CREDIT MANAGEMENT PRACTICES AND LOAN PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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DECLARATION

The authorship of this project is credited to me and it has not been submitted to any academic institution.

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

OPERATIONAL DEFINITION OF TERMS

Appraisal: A process of gauging a borrower's value.

Credit rationing: Scores given to loan applicants so that the commercial bank can decide to offer them credit.

Client appraisal: the process of determining a loan seeker's capacity and credit worthiness to secure and repay a loan

Collateral: Asset a borrower uses to pledge as loan security.

Commercial banks: Financial institutions accepting deposits, offer loans, provide checking account services, as well as savings accounts.

Credit management practices: involves procedures as well as styles banks used to curb credit amounts such as credit rationing, client appraisal, debt collection and credit monitoring

Credit monitoring: racking as well as ascertaining in borrower's behaviour.

Debt collection: the process of recovering principal sum of loan advanced and the accrued interest.

Information asymmetry: evidenced in a lending transaction if a party holds more information than other participants.

Loan: Credit facility banks provide.

Loan performance: the computation of non-performing loans against the gross loans advanced by commercial banks.

Non-performing loans: loans that have not been serviced in a period of 90 days.

Provision: Money set aside by banks to cater for the future liability as they arise.

ABBREVIATIONS / ACRONYMS

CBK:	Central Bank of Kenya
CMPs:	Credit Management Practices
CRBs:	Credit Reference Bureaus
CRT:	Credit Rationing Theory
ECL:	Expected Credit Loss
KBS:	Kenya National Bureau of Statistics
KES:	Kenya Shillings
LFT:	Loanable Funds Theory
MFIs:	Microfinance Institutions
MSME:	Micro, Small and Medium Enterprises
NPLs:	Non-Performing Loans
RPL:	Re-performing Loans
SACCOS:	Saving and Credit Cooperative Society

ABSTRACT

Commercial banks operating in Kenya have been reporting dismal performance, with escalating amounts of non-performing loans between 2018 and 2020 as evidenced in the central bank's reports. The non-performing loans of these banks were averaged at 11 percent, a rate higher than the central bank's recommended rate of 1 percent, probably associated with insufficient credit management practices. The current analysis sought to determine credit management practices' effects on commercial banks' loan performance in the country. It specifically examined the objectives of the effect of credit rationing, client appraisal, debt collection, and credit monitoring on the loan performance of commercial banks in Kenya. The appropriate research design was descriptive survey applied to the targeted 38 commercial banks in the country. Questionnaire instrument assisted in collecting primary data on credit management practices while secondary information on loan performance was obtained from document review form based on loan records of 2018-2020. SPSS (v-21) aided the descriptive as well as inferential analyses of data. The findings of the regression analysis showed that the predictions in the model provide a positive correlation ($R = 0.759$) with loan performance. The coefficient of determination (r^2) was 0.5761. The predictors of credit rationing, client appraisal, debt collection, and credit monitoring were all significant as an increase in unit on credit rationing could lead to an increase in loan performance by 0.356. In addition, a unit increase in the client appraisal could lead to an increase in loan performance by 0.408; the debt collection of the unit increase would lead to an increase in loan performance by 0.445, and an increase in the credit monitoring would lead to an increase in loan performance by 0.312. Further the results indicated that at 95 percent confidence level, credit rationing (p-value = 0.001), client appraisal (p = 0.001), debt collection (p = 0.000), and credit monitoring (p-value = 0.001) were significantly found in the regression model. The study concluded that debt collection has a significant impact on performance of loans, which is better to collect debt as the shorter debt collection period would lead to improved performance of commercial bank loans. The assessment also concluded that client appraisal has a significant effect on credit performance of the banking sector, implying the development of client appraisal would improve the performance of loans in the banking sector. Hence, the analysis concluded that commercial banks' loan performance was largely linked to efficiency in credit management practices adopted by the financial institutions. Based on the assessment findings, the study recommended that credit management practices should be adopted and applied equally by all commercial banks in Kenya to reduce the amount of non-performing loans in the banking sector.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Loans constitute higher amounts of banking institutions assets, while interests generated from credit constitute the main source of income globally. Moreover, loans contain a high level of risk and carry a profound effect on the commercial banks' profitability, liquidity, as well as solvency (Barth, Lin, Lin & Song, 2015). Smooth performance of loans advanced to borrowers can be greatly put at risk by the failures of borrowers to fulfil their contractual obligations within the stipulated dates. Therefore, to secure maximum loan performance of the commercial banks, revitalising credit rationing, client appraisal, debt collection, and credit monitoring are among the most crucial credit management practices to ensure effectiveness of loan performance (Keeton & Morris, 2016).

The process of advancing loan is led by credit management practices attained by proper policies defining procedures as well as guidelines to facilitate lending process in the commercial banking sector. If proper credit management practices are not adopted by banking institutions, then they risk having borrowers who do not honour their financial obligations (Kofarmata & Danlami, 2019). For lending to take place, banks accept deposits which provide a source for providing loans as well as other forms of advances. The financial institutions bear the cost of holding deposits and carrying out lending activities to generate revenue (JoEtta, 2017). Their main sources of revenue include interests, commissions, margins, and fees.

Commercial banks in Kenya are currently experiencing high levels of non-performing loans, which are driven by high defaults threatening the overall loan performance of these banks. CBK (2020) data shows the percentage of gross non-performing loans versus the gross loans grew to 14.1 percent from 12 percent in December 2019. The non-performance could be linked to slow down in business activities because of the severe impacts of COVID-19 pandemic. The findings by Haile (2016) showed that credit management practices of credit rationing positively and negatively influence loan performance, depending on effectiveness or weakness of the credit rationing system (Kadioglu, Niyazi & Nurcan, 2017). The observation connoted a mixed result which necessitated the inclusion of credit rationing as one of the credit management practices in this current study to ascertain credit rationing effect on commercial banks' loan performance to fill the prevailing gap in literature.

1.1.1 Credit Management Practices

Effective practice towards the management of credit is crucial for credit scoring improvement by lenders. Implementation of credit management practices enables the inclusion of main predictive factors which constitute a variety of qualification criteria to achieve desired outcomes (Opiyo, 2016). The process of credit management establishes risk factors on lending decision on each loan seeker, parameters of loan product, and adjustments of factor weightings for positive results. In this context, the desired result is to lower the amount of non-performing loans against gross loans (Wandera, 2017). This is achieved through the effective implementation of credit management practices, including credit rationing, client appraisal, debt collection, and credit monitoring among others.

