

**THE EFFECT OF CREDIT RISK MANAGEMENT ON THE
FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN
KENYA**

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DECLARATION

This research project is my original work and has not been presented for an award of a degree in any other university or institution of learning.



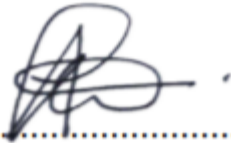
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DEDICATION

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LIST OF ABBREVIATIONS

CAR	Capital Adequacy Ratio
CBK	Central Bank of Kenya
CRM	Credit Risk Management
NIM	Net Interest Margin
NPLs	Nonperforming Loans
NSE	Nairobi Securities Exchange
ROA	Return on Assets
ROE	Return on Equity

ABSTRACT

Commercial banks play an imperative role within the economy through offering savings alongside credit facilities. However, giving out loans poses the banks to credit risks. There is empirical research evidence showing that credit risk possesses negative effects on the financial performance, thus it necessitated the need to scrutinize the credit risk management effect on the commercial banks' performance in Kenya. This research has established how credit risk management affects the performance of Kenyan commercial banks.

The objective of the research was to investigate the credit risk management effects on the Kenyan commercial banks' performance. The researcher utilized secondary data and descriptive research design whereby the population were all licensed banks as at 31st December, 2020. The research period was 5 years between 2016 to 2020. The data analysis was steered through SPSS version 26 software. The researcher used multiple regression model to perform analysis of the amassed data thereby establish the link between the variables of study. The researcher also utilized F-test to establish the regression model's significance. The study findings unveiled that non-performing loans significantly and negatively affect the performance of banks. Moreover, the capital adequacy exhibits positive as well as significant influence on the banks' performance. Additionally, the scholar established that loan loss provisions positively affect the banks' financial performance even though the impact is insignificant at 5%. Hence, the researcher concluded that credit risk management possess a positive effect on the financial performance, so the risk managers and policy makers should establish proper strategies in managing credit risks in banks.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Commercial banks provide an essential function in the economy. That is, they offer saving services to people and extend credit facilities to them as well as companies. Like any other business, commercial banks have the objective of maximizing their profits from revenue sources such as bank fees and commissions, interest on credits, dividends, interest on advances, income from foreign exchange trading, interest on government securities, and many more. Commercial banks get the highest turnover from their interest on credits. However, giving out loans poses risks to the banks. Credit risk is the most critical risk that should be managed effectively since its effects are adverse on the banks' financial performance. Bizuayehu (2015) defines risk as the possibility or threat of loss, liability, damage, or any other negative incident brought on by internal or external susceptibilities, which may, however, be avoided by taking preventative action.

According to Misman et al. (2015), credit risk results when a lender might not receive the lent money, thus leading to a disruption of cash flows as well as a rise in the cost of credit collection. There is usually a risk of default by the borrower whenever a financial institution gives credit (Olamide et al., 2015). Again, banks take deposits from their customers and then use these funds to offer loans to other clients, thus another risk to the clients' savings. When different customers default on their loan repayments, the effect can be massive on the banks, which can also affect the economy at large. The borrowers might be just unwilling to repay the loans or be unable to do it as agreed in the loan contract

(Bizuayehu, 2015). As a result, credit risk management is required to diminish the risks of loan default and ensure the smooth operation of financial institutions.

Studies on this topic have yielded mixed findings; hence, more studies on this topic are necessary. Akomeah et al. (2020) established that a significant association exists between the CAR, NPL, and SIZE and the banks' performance in Ghana. Al Zaidanin & Al Zaidanin (2021) established that NPLR displays a substantial negative influence on the UAE banks' profitability. Although the liquidity ratio, CAR, and ratio of loans-to-deposits do not affect the banks' profitability, Bhattarai (2019) determined that CAR, management quality ratio, and NPLR significantly impact the Nepalese banks' performance. Iheanyi & Sotonye (2017) demonstrated that management efficiency, earnings, capital adequacy, and liquidity insignificantly affect the banks' profitability. Contrarily, asset quality negatively affects the profitability of Nigerian banks. Musyoka (2017) established that CAR negatively affects the return on assets; asset quality negatively and insignificantly affect the banks' ROA, and liquidity possess a positive but insignificant relationship with the banks' ROA. Yet, Kibor (2015) explains that credit risks influence the financial performance of banks but also have grave consequences.

Varied theories elucidate the concept of CRM in banks and its link with financial performance. Thus, this study anchored on the asymmetric information theory, credit scoring model, agency theory, and stakeholder theory. The credit scoring model assists the bank in evaluating customers' qualifications for credit based on clients' credit ratings and default frequencies, so the banks use this model to gauge the customers' historical data to make credit decisions. The systematic information theory considers effective screening of potential borrowers to avoid future loan losses. Asymmetric theory emphasizes on the need

for banks to use varied sources of information when evaluating borrowers because failure to do so can lead to an adverse selection problem leading to increase in credit risk. Agency theory explains management decisions on CRM and how this affects financial performance. The Stakeholders theory considers the interests of all stakeholders, and thus, believes that the banks will only grant credits with low anticipated risks.

There is a belief that poor CRM is the premier cause of the failures in banks globally, and in the last four years, four banks have collapsed in Kenya, which raises eyebrows. On checking the financial records of Kenyan commercial banks, NPLs are on the rise, which brings a concern about whether the banks have efficacious CRM. Therefore, the collapse of these commercial banks, rising NPLs, and being a professional in the credit risk management department motivated the researcher to investigate CRM and its effects on the Kenyan commercial banks' financial performance.

1.1.1 Credit Risk Management

Risk management refers to the continuous process as well as mechanisms taken to reduce corporate risk. In effect, risk management is defined by how companies actively choose the kind and level of risk that they can assume. According to Duffie & Singleton (2003), risk management is the refinement of the risk of vast amounts of losses and the enterprise's vulnerability to them. This susceptibility is reliant on the positions and the capital amount that backs the investment activities of the company. Further, the susceptibility to risk is reliant on the risk management team competence, its risk-measurement structures, and its position liquidity.

Huang & Wang (2017) state that cost reduction is not the only target of banking operations. There is a need to manage risks in banks to reduce the negative impact of risk facts. As

such, shareholders and customers prefer a robust and safe bank since the bank's soundness attracts more deposits. Banks and financial institutions have exposure to various types of risks, one of them being credit risk, which is worse than other known risks. The financial industry is the pillar of any economy, and thus, without appropriate banking channels, the whole business setting would crumble from adverse effects.

Every bank has a purpose of operating and performing well financially to improve its growth and maintain its stability. The dominant assets of the banks are loans, which generate their largest portion of operating income, yet they expose them to extreme risk (Magnifique, 2013). Each commercial bank experiences financial risk, but those that establish appropriate strategies of financial risk management in their planning and management are probable to accomplish their operational and strategic goals (Muteti, 2014). Credit risk originates from lending, and traditional bank lending refers to the financial intermediation of capital between those who provide it and its consumers. CRM influences the banks' financial performance. Subsequently, the minimization of the credit risk is the core purpose of the banks' activities. Wernz (2014) explains that traditional credit risk management, majorly in the form of provision and management of credit limits, has increased with the increment of bank lending. Credit risk management is indispensable because it ascertains the banking sector's growth, thus does not threaten its stability. For this study, the credit risk management measures will be loan loss provision, CAR, nonperforming loans ratio, and loss given default ratio.

