0.23143	2.8199	0.02048	-0.4836
First Community Bank	0.0093	0.9199	0.21158	1.4899	0.02024	-0.5240
First Community Bank	0.0227	0.9199	0.21158	2.4599	0.02000	-0.5645
Guaranty Trust Bank	0.0141	0.9099	0.31459	0.3299	0.01976	-0.484
Guaranty Trust Bank	0.0117	0.7199	0.59134	0.1999	0.02361	0.2301
Guaranty Trust Bank	0.0248	0.6999	0.36133	3.6949	0.02351	0.2440
Guaranty Trust Bank	0.0366	0.243758	0.76130	5.3959	0.02302	0.2928
Guaranty Trust Bank	0.05167	0.173747	0.76126	3.7539	0.02292	0.3042
Guardian Bank	0.0571	0.284073	0.18233	3.8669	0.02282	0.3156
Guardian Bank	0.068	0.853301	0.23207	4.5549	0.02272	0.3270
Guardian Bank	0.0693	0.523158	0.22206	4.6679	0.02121	0.3384
Guardian Bank	0.0732	0.273254	0.17199	6.6569	0.02097	0.3498
Guardian Bank	0.0767	0.232549	0.21779	1.2099	0.02072	0.327
Gulf African Bank	0.0483	0.813317	0.89307	1.2899	0.02282	0.4068

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Habib Bank Ltd	0.0835	0.31409	1.31138	4.0309	0.02048	0.3683
Habib Bank Ltd	0.0834	0.534382	1.77144	4.1929	0.02024	0.3822
Habib Bank Ltd	0.0918	0.242912	0.87175	1.2909	0.02000	0.3960
Habib Bank Ltd	0.0947	0.43273	1.95154	1.2909	0.01976	0.4098
Habib Bank Ltd	0.357	0.426822	1.97115	1.4259	0.02233	0.4236
Housing finance Company ltd	0.35055	0.33422	0.04682	1.0809	0.02223	0.396
Housing finance Company ltd	0.2122	2.172771	0.05909	1.2149	0.02213	0.4296
Housing finance Company ltd	0.2128	0.282913	0.13272	3.6389	0.02203	0.4410
Housing finance Company ltd	0.1909	0.322623	0.10195	3.7919	0.02193	0.4524
I&M Bank	0.0476	0.27285	0.26195	4.6249	0.02085	0.4927
I&M Bank	0.0457	0.492937	0.32567	5.7559	0.02075	0.465
I&M Bank	0.0485	0.731365	0.34133	7.0259	0.02065	0.4068
I&M Bank	0.0655	0.832708	0.02840	4.9489	0.02055	0.4182
Jamii Bora Bank Ltd	0.0855	2.313775	0.04790	3.5999	0.01986	0.4374
Jamii Bora Bank Ltd	0.0815	1.615535	0.03861	4.9399	0.01976	0.4513
Jamii Bora Bank Ltd	0.0933	1.541312	0.02968	4.7199	0.01966	0.4651
KCB Bank	0.0872	1.211291	0.04376	2.7399	0.01956	0.4789
KCB Bank	0.0903	1.08113	0.07080	2.7599	0.01947	0.4927
KCB Bank	0.2247	2.241417	0.07275	2.2799	0.01937	0.465