Credit management practices provide a leading determinant of the quality of commercial banks' credit portfolio. A significant pre-condition driving the effectiveness of credit management lies with the ability to manage the credit lines of customers efficiently and intelligently (Aliija & Muhangi, 2017). Banks need a better understanding of customers' financial strengths, evolution of payment methods of their clients, and credit account history. Based on this argument, financial institutions need to create formal and legal systems as well as policies that authorised designated staff advance credit, lending is provided to people with good credit history, credit is advanced to profitable ventures or activities with strong technical and financial viability (Ata *et al*., 2015). Only the correct credit amount should be disbursed, is recoverable, and management of information flow is adequate to facilitate the effectiveness in the monitoring of credit activity. The lending policy should therefore have a system to check from the point of credit processing to the collection point.

Credit management begins with granting a credit facility and never stops until the final payment is completed. Technically, transactions are only complete upon making the final payment. Effective lending ensures that credit seekers follow the guidelines set in the repayment plan (Domeher, Musah & Poku, 2017). Timeliness and promptness in making repayment are crucial to cushion total loss of the sum of interest the bank could potentially earn due to credit's opportunity costs, money value as well as the underlying risk. Credit management is mainly concerned with effectiveness in the management of creditors and prudent financing of receivables (Branzoli & Fringuellotti, 2020). The goal of credit management involves safeguarding the portfolio of institutions' investments in borrowers as well as maximising operational cash flows. Emphasis should be put on rigorous enforcement of practices for advancing credits, collection of due repayments, as well as high risk factors involved in non-repayments.

1.1.2 Loan Performance

The concept of loan performance is construed as loans serviced, as well as loans defaulted to total sum of loans advanced. Further, it involves loan schedule as well as actual performance, which is linked to steady and timely repayment of principals and interest on loans (Cenni *et al.,* 2015). Loan performance of commercial banks is measured in terms of loan defaults of borrowers. A non-performing loan refers to the sum of advanced money that a borrower has failed to make at least a scheduled payment within a period of ninety days (Mulyungi & Mulyungi, 2020). It also involves the unsettlement of scheduled principal and interest payments. Before the development of information sharing as well as the Credit Reference Bureau regulation, commercial banks lacked mechanisms of understanding financial relations between lenders and their new clients.

Non-performing loans are considered defaulted or almost default and such loans are repaid substantially lower amounts in full settlement. However, the re-assumption of non-performing loans payments makes it a re-performing loan (RPL) regardless of the borrower partially settling the defaulted payments (Satish & Sumanta, 2018). Banks holding non-performing loans in their portfolios can opt to sell them to other loan providers to discard risky assets as well as clear their balance sheets (Kipsang, 2020). The sale of non-performing loans is important because they may present severe financial impacts, damaging a firm's profit and loss as well as tax situations.

Loan defaults emanate from unfavourable circumstances affecting the ability of the borrower to make repayments. The common reasons for defaults include borrowers' unwillingness to make repayments, a laxity of the financial institution to make regular follow-ups, unpredicted crises such as death, illnesses or lay-offs on the part of a borrower, poor business performance, directing the cured credit to its unintended use, and insufficient monitoring of loan performance among others (Absanto & Aikaruwa, 2013). Further, socio-economic as well as institutional factors of high frequency levels of credit follow-ups and collections, effective information management system, credit officer incentives, and tight credit policy controls influence the rate of loan performance (Idris & Nayan, 2016). Lending interest rate, loan size and maturity, as well as credit disbursement timing affect repayment rates.

1.1.3 Credit Management Practices and Loan Performance

Application of credit management practices is crucial as they help in the prudent valuation of loans as well as ascertaining appropriate loan provisions. Banks should therefore have a system to reliably categorise loans based on credit risk to improve repayment rate by clients (Kisaka, 2016). While large sized loans need to be categorised based on credit risk grading system, small sized loans are classified based on payment delinquency status or credit risk grading system. A well-structured credit management system is beneficial in differentiating the level of credit risk in different credit exposures of financial institutions (Njeru, Mohhamed & Wachira, 2018). This enables a more accurate assessment of the overall features of the credit portfolio, default probability as well as sufficient loan losses provisions (Haile, 2016). In the description of a loan grading system, commercial banks need to provide the definitions of every loan grade as well as outlining operation, design, performance, and implementation responsibilities of the system for loan grading.

The implementation of credit management practices enables loan providers to account for loan seekers' financial condition as well as their paying capacity. Further, it is expected that it would account for the current value of collateral, its reliability, as well as borrowers' and facility related characteristics influencing the collection of loan principal and interest (Mburu, Mwangi & Muathe, 2020). Documenting the bank's validation process, results, and regular reporting of results to the concerned management levels are expected to facilitate loan collections and subsequent reduce the numbers and amount of non-performing loans (Otieno, Nyagol & Onditi, 2016). The validation of internal credit assessment models which are subjected to periodic review by independently qualified credit professionals would facilitate the identification and improvement of the credit risk areas, which are prone to loan defaults.

1.1.4 Commercial Banks in Kenya

CBK (2020) indicates 38 commercial banks in Kenya. The banks' gross loans grew by 2.15 percent, which was from 2,847.44 billion KES posted in March 2020 to 2,908.7 billion KES recorded in June 2020 (CBK, 2020). The growth in the loan amount was because of the advances in the manufacturing, transport and communication, as well as real estate sectors (Wandera, 2017). Majority of these commercial banks expect that the repeal capping law on interest rate would insignificantly affect subsequent non-performing loans (NPLs) as pricing of loans does not affect repayment ability.

The application of forward-looking is a major element of the impairment approach of Expected Credit Loss (ECL). As expected currently, banks in Kenya are mandated to factor in the current, historic, as well as forward-looking information, comprising macroeconomic data (Njeru, Mohhamed & Wachira, 2017). The aim of this is to ensure early recognition of credit losses, instead of waiting to experience loss occurrences before the identification of credit losses. Banks' ECLs are determined by ways other than examining various possible outcomes, which are adjusted in line with time-value-of-money (Kitonga, 2014). However, the measurements also account for supportive and reasonable information regarding the present, past, and future economic events and conditions.

1.2 Statement of the Problem

Commercial banks in a country plays key role in capital accumulation, savings mobilization, and credit creation. Despite their role in credit creation, the commercial banks operating in Kenya have been posting escalating loan books of non-performance in loans between 2018 and 2020 as outlined in the CBK (2020) report. Loan performance of commercial banks is driven by their CMPs effectiveness as a substantial amount of their incomes are from the advanced loans. Income generated from loans comprises on average of between 75 to 80 percent of the total commercial banks income (Mburu, Mwangi & Muathe, 2020). Recently loan performance of commercial banks has been an issue of concern, as evidenced by growing loan defaults, with 60 percent rise in bad loans, which is Sh27.5 billion posted in 2020 to Sh43.9 billion in 2021 (CBK, 2021). The default rate also rose between 2018 and 2019, as represented by Ksh. 25.7 billion and Ksh. 31.1 billion of bad loans respectively, as per the CBK report (2020).