1.1.2 Financial Performance

Financial performance refers to the degree of the level of a company's profit or loss in each period. The financial performance of the firms is shown by their financial statements.

Analysts usually concentrate on the accounting figures, albeit they might not sufficiently reflect the true economic values of the firm since some figures are managed too. Different measures can be utilized in estimating the banks performance, such as ROE, NIM and ROA.

ROE indicates how much turnover a firm earns from the whole shareholder's equity. ROE gives the profit the shareholders expect based on their investments in the firm. A company with a high ROE is more probable to generate cash within the firm. Therefore, a higher ROE shows that a firm is in a better position based on its profits. ROE is estimated by taking the After-tax Net Income then dividing it by the Total Equity of the company. Therefore, Return on Equity shows how excellently the management of a firm uses the shareholders' finances. Also, ROA depicts profitability because it is the ratio estimated by taking the Net Income then dividing it by corporation's total assets. ROA specifies how well the firm's administration employs its assets to produce income. Hence, ROA depicts how efficiently the firm utilizes all its resources (Khrawish, 2011). When a firm has a high ROA, it means it is efficiently using its resources to generate profits.

NIM is a key measure used by banks to determine their profits by estimating the difference between the banks' income from interest and the interest they disburse to their financiers, such as those on deposits. NIM is expressed as earnings on credits and other assets in a given period, minus the interest the bank pays on funds it borrows then dividing it by the average earning assets. The NIM is also found through the division of the banks' net interest income by its sum earnings assets. NIM assists in evaluating the gap that exists between the banks' income from interest on their credits and securities and the interest costs they pay on their borrowed capitals. Therefore, it is the bank's intermediation cost as

well as its productivity. When a bank has a higher NIM, it is considered more profitable and stable. This research used ROA (Return on Assets) to indicate the economic performance of Kenyan commercial banks.

1.1.3 Credit Risk Management and Financial Performance

Credit risk management involves processes and mechanisms used to minimize the losses from debts and credit sales. The financial performance of banks refers to the degree of the profit or loss amount they make in a definite period. Therefore, financial performance entails the position of a firm in terms of returns from its investments. Lyman & Carles (1978) state that credit risks affect the commercial banks' performance. According to Michelle et al. (2016), a significant connection exists between bank financial performance and CRM. Therefore, sound CRM leads to the good financials of banks. Hence, banks ought to integrate productive credit risk management to protect the shareholders' interests while safeguarding the bank's assets.

The assessment of credit risk is done by performing an analysis of the commercial banks' financial performance to mitigate effects rising from the default of credit. Therefore, the financial health of the banks is dependent on their possessing strong credit risk management. Apart from defaults of loans, credit risk in commercial banks can arise from internal weaknesses in financial institutions like management inefficiency. This is because management deficiency influences liquidity, which leads to a rise in non-performing loans. This study used some elements of the CAMELS model to analyze the bank's safety, whereby CAMELS denotes capital adequacy, asset quality, management quality, earnings and liquidity, and risk sensitivity. This research established the effects of CRM on the performance of Kenyan banks.

1.1.4 Commercial Banks in Kenya

Commercial banks refer to financial firms which are licensed to take deposits and give credit. As of December 31, 2020, Kenya had 41 commercial banks licensed and operational. The banking sector also has one mortgage finance company. Forty banks are privately owned, whereas the Kenyan government owns two. The 40 banks owned privately include 23 locally-owned ones, whereas 17 are foreign-owned (CBK, 2020).

The monetary regulating authority in Kenya is the CBK, which has implemented Basel I, II, III, and the supervisory rules to help Kenyan banks effectively manage all types of risks they face. Basel I (1988) originally focused on credit risk, even though it was later polished to include market risk. Then Basel II (2004) was intended to handle pecuniary innovation and enhance the supervisory capital needs to show the contributory risks. Besides, it needed to tackle operational risk and offer a risk-based guiding framework. Hence, it handles systematic and firm-specific risks.

A closer look at the financial performance of the Kenyan commercial banks revealed that the banking sector registered a deterioration in profitability in 2020 whereby the profit before tax declined by 29.5% from Ksh.159.1 billion in December 2019 to Ksh.112.2 billion in 2020. The financial industry has large, small, and medium peer groups of banks. In 2020, the large peer groups reported 89.94% of the total before tax return increasing from 2019. However, the total pre-tax profit of this small peer group declined from -1.03% in 2019 to -2.23% in 2020 (CBK, 2020). According to CBK (2020), this result was because eight banks made losses of a greater magnitude in 2020, as opposed to seven banks, which made losses in 2019. The medium peer group of banks' total pre-tax profit rose from

11.24% in 2019 to 15.29% in 2020. These financial indicators raise a concern about whether credit risk management influenced the difference in the performance of the banks.

1.2 Research Problem

The fundamental activities of commercial banks are borrowing and lending, yet when dealing with borrowing and lending processes, there are uncertainties involved. The risks are part of banking that can scarcely be evaded because it is impossible to correctly envisage the capacity of debtors' future repayment (Michelle et al., 2016). The risk portfolio has three broad types of risk; credit risk, operational risk, and market risk. Credit risk affects the stability of commercial banks, other financial institutions, and the whole economy. There has been a financial crisis debate across the whole world, which necessitates countries to have a more efficient credit risk management pattern because it is the only solution to the global economic crisis (Liao, 2018). For example, the 2008 financial crisis that occurred is believed to have been caused by the laxity of credit risk managers in controlling and monitoring the loans. Also, in the Kenyan context, people have witnessed big banks going down and some put under receivership. Gathaiya (2017) states that the key issues which contribute to the downfall of most of the banks in Kenya can be linked to poor risk management strategies, weak corporate governance, insider lending, lack of internal controls, conflict of interests, and a weak regulatory and supervisory systems. Poor credit risk management is thus, thought to be the leading cause of bank failures globally (Khalil & Noormohammd, 2017). Since the creation of credits is the core activity of generating income for the banks, it is vital to ensure there is adequate loan processing management to ensure the survival and growth of the commercial banks, failure of which credits might cause financial distress to the banks.

Commercial banks are the primary monetary intermediaries in the country. Credit risk management issues within the banking sector, conversely, have a substantial impact on their performance, as well as national economic growth and general business development (Huang & Wang, 2017). According to Bhattarai (2016), credit risk has a remarkable function in the bank's performance since a huge share of the bank's revenues comes from its loans granted to borrowers, which earn them interest. Kenyan banks grant credit facilities to individuals and corporates, which makes them inevitably exposed to credit risk (Muriithi et al. 2016). There has been an increasing trend in the number of non-performing loans in the Kenyan banks' books. CBK (2020) shows that the ratio of gross nonperforming loans to gross loans worsened from 12.5% in December 2019 to 14.5% in December 2020. During 2020, non-performing loans grew by 29.6% as compared to the rise in gross loans by 11.7%. The banks also showed poor loan processing, insufficient or absence of collateral for loans, undue interference in the granting of loans, and other deficiencies that all point to poor and inefficient CRM. This is likely to influence the banks' financial performance negatively.