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
KCB Bank	0.2577	1.251523	0.26329	1.1199	0.01927	-0.6050
KCB Bank	0.2696	1.269074	0.21310	5.6229	0.01917	-0.6455
Middle East Bank (K)	0.2001	0.9099	0.13106	2.6979	0.01799	0.327
Middle East Bank (K)	0.1995	0.7199	0.20187	2.7329	0.01789	0.3612
M-Oriental bank ltd	0.2577	0.3399	0.17968	4.1529	0.01720	4.0781
M-Oriental bank ltd	0.235	0.3599	0.17181	4.9229	0.01710	1.139
M-Oriental bank ltd	0.2814	0.3099	0.15912	5.6809	0.01700	0.3683
National Bank	0.0699	0.8899	0.14411	3.0899	0.01631	0.4410
National Bank	0.0761	1.5399	0.19103	3.1399	0.01621	0.4524
National Bank	0.0733	1.4099	0.19207	2.9219	0.01611	0.4638
NIC Plc bank	0.097	0.3999	0.10551	3.6519	0.01582	0.464
NIC Plc bank	0.0782	0.6399	0.10021	3.4889	0.01572	5.0781
NIC Plc bank	0.0692	0.5899	0.13404	3.7929	0.01562	1.393
NIC Plc bank	0.0525	1.1299	0.12903	5.1309	0.01552	0.4374
Paramount Bank	0.0309	0.8699	0.53169	2.1999	0.02213	0.5321
Paramount Bank	0.021	1.0599	0.38409	2.7199	0.02203	0.5435
Paramount Bank	0.0444	0.9199	0.23143	2.8199	0.02193	0.5549
Paramount Bank	0.0501	0.9199	0.21158	1.4899	0.02183	0.532
Prime Bank	0.0366	0.9199	0.21158	2.4599	0.02173	6.0781

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Prime Bank	0.05167	0.9099	0.31459	0.3299	0.02164	1.648
Prime Bank	0.0571	0.7199	0.59134	0.1999	0.02154	0.5065
Prime Bank	0.068	0.6999	0.36133	3.6949	0.02144	0.5204
Prime Bank	0.0693	0.5599	0.27603	4.0379	0.02134	0.5342
Sidian Bank	0.0663	0.284073	0.18233	3.8669	0.02075	0.4374
Sidian Bank	0.0596	0.853301	0.23207	4.5549	0.02065	0.4513
Sidian Bank	0.0488	0.523158	0.22206	4.6679	0.02055	0.4651
Sidian Bank	0.0292	0.273254	0.17199	6.6569	0.02045	0.4789
Sidian Bank	0.0615	0.232549	0.21779	1.2099	0.02035	0.4927
Stanbic Bank Kenya	0.0834	0.293489	0.22173	1.5939	0.01927	-1.0097
Stanbic Bank Kenya	0.0918	0.272805	0.11259	1.3059	0.01917	-1.0502
Standard Chartered	0.0947	0.813317	0.89307	1.2899	0.01907	-1.0907
Standard Chartered	0.357	0.573731	1.52137	1.2569	0.01897	-1.1311
Standard Chartered	0.35055	0.154103	0.97130	7.6999	0.01887	-1.050
Spire Bank Ltd	0.0414	0.282913	0.13272	3.6389	0.01789	0.2301
Spire Bank Ltd	0.0393	0.322623	0.10195	3.7919	0.01779	0.2440
Spire Bank Ltd	0.0402	0.692511	0.07899	4.2779	0.01769	0.2578
Spire Bank Ltd	0.0464	0.442728	0.19554	4.2599	0.01759	0.2716
Spire Bank Ltd	0.0476	0.674696	0.38613	4.2469	0.01749	0.2854

Banks	Asset Quality	Liquidity	Capital Adequacy	Loan Loss Provisioning Log (10)	The financial performance	Management Efficiency
Spire Bank Ltd	0.0457	0.28439	0.07638	1.2049	0.01740	0.258
Transnational Bank	0.0485	0.339739	0.04721	1.1429	0.01730	0.2992
Transnational Bank	0.0655	0.125433	0.00450	1.3509	0.01720	0.3131
Transnational Bank	0.0741	0.348605	0.03580	1.2939	0.01710	0.3269
Transnational Bank	0.1320	0.474234	0.06377	1.2059	0.01700	0.3407
Transnational Bank	0.0905	0.293242	0.38568	4.2659	0.01690	0.3545
UBA Kenya Bank	0.2247	0.263337	0.04058	3.1199	0.01601	-0.200
UBA Kenya Bank	0.2577	0.192882	0.37567	2.2599	0.01592	0.1610
UBA Kenya Bank	0.2696	0.234003	0.03535	2.8699	0.01582	0.1749
UBA Kenya Bank	0.2779	2.313775	0.04790	3.5999	0.01572	0.1887
UBA Kenya Bank	0.2942	1.615535	0.03861	4.9399	0.01562	0.2025