The Central Bank (2015) supervision report shows that high incidence of non-performing loans within the commercial banking sector presents a situation that has severely affected their loan performance and the overall profitability. The trend not only weakens commercial banks viability as well as sustainability but also derails their attainment of goals (Mulyungi & Mulyungi, 2020). The denial of loans to MSMEs because of defaults is a hindrance to the achievement of the objective of credit provision. Commercial banks in Kenya are popular for loaning borrowers, but some of them do not conduct depth credit assessment while advancing loans. The growth of the banking sector in Kenya is linked to effective credit management practices ensuring only borrowers with good credit rating receive loans, reducing non-performing loans as well as overall performance. This has motivated banks to adopt credit management practices to bar high-risk clients with low credit rating scores.

Most previous studies have concentrated majorly on credit models and credit risk management that commercial banks apply to determine their profitability effect (Mburu, Mwangi & Muathe, 2020; Idris & Nayan, 2016; Kimutai & Ambrose, 2013). However, only a limited number of studies have examined credit rationing, client appraisal, debt collection, and credit monitoring as some of the important components of credit management practices and their effects on loan performance among commercial banks in the developing countries, such as Kenya (Kipsang, 2020; Otieno, Nyagol, & Omnditi, 2016). The need for adequate empirical studies on credit management practices as well as the loan performance in the banking sector constitutes the main motivation for this assessment to determine the influence of credit management practices among the commercial banks.

1.3 Research Objective

The general objective was to investigate the effect of credit management practices on loan performance of commercial banks in Kenya.

1.3.1 Specific Objectives

The study was based on the following specific objectives.

i. To determine the effect of credit rationing practice on loan performance of commercial banks in Kenya
ii. To establish the effect of client appraisal practice on loan performance of commercial banks in Kenya
iii. To determine the effect of debt collection practice on loan performance of commercial banks in Kenya
iv. To establish the effect of credit monitoring practice on loan performance of commercial banks in Kenya.

1.4 Research Hypotheses

The study was guided by the following null hypotheses.

H_{01}: Credit rationing practice does not affect loan performance of commercial banks in Kenya

H_{02}: Client appraisal practice does not affect loan performance of commercial banks in Kenya

H_{03}: Debt collection practice does not affect loan performance of commercial banks in Kenya

H_{04}: Credit monitoring practice does not affect loan performance of commercial banks in Kenya.

1.5 Significance of the Study

The assessment results may benefit policymakers and regulators of the commercial banking sector to design effective policies to promote loan performance of these banks. The Central Bank of Kenya as well as Kenya Bankers Association are expected to borrow the study findings to make decisions to improve loan performance also referred to as the asset quality of these banks. Policy decisions of tax rebates and tax exempt on training costs on the implementation of new credit management practices may be developed based on assessment findings.

Commercial banks management in the country may gain from the study results as they can establish the most significant credit management practices. The managers may also identify the loan performance determinants influenced by credit management practices under assessment. The understanding of how credit management practices relates to loan performance may enable commercial banks to implement the most effective credit management practices for better loan performance. The findings may also be replicated to other commercial banks in the country.

The assessment findings may also be expected to provide theoretical knowledge regarding credit management practices and loan performance. Similar studies focused more on the profitability aspect of commercial banks instead of the loan performance. Therefore, the current analysis may provide more insights on CMPs of the assessed banks.

1.6 Scope of the Study

The analysis was to investigate the effect credit management practices on loan performance of commercial banks in Kenya. The study was based on 38 commercial banks in Kenya, covering three years; 2018-2020. Credit management practices were operationalized and limited to credit rationing, client appraisal, debt collection, and credit monitoring. On the other hand, loan performance was conceptualised as non-performing loans' (NPLs) measure against gross loans advanced.

The assessment was limited to study of 38 commercial banks in Kenya, which are currently in operation. Credit managers of these banks formed part of the respondents. A census was used as the target population is less than 100. Questionnaire was used to collect data on credit management practices while document review guide aided in the collection of data on loan performance.

1.7 Organization of the study

The project was organized into five chapters. Chapter one presented the background of the study, problem statement, objectives of the study, significance and scope of the study. Chapter two discussed the theories that underpinned the study, the empirical literature that were reviewed, conceptual framework and the summary of the empirical literature reviewed. Chapter three discussed the research design, population of the study, data collection instrument and procedure, data analysis methods and ethical considerations. Chapter four presented the response rate as well as the results of descriptive and inferential statistics. Finally, chapter five presents summary of the study, conclusions, recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The second chapter explores theories guiding the analysis. The chapter reviews literature on service design and operational performance. Further, the study presents a summary of the literature reviewed and the conceptual framework.

2.2 Theoretical Literature

The assessment was based on loanable funds theory by Dennis Holme Robertson (1963), Stiglitz and Weiss (1981) credit rationing theory (CRT), and stakeholder's theory by Freeman (1984). Credit rationing theory was the main theory of this study. The discussion of these theories is aligned to the study objective.

2.2.1 Loanable Funds Theory

Dennis Holme Robertson (1963) developed the loanable funds theory (LFT) of market interest rate. The LTF was supported by Bertil Gotthard Ohlin (1979) that the demand for as well as supply of funds within the economy determine the rate of interest, at the level in which demand equals supply. LFT assumes a perfect competition prevails in the market and every lender and borrower is a 'price-taker' as well only a single interest rate prevails in a market at a specific time. In such prevailing condition, competition forces are anticipated to facilitate prompt market clearance, for one rate of interest charged on loans becomes the equilibrium interest rate. It can as well be the market-clearing in this situation.

Further, LFT advocates that interest rate paid on loans is taken as the price equating demand for the supply of loanable funds. The interest rate fluctuations emanate from variations in the funds available for credit, demand for loans, or supply of loans. The deduction from this statement is that interest is the same as the price equating loanable funds' demand with their supply. Moreover, loanable funds denote money demanded as well as supplied in the money market at any specified period. With the prevailing interest rate excluded, loanable funds' demand and their supply are depended on the effectiveness of credit management practices lending institutions adopt.

Bank money's availability changes the nature of fluctuations of demand as well as supply. In an economy where money is banknotes or metallic money that the central bank issues, each individual has to acquire a stock of money to aid the finance of transactions. This implies that in order to demand money one has to accumulate a store of cash. Based on this argument, it can be inferred that the functions of money supply and its demand are independent; implying that the quantity of money that circulates can differ with the quantity of money in demand. The variations in these quantities consequently cause differences in price level. The loanable funds theory helps in examining how credit rationing influences loan uptake at the prevailing interest rate and the subsequent loan performance. The relevance of the LFT on credit rationing is that money is requisite for an entity and whoever requires money to purchase goods/services may obtain it by seeking credit from banks at a specified rate of interest.