Empirical studies show no consistent findings on this topic, which creates a gap for further research. For instance, Akomeah et al. (2020) established that a substantial association exists between CAR, NPL, and SIZE and the performance of banks. Al Zaidanin & Al Zaidanin (2021) revealed that the liquidity ratio, CAR, as well as loans-to-deposits ratio do not affect the banks' profitability. Iheanyi & Sotonye (2017) demonstrated that management efficiency, earnings, capital adequacy, and liquidity have insignificant influence on the banks' performance. Musyoka (2017) established that CAR negatively affects the ROA of the banks; asset quality exhibit an insignificant negative connection

with ROA, and an insignificant but positive association exists between the liquidity and ROA of the banks. From the literature evidence, a need arose to explore further CRM and the influence on the performance of banks. Therefore, the researcher established the answers to the research question: what is the effect of credit risk management on the financial performance of the commercial banks in Kenya?

1.3 Research Objective

The objective of the research was to investigate the effect of credit risk management on the financial performance of Kenyan commercial banks.

1.4 Value of the Study

This research can offer value to different people and institutions. First, it can be of great importance to regulators of the banking sector. This is because the Kenyan banks continue to fail, which has led to others in receiverships; hence, they need to emphasize credit risk management. Therefore, the regulators can use the results to determine if the commercial banks have enforced standard credit risk management. If they have deficiencies, then the regulators can formulate more policies to set up efficient credit risk management standards and procedures that can help the banks to ensure they allow proper credit levels; hence, maintain a low credit risk. Besides, the CBK and CMA (Capital Markets Authority) can find the study beneficial since it will help them regulate the banks.

Also, the CRM personnel of the banks can benefit from the results of this research. This is because they can use it to formulate more policies for their credit risk management and even strengthen the existing policies. Thus, they can effectively manage credit risk. Besides, the findings of this research can be a vital addition to the current body of scholarly knowledge. This is because the results can add to the available literature surrounding the

CRM of commercial banks and performance. It can also serve as a focal reference tool for those academicians who still wish to investigate this topic. Also, it can form the basis for additional research on this topic.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Chapter two describes literature linked to CRM and the banks' performance. Additionally, the chapter highlights some of the theories on credit risk management. Then the chapter discusses some of the various empirical literature existing both locally and internationally and the gaps which has guided the study. It also presents the theoretical model which the researcher adopted to guide the study.

2.2 Theoretical Review

CRM is coordinated responsibilities and actions used to control and direct risks a firm faces by incorporating key tactics and processes of risk management linked to its objectives. Looking at the literature available, the researcher found several theoretical thoughts which support the credit risk management in banks. So, this research was linked to theories and models like agency theory, stakeholder theory, credit scoring model and asymmetric information theory.

2.2.1 Credit Scoring Model

A credit scoring model refers to a mathematical system that financial institutions utilize to approximate the probability of their customers' defaults, i.e., the likelihood that the clients will default on their loan repayments or fail to pay them entirely. The default possibility is demonstrated using a credit score in this model; hence, the higher the credit score, the lower probability of customers' default. Huang & Wang (2017) describe the credit scoring model as one of the tools that banks utilize to grant credit to customers. It has both quantitative

and qualitative sections for corporate and commercial borrowers, which offer several factors of risk such as asset quality, operating experience, liquidity ratio, management expertise, and leverage ratios. Therefore, lenders review such information and then offer credits based on their set terms and conditions. Traditionally, commercial banks adopt credit scoring models to assist them in accurately predicting the likelihood of default on loans made by borrowers. Therefore, this model supports banks in maximizing their risk-adjusted returns. The credit scoring model aids lenders in evaluating the repayment capability of borrowers by looking at their credit ratings, hence making them manage credit risks through the offering of credit to only those who qualify. As a result, the banks can control the rise in non-performing loans. Nevertheless, customers tend to change their behaviors swiftly during economic cycles like economic downturns, and the markets change too during such times. Thus, credit risk managers must develop the scoring models and speedily fine-tune and authenticate them accordingly.

One of the advantages is that the credit scoring model needs little data when making credit decisions because it includes only the variables that significantly and statistically correlate with the repayment nature of the borrowers. Also, the credit scoring model tries to rectify any bias that would originate from consideration of the repayment histories of only accepted applications while excluding rejected applications. Moreover, banks use it as opposed to other methods because the model is simple to analyze; hence, any credit analyst can evaluate the same data of any client and still give a similar verdict. However, despite its advantages and vital role in credit risk management, the credit scoring model omits certain variables that when employed with others used might predict that a client will repay his/her loan. Therefore, the model is incomplete in credit assessment because it does not

include every conceivable variable; hence, it is prone to misclassify some individuals. Besides, the credit scoring models entail the likelihood of indirect discrimination, and there is no standardized credit scoring model, so they differ from one place to another. Again, it is costly to buy the model and train credit analysts on how to use it. Yet worse is that the credit scoring model might reject a potential creditworthy loan applicant just because there is a change in particulars, like job or address. For that reason, banks need other theoretical models to constructively assess their borrowers and only screen out genuinely probable defaulters. The credit scoring model in this research relates to asset quality management of the banks to help them efficiently control credit risk and its effect on performance.

2.2.2 Asymmetric Information Theory

Akerlof (1970) established this theory positing that customers use readily accessible statistics or information to determine the value of specific goods. Alternatively, the seller sees the market through the lens of a particular item the trader introduces to the market. As per the author, information asymmetry incentivizes sellers to sell lower-quality goods than market goods. As a result, as the market size grows, the average quality of products sold diminishes.

Information asymmetry describes a circumstance in which entrepreneurs are more aware of their corporation's prospects and risks than lenders. It refers to a state wherein all relevant participants in a task are unaware of relevant information (Kipkirui & Omagwa, 2018). Information asymmetry occurs in a credit market once a borrower has a better comprehension of the probable risks and returns associated with the capital investments than the lender who lacks sufficient information about the borrower. Hence, when evaluating lending applications from borrowers, banks face a state of information

asymmetry (Binks & Ennew, 1997). This info they need to evaluate the level of assurance of borrowers and their business's projections is either absent, prohibitively expensive to find, or hard to interpret.

According to Binks & Ennew (1997), alleged information asymmetry causes banks two issues: moral hazard (surveilling behavior of entrepreneurs) and adverse selection that transpires when banks advance enterprises that later fail or fail to lend to enterprises that later become successful. Banks will struggle to solve these hitches since it is not profitable to allocate resources to evaluations and surveillance, especially when loaning involves small amounts, and banks do not even have free access to the data mandatory to screen applications of credit and monitor borrowers. This theory is applicable in this research since it is tough to distinguish between virtuous borrowers and bad borrowers; thus, commercial banks can experience a moral hazard problem whereby borrowers divert funds toward other activities. Conversely, the banks can have an adverse selection problem, in which the selection of bad borrowers happens. Consequently, this can lead to an accretion of non-performing loans in banks, thus impacting the banks' financial performance. Therefore, the banks should obtain diverse sources of information including those that the borrowers themselves offer. Derban, Binner & Mullineux (2005) explained that there is need to screen borrowers through credit appraisal and the banks can employ both subjective and quantitative approaches can to review the borrowers.