2.2.2 Credit Rationing Theory

Developed by Stiglitz and Weiss in (1981), CRT is directed at credit markets with information asymmetry, limiting banks' capacity for obtaining accurate information concerning loan seekers as well as to evaluate their actions. The CRT assumes several commercial banks seeking profit maximisation through interests they set as well as collateral required. The aim is to limit the possibility of loan defaults as well as the majority of potential borrowers trying to maximise their profits on selected projects. The possibility of project success is uncertain to the commercial banks but well known to companies owing to information asymmetry. In certain situations, borrowers change to projects with minimum risks to riskier projects promising the best positive returns but portraying low levels of growth. Nevertheless, the situation renders it difficult for banks to control their loan customers' actions.

Banerjee (2008) asserts that commercial banks gain competitiveness through the selection of interest rate as well as application of interest rates to screen good risks from bad risks. Borrowers seek fixed-interest loans to help in funding projects with an equal outcome, but the situation compels loan seekers with low credit scores to bear higher interest rates. Nonetheless, high interests can pilot a cut in the expected profit of commercial banks owing to disagreeable choice influence because of dwindling quality of loan applicants' selection and the effect of incentive from pattern variation of borrowers changing from safe to high risk projects. Hence, equilibrium takes place at the interest rate where commercial banks maximise their expected profits.

Jaffe and Stiglitz (1990) examine pure credit rationing where some credit seekers obtain loans while banks deny their peers with similar characteristics demanding the credit at the same rate as well as non-price terms. The theorists also explored credit rationing typology happening where identifiable groups, with a particular credit supply, are not able to secure loans at any prevailing rate of interest, otherwise with a larger credit supply they could secure credit. CRT is built on the assumption that lenders are unable to differentiate between borrowers of varied degrees of risk. The other assumption is that loan agreements are based on limited liability, implying that if return is below loan obligations, the customer is not held responsible to pay the loan from sources other than the invested project. The assessment is limited to involuntary default, assuming borrowers settle loans if they have the means to repay.

The theory facilitates the understanding of factors leading to pure credit rationing as well as redlining. Okurut *et al*., (2006) identifies factors of loan seeker's observable attributes of credit history, wealth, age, experience as well as loan characteristics of interest rate, loan maturity, amount demanded, and collateral offered. Commercial bank's credit rationing behaviour were categorised into screening, quantity, as well as evaluation rationing stages as Lapar and Graham (1988) suggested. The screening marks the stage where the commercial bank's manager interviews the loan seeker to ascertain their eligibility for the loan, specifically analysing their loan demand, creditworthiness, as well as favourable terms.

Similarly, Hoff and Stiglitz (1990) opine risk level impacts credit rationing. Banks perceive borrowers with uncertain loan settlement as riskier and prone to credit rationing. Default risk is common in banks, which is the inability of a borrower to fulfil its obligation to the lender. Guido (2008) holds a similar viewpoint that credit rationing is also a result of banks' failure to group their loan seekers into appropriate risk brackets. Collateral value also informs the application of credit rationing as it provides the last resort for loan recovery when default happens; the bank auctions the collateral to receive the outstanding loan balance. Further, it helps in the reduction of information asymmetry between bank and the firm. The collateral provided to secure a loan estimates the actual value of a certain project, specifically when the borrower holds investment with higher potential of generating positive return.

Notwithstanding the relevance of CRT's criticism its skewed emphasis on banks' allocation of resources while ignoring endogenous money-creation. Wolfson (1996) averse that banks adjust credit reserves accordingly to accommodate demand. The demand creditworthy borrowers are preferred by commercial banks and are served promptly, which is referred to as the effective demand (Wolfson, 1996). The existing difference between original demand and effective demand implies credit rationing. A factor that influences commercial bank's perception regarding the future creditworthiness of a loan seeker could result in shifting effective demand curve with a corresponding shift in credit rationing.

2.2.3 Stakeholders Theory

Freeman's (1984) stakeholder theory was supported by Coombs and Gilley (2005) that a firm is likely to have better performance if normative precepts are used. The theory postulates that a firm's objective is to coordinate stakeholders' interests, but this opposes the theory of the firm which advances shareholders' wealth maximization. Stakeholder theory emphasises that it is impossible for a firm to survive by failing to deliver value to its key stakeholders. Despite the shareholders holding varied rights with other stakeholders, this never exposes them to an imbalanced right to obtain company benefits.

In line with this theory, commercial banks need to ensure that borrowers are protected as well as enjoy contractual and legislation benefits, without holding the imbalanced right to obtain banks benefits. Nonetheless, a need exists to ensure internal efficiency of commercial banks through credit rationing for optimal performance of advanced loans. The argument confirms Boaventura, daSilva, and Rodrigo's (2012) claim that the stakeholder theory has a relationship with the theory of the firm, as the intention to maximise performance is associated with a firm's objective. Commercial banks committed to honouring loan borrower's requests do so with the expectation of optimising returns as well as to mitigate potential risks.

2.3 Empirical review

The review considers similar studies conducted previously on credit management practices (CMPs) as well as loan performance. Analysed literature has been gathered from good scholar, JSTOR, and peer reviewed journal articles. Credit management practices have been analysed in the dimensions of credit rationing, client appraisal, debt collection, and credit monitoring.

2.3.1 Credit Rationing and Loan Performance

Kofarmata and Danlami (2019) used a multinomial logit model to analyse credit rationing among farmers in the rural areas of Kano State of Nigeria. The study found the engagement of farmers in farming activities greatly influenced credit rationing and consequent effect of farm profit. Contrary to the commercial banking sector, the study was based on agricultural credit rationing, a gap to be filled.

Domeher, Musah, and Poku (2017) used a multinomial logistic regression to analyse credit rationing among the small and medium enterprises in the context of Ghana. The study findings revealed the presence of credit rationing within the SME sector. The results confirmed credit rationing among the SMEs varies and the variations are based on business characteristics as well as SME owner characteristics. The application of the survey method in this study however exposed the assessment of credit rationing to biases as per the responses obtained. The use of indirect method in this study was further limited because of the absence of publicly available data. However, the current analysis may fill this gap by using the published information on loan performance drawn from CBK reports and the annual reports of the respective commercial banks.