2.2.3 Agency Theory

Jensen & Meckling (1976) established this theory that is considered to be the dominant theory of the corporate governance. According to the agency theory, managers and employees contribute significantly to a good governance structure because they are held

accountable for their responsibilities and tasks. However, the agency theory argues that there is a likelihood of conflicting interest between the management, shareholders, and debt holders because the managers mostly want to earn more instead of fulfilling their duty of maximization of the shareholders wealth. Therefore, the firms can end up not engaging in projects which bring positive net value or taking too much risk. This theory, though, has had criticisms. For instance, the stewardship theory rejected the assumptions of agency theory and does not support the proposition that managers' efforts to satisfy shareholders are distracted by their personal ambitions and interests. The stewardship theory contends that the separation of corporate control and ownership does not always cause conflicts of interest between managers and owners.

This theory aided in identifying and describing the participants of commercial banks. Agency issues influence the attitudes of managers toward risk taking and evading when it comes to business risk management. Hence, agency theory suggests that well-defined risk management guidelines can significantly impact the value of a firm. Thus, it is influential in evaluating the effect of the motivation and motives of credit officers who are involved in ensuring that credit risk management practices are effective and who are informed and compensated based on the strength of their performance on these tasks.

2.2.4 Stakeholder Theory

Freeman (1984) developed the theory to serve as a managerial instrument. Stakeholders' theory focuses on the shareholders' interests when making corporate policy, thus contributes in risk management through extension of implied contracts theory including employment and other contracts. It assists the firm in addressing the significance of customers trust and costs of financial distress to firms (Omasete, 2014). According to

stakeholder theory, smaller companies are more susceptible to financial issues, which need to raise their interest in practicing risk management.

However, just like other theories of management, the stakeholder theory has had criticisms from other theorists. Pesqueux & Damak-Ayadi (2003) sturdily disapprove of the deceptive obviousness of this theory. They state that this theory's descriptive appearance is a hardheaded screen which hides the combative treatise it supports. For example, the stakeholders' theory relies on sociological and psychological concerns whereby its psychological feature is meant to present people as volunteers and, at best, partly altruistic individuals. Furthermore, the stakeholder theory proposes group stakeholders which are management science generics (that is, employees, government, community, providers, trade associations, suppliers, and so on), but these groups have little to do with credit risk management. Furthermore, the theory focuses on behaviors and roles, but it flops in its attempt to generalize the preexistent notions. It also fails to recognize that just like the agency relationship between the managers and shareholders, there is the possibility of contractual interests that might underlie stakeholder relationships.

2.3 Determinants of Financial Performance

There are both internal and external aspects which influence the bank performance. The internal factors refer to the aspects of individual bank that affect its performance whereas external factors are those aspects affecting the whole banking industry (Gamage et al., 2019). There has been an overall improvement on the financials of the Kenyan banks even though there are banks which are not profitable. The internal determinants encompass Capital Adequacy, Customer deposits, Asset Quality, Earnings Ability and Liquidity,

interest rate policy, Management Efficiency, and credit risk management and among others. Some of the determinants are discussed in the subsequent section.

2.3.1 Customer deposits

Cipovová & Dlasková (2016) states that banks excessively rely on the bank deposits to generate credits that they offer to borrowers. They explain that deposits are cheap source of funds for the banks, hence they affect the financial performance when the bank has a rise in request for loans. Consequently, banks make more profits if the customer deposits rise as well as loans given to potential borrowers. Nevertheless, if the bank has low demand for loans by the borrowers, then an increase in deposits could decrease its financial performance because it pay interests on the customer deposits (Cipovová & Dlasková , 2016).

2.3.2 Capital Adequacy

The capital adequacy is money needed to safeguard banks from the risks (Ongore & Kusa, 2013). Therefore, Capital Adequacy is the available cash which supports the activities of the bank and act as its buffer if an adverse situation occurs. Yahaya, Mansor and Okazaki (2016) explains that capital adequacy is a vital element when making decisions on the level of risk adaptation of banks. It also secures the bank and gives a good image of the banks thus gives the public confidence in the bank. Therefore, strong capital assist in the maintenance of public opinion of a given bank.

Moreover, capital has great influence on the returns of the bank because it entails cash used in banks operations and ensures they remain liquid. The commercial banks are intermediary financial institutions, hence the funds they collect should undertake their activities so that

they can earn high profits (Aliu & Sahiti, 2016). In case a bank has low capital then it can't be able to meet its business operations if risks occur. The higher the capital of the bank, the lower its chances of financial distress. CBK Prudential Guideline (2013) states that the least requirement for capital adequacy is 8% and 12% which are indicated through ratio of Total Core Capital to Total Risk weighted Assets respectively. So, capital adequacy is that capital which the banks require to be able to withstand risks like operational, credit and market risks and handle any probable losses and shield the stakeholders of the bank. The capital adequacy (CAR) measures the adequacy of capital. CAR portrays the bank's internal strength to endure losses in crisis times. Sangmi & Nazir (2010) also states that CAR directly impact the banks' financial performance because it helps find out the risky yet profitable projects.

2.3.3 Credit Risk Management

Credit Risk is unavoidable in the lending establishments because credit is an asset to the bank yet some borrowers default their payment of loans. Default of loan repayment might bring problems of cash flows to the banks, and thus can affect its liquidity position. Non-performing loans affects Asset quality of banks which consequently affect the performance, so the commercial banks aim to keep nonperforming loans to the lowest amounts. Therefore, the lesser the ratio of nonperforming loans, the healthier the financial health of the bank (Sangmi & Nazir, 2010).

Also, credit advances lead to more growth for the banks in terms of profits which is an implication that a growth in bank lending contributes to upsurge in profit growth. However, the banks need to tread carefully because credits advances expose them to risks which can lead to liquidity crisis if there are defaults by the borrowers (Yuga, 2016). Yuga (2016)

explains that if this happens then it causes loss of profitability which threatens the banks survival. For example, the 2008 global financial crisis was attributed to nonperforming loans which the commercial banks advanced. Accordingly, a decrease in the housing market made the borrowers who had taken the loans unable to pay the credits which had been advanced to them (Aulia & Antyo, 2018). Subsequently, it caused the collapse of certain banks.

According to Chuxuan & Xiaoyue (2017), if assets of the banks are not subjected to appropriate use, then occurrence of bad debt happens, subsequently financial ability of the bank is deteriorated which can lead to collapse of the banks. Quality of loans is a great determinant of the bank performance. Millon, et al. (2015) carried research which showed that loan loss provision ratio has an inverse association with performance of commercial banks. So, loans to total assets also assists in evaluating the loan quality. The ratio of loans to total assets is perceived to have a negative association with financial performance. Besides, nonperformance ratio measures the loan quality. Other loan quality estimates comprise of ration of loan loss provision. Aliu et al. (2017) point out that income from interest is the chief revenue source for the commercial banks because it contributes to a significant amount of earnings of the banks. Therefore, credit risk is inevitable but it affects the financial performance, thus should be managed well.

2.3.4 Asset Quality

This component involves analysis of the assets of the bank to determine the size and level of credit risk linked to its operations. The focus of asset quality is the credit given by the bank. Asset quality pinpoints the measure of probable and existing credit risk that are

identified with the investment progression. When the assets value of banks deteriorates, then the financial and operational performance gets distressed.

2.3.5 Management Quality

Management Efficiency is also a determinant of the bank performance. The Management quality is estimated via varied ratios for instance, earnings growth rate, total asset growth, besides loan growth rate. It is judged by the ability of the administration to effectively utilize resources to maximize the profits and reduce costs of operations. Cost efficiency known as efficiency ratio is estimated using Operating Expenses to the Total Revenues ratio. It determines the flexibility of management in adjusting costs when there are any business development changes as shown by the revenues. When there is a higher Efficiency Ratio, then the default risk is higher.