Kisaka (2016) used a cross-sectional survey design to determine the effect of credit rationing on performance of loan books among the commercial banks in Kenya. Primary data comprised credit rating practices among the commercial banks while secondary data was based on performance of loan book. The findings from the regression analysis showed that credit rating positively influenced loan book performance, with the capacity to pay being the most influential. It could be inferred from the analysis that credit rationing is crucial in risk assessment as it helps minimise cases of loan defaults. However, the use of cross-sectional design was not appropriate as data on loan performance covered a series of years. It would be appropriate to use this design if only questionnaires were applied in primary data gathering.

Ata, Korpi, Ugurlu, and Sahin (2015) used logistic regression as well as discriminant analysis to estimate credit rationing. The study findings showed that morality, liquidity, and credit history influence commercial lending significantly. However, the assessment was based on the manufacturing firms which have different loan portfolio compared to the commercial banking sector.

Absanto and Aikaruwa (2013) used a case study design to analyse the influence of credit rationing on loan-repayment performance. The findings identified major factors of credit ration as group guarantee, deposits, savings, guarantors, asset collaterals, age, and sex. Overall, the assessment found credit rationing to have a significant influence on the performance on loan repayment. This implies that the effectiveness of credit rationing positively affects loan performance. However, the study was based on Saving and Credit Cooperative Society (SACCOS), which has a different loan characteristic from the commercial banks. Further, the study relied on semi-structured questionnaires as well as interview guides as instruments for data collection. The current study may fill this gap by incorporating the use of document review form to collect secondary data on loan performance.

Kimutai and Ambrose (2013) used descriptive statistics to analyse factors affecting credit rationing among the commercial banks in Kenya. The identified factors included loan characteristics, observable and firm attributes. However, the study did not concentrate on finding how credit rationing influences loan performance and overall business growth. Further, besides the use of descriptive statistics, the current study can incorporate the use of inferential statistics to determine how assessment variables correlate.

2.3.2 Client Appraisal and Loan Performance

Mulyungi and Mulyungi (2020) studied how client appraisal influences the performance of financial institutions. A descriptive research design was applied in this assessment based on Guaranty Trust Bank Rwanda and the findings showed client appraisal and financial performance relate positively. It can be inferred from the results that client appraisal based on business finance and individuals as well as physical characteristics contained within the credit scoring models as well as credit reference bureau utilisation and analysis of credit risk is crucial for establishing appropriately reliable clients to advance loans. The identification of the right strategies to ascertain the suitability of borrowers reduces the chances of loan defaults and overall loan performance.

Njeru, Mohhamed, and Wachira (2018) conducted a census study to assess how credit appraisal affects commercial banks' effectiveness in the Kenyan context. The assessment result showed that credit appraisal significantly determines the banking sector's performance. Lending to borrowers by putting emphasis on past information, credit history, and credit referencing strengthens credit appraisal and limits the chances of credit defaults.

Aliija and Muhangi (2017) applied a mixed research approach to study management of loan appraisal on credit performance effectiveness using the microfinance institutions (MFIs) with operations in Uganda. Findings revealed that client appraisal is strongly associated with credit performance. It can be deduced from the study findings that strengthening client appraisal techniques within the MFIs would render them more effective and subsequently leading to better credit performance. However, this study was based on the microfinance institution sector that has a different loan structure and institutional structure with the commercial banking sector.

2.3.3 Debt Collection and Loan Performance

Kipsang (2020) used a descriptive survey design to examine debt recovery strategies and their influence on loan performance. The analysis found a significant positive link between loan performance and fines. It was inferred from the analysis that loan penalties resulted in the promptness of loan repayments as well as reducing the rate of defaults in loan repayments. Adverse credit listing also had significant performance on loan recoveries. It was deduced that credit information sharing made it possible for digital lenders to address the concerns of credit rationing. Based on the assessment, it is evidenced that loan limit reduction facilitated compliance among different customers that is crucial for revenue generation and profitability of digital lenders. The assessment was conducted on fintech companies in Kenya and not the commercial banking sector, which is a gap to be filled in this current analysis.

Wandera (2017) examined the effectiveness of debt collection outsourcing on non-performing loans' recovery. Barclays/AbsaBank (Kenya) was the case study and found that the outsourcing of a private debt collector enabled the bank to have access to best expertise, business practice, technology, as well as resources that may be expensive for the company to build internally. The findings further ascertained credit-information sharing significantly affects non-performing loans' recovery; specifically, it helps to trace clients whose contacts are lost. Based on the findings, it can be inferred that by contracting debt collection firms, commercial banks are able to recover more non-performing loans as these firms have a well-trained and better experienced workforce, access robust technology as well as enjoy economies of scale. However, the study was based on the defunct Barclays Bank of Kenya which has since then been restructured and rebranded as Absa Kenya Ltd. Instead of just concentrating on one bank alone, the current assessment covered all the 38 commercial banks in Kenya that are currently in operation.

Kitonga (2014) used a descriptive survey design to examine the determinants that effectively influence debt collection practices of the commercial banking sector in Kenya. The study operationalized loan performance into non-performing loans divided by gross loans. Investment in the management information systems enabled the banks to integrate loan data with other banking systems. The analysis established significant negative information between staff competency of these banks with non-performing loans. This implies that as a bank engages more competent staff, they are able to limit their non-performing loan levels by scaling down loans defaulted. Financial resources also have a significantly negative correlate with non-performing loans. Further, information technology management has a significant and negative correlate with non-performing loans.

2.3.4 Credit Monitoring and Loan Performance

Branzoli and Fringuellotti (2020) assessed credit monitoring effect on loan repayment using the case of Italian Credit register. Causal analysis established monitoring lowers delinquency probability in a significant way as well as with stronger effect for loans benefiting from bank oversights, including term loans. Theoretical model envisaging that tax rate reduction promotes incentives by banks to monitor their clients through the increase of returns from loans advanced supports identification strategy. However, the study was conducted in the Italian context that has a different banking characteristic with Kenya.

Idris and Nayan (2016) studied loan monitoring's moderating role and how it links with non-performing loans (NPLs) as well as macroeconomic variables in the context of Southeast Asian countries. The assessment found that loan monitoring has a significant positive moderation influence with the association between NPLs and macroeconomic variables. It can be inferred that the understanding of the moderation influence of loan monitoring is significant in enhancing the resilience of banking systems against shocks or banking crises that might occur from integration. However, the study was not linked to a specific commercial banking sector, a gap to be filled in the current assessment.

Migwi (2013) examined credit monitoring as well as recovery strategies of Kenya’s commercial banking sector. The study revealed that loans are monitored for safeguarding payments, implying that banks are keen on loan repayment for them to incur minimal losses. Reports are generated to help banks monitor their borrowers. Further, they adopt several strategies for debt recovery, including loan securing, adequate training of loan officers, visiting clients to remind them to settle outstanding loans, and periodically reminding and informing their clients. However, banks should adopt credit score cards to monitor and recover loans. While the survey was based on 44 commercial banks in Kenya that existed between 2008 and 2012, the current assessment was based on 38 commercial banks currently in operation in Kenya

2.4 Summary of Literature Review

Results based on the reviewed literature confirmed that several dimensions of credit management practices (CMPs) influence loan performance of the commercial banking sector. Nonetheless, the factors linked to the effect are not limited to CMPs alone. Most scholars and researchers have focused on CMPs because of its perceived effect on loan performance.

The review outcomes established that multiple CMPs exist because variation loan performance is also referred to as asset quality, across firms. However, empirical literature has given evidence that there are a few studies on CMPs and loan performance of commercial banks in Kenya. This confirms that limited studies exist in the context of developing countries, including Kenya.

Table 2.2 Summary of Empirical Gaps

Author (s)	**Objectives**	**Key Findings**	**Research gaps**	**How the current study will fill the existing study gaps**
Kofarmata and Danlami (2019)	Determinants of credit rationing	Credit rationing is influenced by farmers engagement	The study was based in the agricultural sector	-The current study was in commercial banking sector. -The study correlates credit rationing with loan performance
Wandera (2017)	Debt collection and non-performing loans recovery	Outsourcing a private debt collector enabled banks to collect more non-performing loans	The study was based on the defunct Barclays bank of Kenya	The study was based on all commercial banks in Kenya.
Aliija and Muhangi (2017)	Management of loan appraisal on credit performance effectiveness	Client appraisal and credit performance are strongly related	Study was based on microfinance institutions with different loan and institutional structure	The correct study was based in the commercial banks
Kisaka (2016)	Credit rating practices and loan book performance	Credit rating positively influenced loan book performance	Used cross-sectional design	-
Idris and Nayan (2016)	Moderating role of loan monitoring on the link between NPL and macroeconomic variables	Loan monitoring has a significant positive moderation role on the link between NPLs and macroeconomic variables	The study was not linked to specific commercial banking sector	The study has been linked to all the commercial banks operating in Kenya.

2.5 Conceptual Framework

The framework links credit management practices (CMPs) with loan performance. CMPs have been presented in the dimensions of credit rationing, client appraisal, debt collection, and credit monitoring. On the other hand, loan performance has been operationalized into amounts of loans defaulted to total loans.

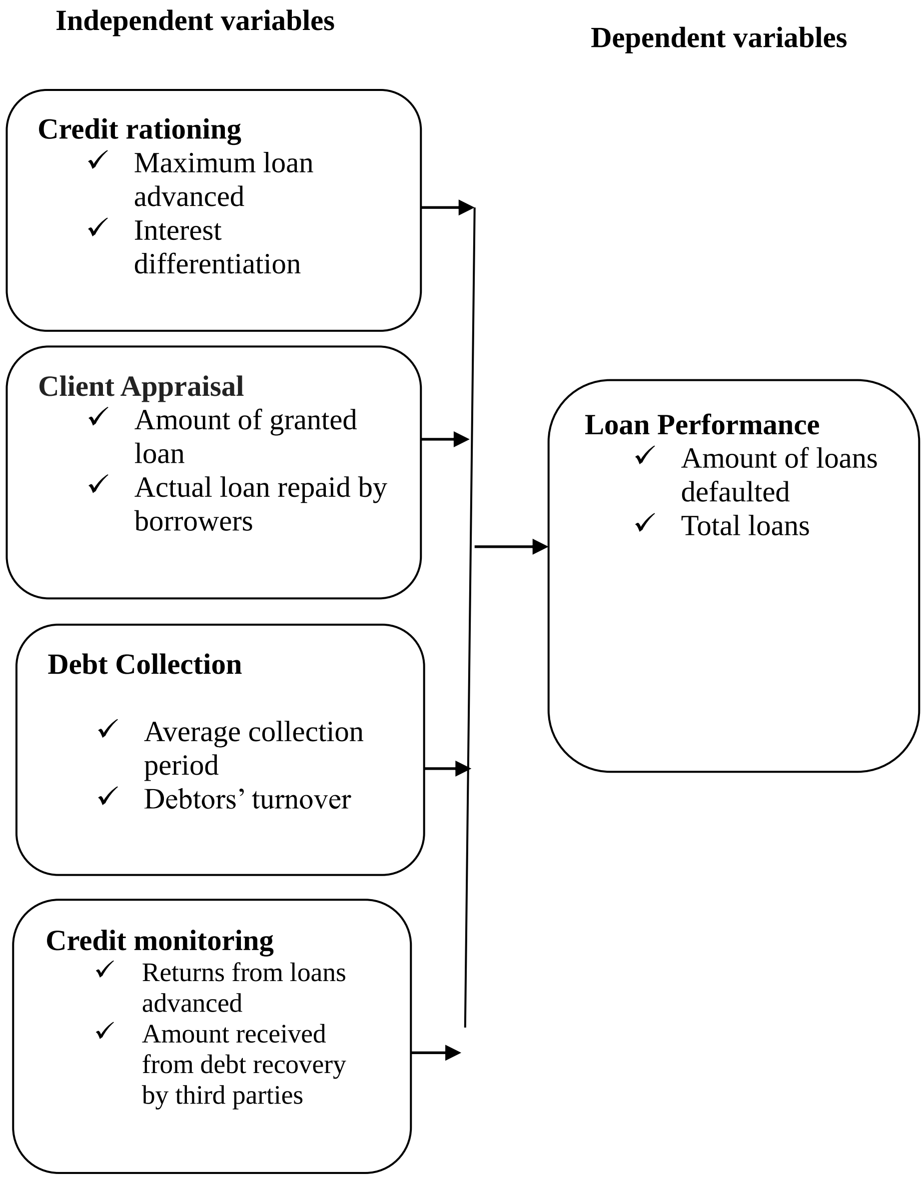

Figure 2.1: Conceptual Framework

Source: Author (2021)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter presented the research design, population of the study, data collection instruments and data collection procedures. It also captures the operationalization and measurement of study variables, data analysis as well as ethical considerations for the study.

3.2 Research Design

Descriptive survey design was applied as it ascertains common characteristics of a specific population or subjects as recommended by Bryman and Bell (2015). The design was relevant for this assessment because it helped to ascertain the individual real perceptions as well as value to identify the extent to which the situation links with the target population. The analysis was cross-sectional as the assessment cut across the entire commercial banks operating in Kenya as well as replicates to the whole banking industry. The relevance of this design to the study was that it enabled the study to conclude on credit rationing, client appraisal, debt collection, and credit monitoring, thus permitting full control of measurements.