2.3.6 Liquidity

The bank regulators require the commercial banks to maintain adequate liquid assets to be able to handle their daily operations like withdrawals and client needs. According to Eva & Gabriela (2016), this can only be possible if the commercial banks have the ability to acquire more funds and can easily raise cash from other sources. Hence, the banks survival highly depends on its ability to accomplish a significant liquidity level. Decline in earnings on the finances and liquid assets of commercial banks negatively affect the profitability of the banks (Eva & Gabriela, 2016). For that reason, the ability of a bank to manage its liquidity dictates its financial performance. Adequate liquidity level is positively correlated with bank performance.

2.4 Empirical Review

Various empirical researches have been done both internationally as well as locally on the topic of CRM and banks performance. The following section highlights some of the studies. Akomeah et al. (2020) surveyed the CRM impact on the productivity of certain banks listed in Ghana Stock Exchange. The researchers used a period of ten years period between 2007-2016. They adopted fixed effect model to test their hypothesis. They found that a significant link exists amidst the CAR, NPL and SIZE and performance of the listed banks in Ghana.

Al Zaidanin & Al Zaidanin (2021) sought to measure up the extent by which ratio of NPLs, ratio of liquidity, ratio of cost-income, loans-to-deposits ration, together with capital adequacy ratio impacts the performance of the banks within the UAE. The scholars used panel data and random effect model. Their verdicts revealed that cost-income and non-performing loans ratios significantly as well as negatively impact the productivity of banks in the UAE. However, liquidity ratio, CAR, besides loans/deposits ration possess a weak a positive link with the ROA even though they do not determine the banks' profitability since they have insignificant statistical effect on it. Al Zaidanin (2020) purposed to determine the impact of the CAMEL model variables on the productivity of thirteen banks in Jordan. The research timeline was from 2013 to 2019. The result showed that Income to Total Loans and Advances significantly and positively affect profitability while Non-Interest Income to Total Assets besides cost to Total Income possess strong and negative effect on the profitability. Moreover, Equity/Total Assets possess robust negative correlation with ROE.

Bhattarai (2019) investigated credit risk effects on the Nepalese commercial banks performance. The researcher used a balanced panel methodology and determined that capital adequacy ratio (CAR), management quality ratio (MQR) and NPLR significantly relate with the ROA of the banks in Nepal. Likewise, risk sensitivity (RS and credit/deposit ratio (CDR) have no significant effect on the Nepalese commercial banks' performance. Hence, the study's conclusion was that the NPLR, MQR and CAR significantly and negatively relates with the Nepalese banks' performance. Equally, RS and CDR do not significantly impact the Nepalese banks' performance.

Catherine (2020) investigated the link between CRM and Bank of Africa's financial performance. The researcher employed a case study methodology whereby she used both quantitative along with qualitative techniques. The outcome was a positive link amidst CRM and the performance. Also, Githaiga (2015) scrutinized the CRM practices effects on the performance of Financial Banking Institutions within Kenya. The researcher applied descriptive design methodology and secondary information from the CBK publications. The findings depicted that CAMEL component strongly impact the commercial banks performance. The verdicts also exposed that credit risk has a weak yet negative association with the performance.

Iheanyi & Sotonye (2017) used CAMEL rating methodology to determine the Nigerian banks' performance and they utilized 19 years' data. Their outcome demonstrated that liquidity, capital adequacy, Earnings, management efficiency, have no significant effect on the banks' profitability. Contrarywise, assets quality negatively impacts Nigerian banks' profitability. Mumbi & Omagwa (2017) assessed the influence of CRM on the performance of certain Kenyan banks. The scholars used descriptive research and found no significant

effect of debt recovery process on bank performance. However, their results showed that loan appraisal process, credit policies and lending requirements significantly affect bank performance.

Muriithi et al. (2016) assessed the credit risk effect on the Kenyan banks' performance. They used panel data technique and generalized method. Their results exhibited that credit risk negatively relates with profitability of banks. They determined that poor asset quality leads to poor bank performance. Musyoka (2017) analyzed the capital adequacy influence on the Kenyan banks' performance. The researcher applied descriptive design methodology and conducted a census survey of the banks. The verdicts established that capital adequacy has a negatively influence the banks' ROA. Also, the outcomes depicted that bank size negatively influence the return on the banks' assets. Nevertheless, the results also designated that asset quality negatively and insignificantly relates with ROA of the commercial banks and a positive but insignificant relation between the liquidity and banks' ROA. Further, the researcher found a negative insignificant relation amid ROA and management quality. Hence, the verdict shows that capital adequacy and bank size significantly impact performance of the banks.

Nwude & Okeke (2018) scrutinized the CRM effect on the Nigerian deposit-taking banks' performance. They utilized Ex-post facto methodology and their period of research was 2000–2014. The results disclose that CRM positively and significantly impact ROA, advances and total loans, and ROE of the deposit-taking Nigerian banks.

Nyabicha (2017) researched on the impact of CRM on the performance of Kenyan banks listed in the NSE. The researcher utilized a longitudinal study design and found statistically insignificant association between CAR and performance of Kenyan bank stock. The

findings also depicted a statistically insignificant intercorrelation of loss given default ratio and performance of Kenyan bank stock. Moreover, the researcher found no significant connection amid the ratio of loan loss provision and the Kenyan bank stock performance. However, the findings demonstrated a statistically significant negative correlation between NPLR and the Kenyan bank stock performance. Singh (2015) carried a study in India which indicated that a significant link between the bank performance and CRM exists. Additionally, the findings indicated that a direct inverse correlation is present between nonperforming asset ratio and ROA. Also, in 2013, Singh found out that effective risk management was vital for banks in achieving good financial performance.

2.5 Conceptual Framework

The independent variable being credit risk management that was indicated by loan loss provision ratio, CAR, and nonperforming loans ratio.

Independent Variables (i.e., Credit Risk management)

Dependent variable
(that is, Financial
Performance)

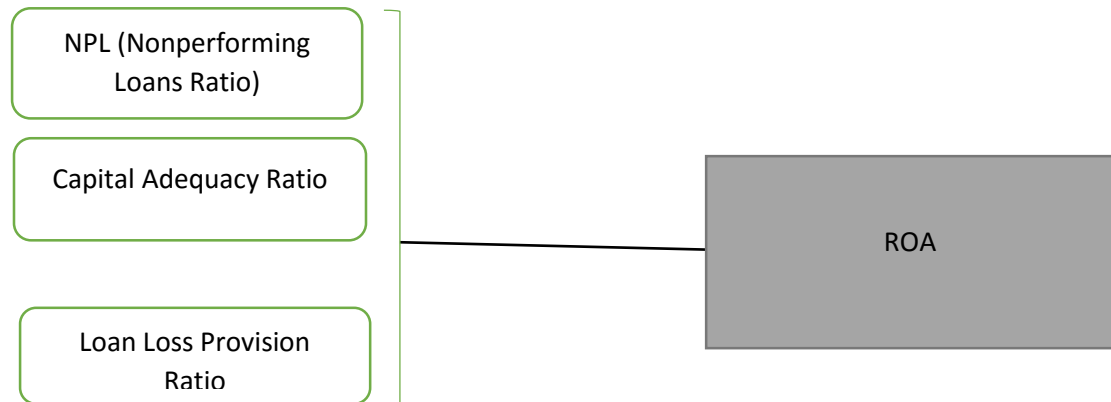


Fig.2.1 Conceptual Model

Source (Researcher, 2021).

2.6 Summary of Literature Review

The researcher discussed the agency theory, credit scoring model, stakeholders' theory, and asymmetric information theory which are linked to credit risk management. Also, the researcher discussed some of the banks financial performance determinants like credit risk management, customer deposits, and the elements of CAMELS model. The researcher then summarized findings from different scholars on the same topic. The review of literature shows that there are few carried out in Kenya which creates a gap for research. Moreover, no direct studies have been conducted and since CRM is an essential part of the banks and economy, there is still need for further research on this topic and even more improvement on it too. Again, the findings from different scholars indicate mixed effects which show there is no consistency, hence there is a gap for further studies. The researcher therefore

carried out an examination on how CRM impacts the financial performance of commercial banks in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Chapter three highlighted the research design, study population, methods for data collection and methods for analysis of the information which were utilized in the research.

3.2 Research design

This research applied descriptive research design. A descriptive research refers to an investigation whereby one collects data then analyzes it to give description of the specific phenomenon in the current events at that time (Kerlinger, 1986). The study adopted descriptive research design because it can make it possible to apply the findings to the bigger population that is, all the Kenyan commercial banks.

3.3 Population

The populace target for the research was all Kenyan commercial banks. Population of study refers to elements, people, firms, services which possess different traits from the rest. The target people for this research entailed 41 commercial banks which were licensed and operative as at 31st December, 2020. So, the researcher assessed all commercial banks (Appendix 1) and used data for the period 2016-2020 which were classified consistent with their asset base. The researcher chose this period for study because the banking sector has undergone development, experienced challenges and competition during the time.

3.4 Data Collection

The researcher utilized secondary data for the study. Secondary data is information which are already collected by others. The researcher obtained the secondary information from

Central Bank of Kenya and annual accounts of the 41 banks for the examination period (2016- 2020). The motive for the utilization of the annual financial statements was because both independent and dependent variables can be traced within the financial records. Furthermore, the researcher easily accessed the annual statements since the banks use them to communicate the financial performance to their stakeholders.

3.4.1: Diagnostic Tests

Various diagnostic assessments were conducted on the data collected to ensure that it is accurate and reliable for use in research. The researcher performed tests for normality to determine if the data was taken from a normal distribution populace. Multicollinearity was steered by SPSS to assess the Variance Inflation factor of the connection existing between the independent study variables and dependent variables. Heteroscedasticity was also tested by SPSS to elucidate the error term existing amid the independent and dependent variables.

3.5 Data Analysis

Data analysis was performed by use of the SPSS 26 software. The data analysis method was utilizing regression model and Pearson correlation to establish the link amid variables examined. The scholar utilized a multiple regression model to perform analysis of the collected data because regression model helps determine the correlation between variables of research. Multiple regression analysis ease prediction of one variable using other several variables. Therefore, the researcher employed the model to find the correlation of banks' financial performance and CRM. The regression model used in the study was

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Whereby:

Y which is the financial performance was measured using ROA

X1 signifies non-performing loan ratio which was measured by dividing non-performing loans of respective banks by their total loan portfolios.

X2 represented the capital adequacy ratio which was measured through the bank's total core capital divided by its total risk-weighted assets.

X3 denotes loan loss provision ratio which was measured by taking the sum of loan loss provision and before-tax income of the banks then dividing it by their net charge offs.

β_0 was constant term

β_1 , β_2 , β_3 and β_3 were coefficients of regression

ϵ was the error

3.5.1 Tests of Significance

The researcher used F-test to establish the regression model's significance. Then, the R^2 (coefficient of determination), was employed to establish the variation amid the dependent study variable which the independent study variables explain. The researcher utilized Analysis of Variance (ANOVA) too to acquire accuracy against the regression model's results.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATIONS

4.1 Introduction

Chapter four provides a presentation of the data, the data analysis, and a discussion of the study discoveries on the CRM impact on the Kenyan commercial banks' performance. It begins with a demonstration of the response rate then proceeds to analysis and findings. The researcher utilized excel to compile data and SPSS in its analysis. Also, the scholar applied regression analysis to establish the impact of CRM on the Kenyan commercial banks' performance. The dependent variable was financial performance and the Loan loss provision ratio (LLPR), NPL Ratio (NPLR), and CAR were the independent variables.

4.2 Response Rate

The target populace for this research was 41 commercial banks in operation and licensed by the CBK as of December 31st, 2020. In this study, a census was conducted, however, the researcher left out some banks that had not been operating for the complete time of study, some whose data were not retrievable and some that were under receivership and liquidation. Therefore, the researcher obtained complete data from 33 commercial banks which is an adequate representation for the study since it is 80.49% of the total population.

4.3 Descriptive Statistics

The below table displays the descriptive statistics summary for the research variables of the 33 commercial banks within Kenya during the years 2016-2020.

Table 4. 1: The Descriptive Statistics Analysis				
	Minimum	Maximum	Mean	Std. Deviation
NPLR	.00	94.55	18.1496	15.16790
CAR	-22.00	60.60	21.1691	10.68052
LLPR	.48	88.24	35.9600	16.28857
ROA	-24.59	7.40	1.1452	3.78912

Source: (Researcher, 2021).

The statistics above, illustrates the average of the study variables, their minimum and maximum values along with their respective standard deviation. The ROA portrayed a mean value of an average of 1.15% during the research period. Moreover, ROA had a standard deviation of 3.79% indicating that the variation in the banks' ROA during the research period had a moderate variation. The least financial performance shown by minimum ROA was -24.59% while the highest performance (indicated by maximum ROA) was 7.40%.

NPLR displayed an average of 18.15% with a 15.17 standard deviation which indicates a high variation in NPLR of the commercial banks. The minimum NPLR was 0.00% while maximum was 94.55%. Additionally, CAR had an average of 21.17% with a 10.68 standard deviation depicting a high variation between the CAR of the commercial banks in Kenya. The highest CAR was 60.60% whereas the lowest CAR was -22.00%. Further, LLPR (loan loss provision ratio) had an average of 35.96% for the commercial banks in Kenya. The LLPR had a standard deviation of 16.29 indicating they loan loss provisions

of the banks have high variations. The findings also show that the minimum LLPR was 0.48% while the maximum LLPR was 88.24%.

4.4 Diagnostic Statistics

Diagnostics tests were performed as indicated in the section below:

4.4.1 Normality

The scholar utilized both Shapiro-Wilk along with Kolmogorov-Smirnov to test normality.

The normality test outcomes are displayed in the following table.

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
ROA	.221	164	.000	.735	164	.000
NPLR	.173	164	.000	.828	164	.000
CAR	.143	164	.000	.896	164	.000
LLPR	.045	164	.200	.988	164	.180

Source: (Researcher, 2021).

The result shows a normal distribution of the population used to collect the data because both tests of normality revealed p-values > 0.05 . This means that the data amassed was suitable for research besides regression analysis, Pearson's correlation and ANOVA.