3.3 Population of the Study

The survey covered all the 38 commercial banks based in the country. A census was used because of the small population, which is less than 100 (≤ 100) as recommended by Creswell (2014). A total of thirty-eight credit managers were drawn from these 38 banks.

3.4 Data Collection Instrument

According to Creswell (2014), questionnaires are a basic tool for survey research. While primary data on credit management practices was collected through structured, secondary data on loan performance for three years was collected through published materials and annual Central bank of Kenya reports. This specifically captured the amount of defaulted loans and outstanding loans. The document review also used to obtain data on loan performance for the period between 2018 and 2020, capturing the amount of defaulted loans and outstanding loans of these commercial banks, as suggested by Bryman and Bell (2015).

3.5 Data Collection Procedure

Kenyatta University provided an introductory letter while NACOSTI gave the authorization permit to commence data gathering. The researcher further sought permission from the county director of education. The researcher then delivered the questionnaires to the banks credit managers. Weekly follow-ups were done to ensure that all the completed questionnaires are collected in time. Document review was used to fill in secondary data on loan performance.

3.6 Test for validity

Black (2010) defines validity as a research instrument's ability to collect accurate data to measure constructs of the study. Two types of validity were considered in this assessment, including content as well as construct validity. In this assessment, content validity considered how a research instrument measures the targeted content area. Therefore, the items had to be relevant to the measurements of the desired content. Respondents gave their comments concerning the clarity of words used in the tools as well as statements viability when pre-testing the tools. Duration taken to respond to statements was calculated. Supervisors gave their input concerning the appropriateness and relevance of the instruments. Further, this was to ensure that items are designed as per the study objectives.

Construct validity was completed by making a comparison between items in the research instruments, theoretical expectations as well as hypothesised claims to ascertain how well they fit. Clear definition of constructs was operationalized for the analysis to be based on the correct concepts interpretation. The items in the research instruments were developed according to the research objectives.

3.7 Test for reliability

As expanded by Creswell (2014) reliability is the extent to which the research instrument can yield same results after repeated trials using a respondent with homogenous features. Cronbach Alpha coefficients were applied in testing reliability. As recommended by Bryman and Bell (2015), Alpha coefficients greater than 0.7 were considered reliable in this study thereby confirming internal consistency of the research instrument.

3.8 Operationalization and Measurements of Study Variables

The following table provides a list of variables and their measurements.

Table 3.1: Operationalization and Measurements of Variables

Variable	Nature	Measurement
Loan Performance	**Dependent variable**	✓ Amount of defaulted loans ✓ Total loans
Credit rationing	**Independent variable**	✓ Maximum loan advanced ✓ Interest differentiation
Client Appraisal	**Independent variable**	✓ Amount of granted loan ✓ Actual loan repaid by borrowers
Debt collection	**Independent variable**	✓ Average collection period ✓ Debtors' turnover
Credit monitoring	**Independent variable**	✓ Returns from loans advanced ✓ Amount received from debt recovery by third parties

Source: *Author and Literature Review (2021)*

3.9 Data Analysis

The collected data was numerically coded to aid statistical analysis, using descriptive statistics of mean, percentages, and standard deviation for the analysis of data collected. Multiple regression analysis was applied in determining the linkage of CMPs and loan performance as recommended by Creswell (2014). Tables were used in presentation of the findings. The analysis was generated as per the regression model:

Since the loan performance (Y) is a function of credit management practices.

Loan Performance = f (X_1, X_2, X_3, X_4).

Hence,

$$Y = \beta o + \beta_1 x_1 + \beta x_2 + \beta_3 x_3 + \beta_4 x_4 + \boldsymbol{\varepsilon}$$

Where, Y = Loan Performance

β_o = Constant

X_1 = Credit rationing

X_2 = Client appraisal

X_3 = Debt collection

X_4 = Credit monitoring

$\boldsymbol{\varepsilon}$ = Error term

3.10 Ethical Consideration

The assessment was conducted with strict adherence to regulatory framework. The researcher also maintained high objectivity standards. NACOSTI provided the research authorization permit. Consent was sought beforehand as participation in the survey is voluntary.

Ethical considerations were observed in the course of this study, specifically ensuring that the respondents did not suffer, not feel embarrassed, and their privacy was maintained. Consent was obtained from the Human Resources Managers of these banks for approval as well as the management of the 38 commercial banks in Kenya. Purpose of the assessment was explained and assurance of confidentiality.

CHAPTER FOUR

STUDY RESULTS, INTERPRETATIONS, AND DISCUSSIONS

4.1 Introduction

The chapter presents the response rates and the reliability of results. It also indicates both descriptive and inferential test results. Inferential results were used to derive meaning and the results were presented in accordance with the study objectives and research hypothesis.

4.2 Response Rate

A total of 38 questionnaires were given to 38 credit managers of the 38 commercial banks in Kenya. The completed 38 questionnaire represents a response rate of 100 percent. Response rate is considered the best and is worth analysing and interpreting data.

The questionnaire was checked for internal consistency and reliability. The analysis revealed Cronbach's Alpha Correlation of 0.81. The reliable data collection tool produces alpha (α) within a range of $0.7 \leq \alpha < 0.9$ indicating good internal consistency of the data collection tool. On the other hand, secondary information was collected using a document review form on loan performance of the 38 commercial banks in Kenya.

4.3 Descriptive Statistics

The descriptive statistics were used to analyse responses obtained from assessed credit managers of commercial banks, Kenya. This involved the use of mean and standard deviations to analyse credit management practices of credit rationing, client appraisal, debt collection, and credit monitoring on loan performance. The responses were rated as;

1: strongly disagree, 2: disagree, 3: undecided, 4: agree, 5: strongly agree. Scores of respondents above 3.0 indicated a high level of agreement to the effect of credit management practices on loan performance while points below 3.0 represented a low level.

4.3.1 Credit Rationing

The respondents were requested show whether their banks applied credit rationing to their borrowers before advancing loans to ascertain the extent to which the practice affected loan performance of those banking institutions. Table 4.1 shows the findings.

Table 4.1: Descriptive statistics for credit rationing

Statement	N	Mean (M)	Standard Deviation (SD)
1. The limit put for the maximum amount of loan advanced determine the success of our loan repayments	38	3.82	0.76
2. Interest rate charged on loans affects the performance of loans	38	4.07	0.12
3. Our interest rate has contributed to high default rates of loan repayments	38	2.87	1.94
4. The threshold put loans advanced by our bank has locked out clients from taking loans with us	38	3.21	0.87

Source: Survey data (2022)

Based on the findings in Table 4.3 above, when asked about limit put for the maximum amount of loan advanced determine the success of our loan repayments the results showed (M = 3.82, SD = 0.76), in response to Interest rate charged on loans affects the performance of loans, the results were as follows: (M = 4.07, SD = 0.12), With respect to their interest rate leading to high default rates of loan repayments, the results showed (M = 2.87, SD = 1.94), implying that the commercial banks charge favourable interest rates that insignificantly discourage borrowers from seeking loans. When asked about their threshold for loans advanced by our bank has locked out clients from taking loans (M = 3.21, SD = 0.87).