4.4.2 Multicollinearity

Table 4.3: Multicollinearity Test

Indicators	Collinearity	
	Tolerance	VIF
NPLR	.888	1.127
CAR	.887	1.128
LLPR	.999	1.001

Source: (Researcher, 2021).

Table 4.3 illustrates the multicollinearity tests results whereby the independent variables shows a tolerance larger than 0.2. The independent variables also portray VIF of less than 10 whereby NPLR has VIF of 1.127; CAR has VIF of 1.128 and LLPR has VIF of 1.001. Hence, no multicollinearity occurred amid the study variables because their tolerance was above 0.2 and their VIF below 10 and averagely less than 3 which is more recommended.

4.4.3 Heteroscedasticity

The researcher performed heteroscedasticity to investigate the error term present between the research variables. The assumption was that if the value is <0.05 then there will be no heteroscedasticity issue. The results are as follows:

Table 4.4: Coefficients

Model	Unstandardized	Standardized	T	Sig.
	Coefficients	Coefficients		

		B	Std. Error	Beta		
1	(Constant)	4.412	.838		5.263	.000
	NPLR	-.169	.016	-.676	-10.806	.000
	CAR	.050	.022	-.029	.467	.041
	LLPR	.010	.014	.004	.062	.951

(Researcher, 2021).

The outcomes from the table demonstrates that the standard error values of coefficient of NPLR is 0.016 is less than 0.05; the standard error value for CAR is 0.022 which is also less than 0.05 while that of LLPR is $0.014 < 0.05$. Hence, the error terms between present between the independent and dependent variables are within a close range and no big variation is present amid the dependent research variable and the independent study variables. Therefore, there will be no heteroscedasticity problem.

4.5 Correlation Analysis

The scholar executed a correlation analysis to reveal the link present amidst the independent and dependent investigation variables. Table 4.5 below is a presentation of the correlation analysis outcomes.

Table 4.5: Correlations					
		NPLR	CAR	LLPR	ROA
NPLR	Pearson Correlation	1	-.337	.000	-.667

	Sig.		.000	.009	.000
CAR	Pearson Correlation	-.337	1	-.029	.198
	Sig.	.000		.716	.011
LLPR	Pearson Correlation	.050	-.029	1	.055
	Sig.	.009	.716		.954
ROA	Pearson Correlation	-.667	.198	.055	1
	Sig.	.000	.011	.954	

Source: (Researcher, 2021).

The outcomes above demonstrates that the correlation of performance (ROA) of the Kenyan commercial banks to NPLR is -0.667. This means that a substantial negative correlation exists between the non-performing loans and the performance. This correlation result illustrates there is a significant negative link amidst ROA and NPLR since the sig is 0.000, indicating that $p\text{-value} < 0.05$. Therefore, an increase in non-performing loans leads to a decline in the financial performance of the banks. Also, the correlation of ROA to CAR (capital adequacy) is 0.198. The p-value is $0.011 < 0.05$ insinuating a significant positive connection amid the capital adequacy and performance of the commercial banks. Hence, an upsurge in the capital adequacy would cause an upsurge in performance.

Moreover, the results show that the correlation of ROA to LLPR is 0.055 with sig. of 0.954. Thus, loan loss provision has a positive association with the performance (return of assets) of the Kenya banks. The p-value is larger than 0.05 illustrating that the association between

the loan loss provision and ROA is insignificant at 5% significance level. Subsequently, a rise in loan loss provision will lead to an insignificant positive change in the financial performance of the banks.

4.6 Regression Analysis

The scholar executed a multiple regression analysis of the data gathered for the commercial banks in Kenya to inspect the association of the independent and research dependent variables. From the research model, the coefficient of determination was calculated which is efficient in explanation of the scope that the independent examination variables explain the dependent variable. The analysis finding is as follows.

Table 4.6: Regression Analysis Outcomes

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.667 ^a	.444	.434	2.85563
Predictors are (Constant), LLPR, NPLR, CAR				

Source: (Researcher, 2021).

From table 4.6, it is palpable that the determination coefficient (R-Square) was 0.444. This R^2 implies that the independent variables of this study explicate 44.40% of the variations in the performance (ROA) of the Kenyan commercial banks. That is, loan loss provision, NPLs, and capital adequacy explain 44.40% changes in the Kenyan commercial banks’

financial performance whereas other factors excluded from the model explain 55.60% of the discrepancies in the financial performance.

Table 4.7: Analysis of Variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1043.818	3	347.939	42.668	.000
	Residual	1304.738	160	8.155		
	Total	2348.556	163			
Dependent Variable is Performance						
Predictors are (Constant), LLPR, NPLR, CAR						

Source: (Researcher, 2021).

From the ANOVA table above, it was clear that the model significantly predict the dependent variable. Thus, NPLR, CAR and LLPR jointly predict the return on assets. This is because the F-statistic is 42.668 which is large, and it had a p-value 0.000 that is below the 0.05. For that reason, the results implies that the regression model is a good fit and all the independent variables are analytically significant in prediction of the financial performance (ROA).

Table 4.8: Regression Coefficients

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Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.412	.838		5.263	.000
	NPLR	-.169	.016	-.676	-10.806	.000
	CAR	.050	.022	-.029	.467	.041
	LLPR	.010	.014	.004	.062	.951
Dependent Variable: ROA						

(Researcher, 2021).

The research model was $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$

By which:

Y was ROA while X1, X2 and X3 were NPLR, CAR and LLPR

From the research findings, the regression model becomes

$$Y = 4.412 - 0.169 \text{ NPLR} + 0.05 \text{ CAR} + 0.01 \text{ LLPR} + \epsilon$$

$$\text{Financial Performance} = 4.412 - 0.169 \text{ NPLR} + 0.05 \text{ CAR} + 0.01 \text{ LLPR} + \epsilon$$

From the findings, if all other factors (independent variables) remain constant, the financial performance will be 4.412. Non-performing loans exhibits a negative link with financial performance, and correlation is significant since it has a p-value of $0.000 < 0.05$; hence, a unit increase in NPL will cause 0.169 reduction in performance. Additionally, capital

adequacy and loan loss provision positively relate with financial performance. The association amid the capital adequacy and performance is significant because CAR has a p-value of $0.41 < 0.05$. Therefore, a unit growth in CAR would cause 0.05 upsurge in the performance. Besides, the relationship between LLPR has a p-value is $0.951 > 0.05$. Therefore, LLPR posits a positive impact on the financial performance albeit it isn't significant at 5% significance level.

4.7 Interpretation of the Findings

The goal of the examination was to investigate the influence of credit risk management on the financial performance of the Kenyan commercial banks. Research verdicts disclosed a strong negative correlation between NPL and ROA (0.667) with p-value of $0.000 < 0.005$. This insinuates that NPL significantly and negatively impact the financial performance. Thus, the outcome of the study illustrates that a surge in non-performing loans will cause diminution in the banks' financial performance. This is because a high level of non-performance loans means that the bank is not effective in receipt of its loan repayments. Hence, it has a high probability rate of default risks which can affect its performance negatively. This study result confirms the research findings of Bhattarai (2019) and Nyabicha (2017) who found that NPL significantly and negatively affect the performance of banks.

Moreover, the investigation found that CAR has a positive influence on the commercial banks' performance, as designated via the correlation of 0.198 between CAR and financial performance. P-value was $0.11 < 0.05$ thus the relationship between CAR and ROA was significant. Capital adequacy guarantees that a bank has the stability and efficiency of operations because it lowers the bank's ability to become insolvent. Therefore, a bank that

maintains a high CAR is safer than one with a lower CAR because it can meet its arising financial obligations. This research outcome is in line with other scholars who established that CAR possesses a positive but weak link with the ROA of banks (Al Zaidanin & Al Zaidanin, 2021).

The findings also demonstrate that loan loss provisions exhibit a positive influence on the banks' financial performance. The study outcome shows that the coefficient of correlation between LLPR and financial performance is 0.055 with a p-value of $0.954 > 0.05$, hence it is insignificant. This result implies that NPLR correlates positively with the financial performance, but it has an insignificant effect at 5% significance level. The loan loss provision ratio usually indicates the bank's protection against future credit losses. Hence, a higher LLP ratio is desirable since it demonstrates that the bank can withstand any imminent losses.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter five presents the summary of the study results. Also, it discusses the conclusion, recommendation and proposes areas that the researcher identified which need further research. Additionally, it states some of the limitations of the research.

5.2 Summary of Key Findings

The aim of this project was to scrutinize the effect of CRM on the financial performance of Kenyan commercial banks. The study employed secondary data retrieved from the yearly financial statements of the 33 banks within Kenya. The period of study was 5 years between 2016 and 2020. The researcher conducted inferential statistics to address the objective of the research whereby correlation was employed to investigate the association between the research variables. Besides, the researcher undertook a regression analysis to examine the association existing between the independent research variables and dependent ones. Therefore, the researcher utilized a multiple regression analysis to establish the link involving the variables of research. The test of significance involved use of 5% level in a 2-tailed.

The correlation outcomes exhibited a significant strong negative correlation between the NPLs and financial performance. Therefore, the researcher established that an upsurge in non-performing loans causes decrease in the banks' financial performance.

Furthermore, the investigation determined that a positive significant correlation exists between capital adequacy and financial performance. Hence, an upsurge in capital adequacy ratio contributes to improved financial performance of the banks. Moreover, the correlation analysis established that there is a weak positive and insignificant link between loan loss provision and profitability of the banks. Thus, an increase in loan loss provision positively but insignificantly affects the performance of banks. The regression analysis proved that independent variables of this study explain 44.40% of the variations in the banks' financial performance.

5.3 Conclusions

The conclusion of the research is that there is a significant negative relationship between NPLs and the financial performance of the Kenyan commercial banks. Hence, a rise in NPLs decreases the financial performance of banks. For that reason, banks should manage their non-performing loans and reduce them as much as possible to better their financial health. Additionally, the study concluded that there is a significant positive effect of capital adequacy on the financial performance of banks. Therefore, banks ought to aim at keeping their capital adequacy ratios as high as possible to offer assurance that the bank will remain solvent in the foreseeable future.

Besides, the study resolved that a positive effect exists between loan loss provisions and the banks' financial performance. Therefore, the banks need to ensure they have an adequate loan loss provision which can cushion them from any probable credit risk losses. From the findings, the researcher concluded that CRM is effective in warranting the high financial performance of commercial banks. This is because credit risk as denoted by the NPLs possess worse effects on the banks' profitability. Accordingly, commercial banks

must ensure that they employ effective approaches in managing their credit risks. These can include but not limited to raising their capital adequacy, minimizing their non-performing loans as well as raising their loan loss provisions. Additionally, the commercial banks need to determine other factors that affect their performance and address them since the study findings portrayed that the current study's independent variables only explain 44.4% changes in the financial performance. Meaning there could be other aspects that could contribute to enhancing their performance, thus ensuring they are a going-concern.

5.4 Recommendations

The researcher recommends that credit risk managers ought to put emphasis in ensuring that proper management approaches of the nonperforming loans are established because NPL possess negative effects on the banks' financial performance. Moreover, the researcher suggests that policy developers in banks to create enhanced strategies for managing loan loss provisions and capital adequacy ratios since these affects the commercial banks performance positively.

Also, the regulators of the banks can maintain the regulation on minimum capital adequacies since this will assist the banks in credit risk management. The researcher also recommends future studies around this topic should involve longer periods to determine if the outcome will be different. Besides, future studies can comprise more independent variables to establish how they impact the financial performance.

5.5 Limitations of Study

The prime limitations for this study were time and resources, which made it impossible to cover an extensive period. The researcher was working on a deadline to submit the research

findings; hence, there was no opportunity to use a prolonged study period. Besides, the researcher was tasked with censusing entire commercial banks in Kenya, yet the data collection process involved reviewing every bank's annual financial statements. Then came the compilation of the data and performing the necessary calculations to get the study variables, which all took time. Therefore, the researcher covered only five years, leaving room for further study. Besides, the time constraint permitted only the use of secondary data and a focus on commercial banks. Given the timeline to complete the project, the researcher could not amass primary data because this needed a longer duration to organize with the respondents. Additionally, this meant the researcher could not explore other lenders in the industry but only concentrate on the commercial banks.

Moreover, resources limited the researcher because the information needed for the research was unavailable in some of the banks' reports available to the public. Therefore, the researcher was unable to retrieve data from some banks. Consequently, the scholar dropped some commercial banks due to incomplete data. Perhaps, collecting primary data would have solved this since the researcher might have had a chance to visit those banks and request such data. Therefore, this limitation offers a prospect for future studies to consider other players in the industry and exploit both primary and secondary data to examine the effects of CRM on the performance.

5.6 Areas for Further Studies

Suggestions by the scholar are for future studies to cover a longer period of study than 5 years used for this study. This would illustrate whether longer time can lead to variations in the results or not. So future scholars can focus on 7 to 20 years. Furthermore, future

researchers can employ more independent variables of study to examine their effects on CRM of the commercial banks.

Besides, further studies can use different predictors and measurements for the variables of the investigation to help discover the influence on the profitability of the banks. Alternatively, further research can focus on other players in the banking sector or the whole industry because this examination only concerted on the commercial banks in Kenya, thus excluded other firms like SACCOs, insurance, and microfinance firms.

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APPENDIX

Appendix: Data Collection Form

Commercial Banks	Nonperforming Loans	CAR	Loss given default ratio	Loan loss provision	ROA
1. KCB					
2 Co-op Bank					
3 Equity					
4 I & M					
5 Absa Bank Kenya Plc					
6 Standard Chartered					
7 NCBA					
8 Stanbic					
9 Bank of Baroda					
10 Citibank N.A. Kenya					
11 Diamond Trust Bank					
12 Bank of India					
13 Prime					
14 Family					
15 SBM					
16 Gulf African Bank					
17 Guaranty Trust Bank					
18 Victoria					
19 Habib AG Zurich					
20 National					
21 First Community Bank					
22 African Banking Corporation					
23 Middle East Bank (K)					
24 Sidian					
25 Paramount					
26 Guardian Bank					
27 UBA					
28 M-Oriental Commercial					
29 Development Bank of Kenya					
30 Credit Bank					
31 Ecobank Kenya					
32 Kingdom					
33 Consolidated Bank of Kenya					
34 Mayfair CIB					
35 Bank of Africa (K)					

36 DIB					
37 Spire					
38 Access Plc					
39 Imperial (Under receivership)					
40 Chase (In Liquidation)					