The above findings are indicative that many commercial banks apply credit rationing before granting them credit. Further, the assessment results confirm the findings by Absanto and Aikaruwa (2013) that credit rationing positively affects loan performance. This is also supported by Kisaka (2016) that credit rating positively influenced loan book performance.

4.3.2 Client Appraisal

Respondents were asked to comment on the extent to which client appraisal affects loan performance. Table 4.2 presents the results.

Table 4.2: Client appraisal

Statement	N	Mean	Standard deviation (SD)
1. Amount of loan granted by our bank determines our loan performance	38	3.04	1.93
2. Actual loan repayment is influenced by our clients' individual character.	38	4.02	0.58
3. Client appraisal has enabled our bank to have fewer outstanding loans	38	4.83	0.12

Source: Survey data (2022)

From the result in Table 4.2, Amount of loan granted by our bank determines loan performance (M = 3.04, S.D = 1.93), regarding Actual loan repayment is influenced by clients' individual character (M = 4.02, S.D = 0.58). As for client appraisal enabling bank to have fewer outstanding loans the results are as follows (M = 4.83, S. D = 1.12). This is a clear indication that most commercial banks undertake client appraisal. Further, client appraisal affects the extent to which borrowers make their loan repayments.

The above findings are in agreement with Mulyungi and Mulyungi's (2020) that client appraisal and financial performance relate positively. Similarly, Njeru, Mohhamed, and Wachira (2018) found that credit appraisal significantly determines banking sector's performance. Aliija and Muhangi (2017) further confirmed that client appraisal is strongly associated with credit performance.

4.3.3 Debt Collection

The respondents were asked to state the extent to which debt collection affects loan performance. Table 4.3 presents the findings.

Table 4.3: Debt collection

Statement	N	Mean (M)	Standard deviation (SD)
1. Average collection period for loans advanced has significantly reduced in our bank	38	3.02	1.26
2. A shorter average collection period has driven the success of our loan performance	38	4.67	0.31
3. Our bank experiences a high debtor's turnover	38	2.89	1.45
4. A favourable loan performance is driven by our debtor's turnover	38	4.88	0.04

Source: Survey data (2022)

Based Table 4.3, the results are as follows: (M = 3.02, S.D = 1.26) for the average collection period for loans advanced, (M = 4.67, S.D = 0.31) for a shorter average collection period. (M = 2.89, S.D = 1.45) for a high debtor's turnover. About a favourable loan performance (M = 4.88, S.D = 0.04), implying that debtor's turnover significantly drives loan performance of commercial banks. In a bid to reduce the levels of non-performing loans, banks pursue a shorter debt collection period to minimise loan defaults and realise more collections from borrowers.

The assessment findings conform to Kipsang's (2020) that there is a significant positive link between loan performance and debt collection. Wandera (2017) similarly established that contracting debt collection firms, commercial banks are able to recover more non-performing loans.

4.3.4 Credit Monitoring

The respondents were asked to state the extent to which credit monitoring affects loan performance. Table 4.4 presents the findings.

Table 4.4: Credit monitoring

Statement	N	Mean (M)	Standard deviation (SD)
1. Our bank has made a provision for bad debts	38	4.99	0.01
2. The provision for bad debts has severely affected the performance our loans	38	3.21	1.36
3. Credit monitoring has enabled our bank to reduce the amount of bad debts written off.	38	4.45	0.32
4. Credit monitoring has enhanced the performance of loans advanced to our clients.	38	4.76	0.18

Source: Survey data (2022)

As per the Table 4.4, the results are as follows: provision for bad debts (M = 4.99, S.D = 0.01), regarding provisions for bad debts and their effects on loan performance (M = 3.21, S.D = 1.36). As credit monitoring the results are as follows (M = 4.45, S.D =0.32) while credit monitoring and loan performance (M =4.76, S.D = 0.18). The results imply that credit monitoring helps the commercial banks to improve their loan performance.

Based on the assessment findings presented in Table 4.4, a convergence is evident with Branzoli and Fringuellotti's (2020) that credit monitoring improves loan repayments. Similarly, Migwi (2013) found that loans are monitored for safeguarding payments, implying that banks are keen on loan repayment for them to incur minimal losses. However, Idris and Nayan (2016) established that loan monitoring has a significant positive moderation influence with the association between NPLs and macroeconomic variables.

4.4 Inferential Statistics

The application of inferential analysis determined the relationship between the independent variable of credit management practices and the dependent variability of loan performance. The dependent variable of loan performance was regressed against the independent variation of credit management practices. Multiple regression model was used to determine the effect and association between the four predictable variables, which are variables under the credit management practices include credit rationing, client appraisal, debt collection, and credit monitoring.

4.4.1 Regression Model Summary

The model summary presents information about the regression line's ability to reverse rotation complete variation of dependent variations. The section shows the links between two variables (R). Table 4.5 presents the findings are presented.

Table 4.5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.759[a]	.5761	.5185	.108

a. Predictors: (Constant), credit rationing, client appraisal, debt collection, credit monitoring

b. Dependent variable: loan performance

Source: Survey Data (2022)

The findings shown in Table 4.5 show that the predictions in the model provide a positive correlation (R = 0.759) with performance. The coefficient of determination (r^2) from Table 4.5 is 0.5761. It means that the independent variability of the coefficient represents 57.61 percent variance. The remaining 42.39 percent can be explained by other indicators, left out of the experiment.

4.4.2 Analysis of Variance

Diversity analysis shows the relationship between these two variables. This section indicates the number p (“sig” for “importance”) of the prediction effect on the subject flexible. P values below .05 are generally considered to be “statistically significant. In this, the relationship between credit management practices and loans performance was determined. Table 4.6 presents the results.

Table 4.6: ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	61.234	2	30.617	23.912	.001[b]
Residual	17.112	35	.489		
Total	78. 346	37			

Source: *Survey data (2022)*

a. Dependent variable: loan performance

b. Predictors: (Constant), credit rationing, client appraisal, debt collection, credit monitoring

From the Table 4.6 ANOVA result, 0.001 probability ([b]) was obtained, which means that the regression model was important in predicting the relationship between credit management practices and loan performance. Independent variables used to explain this link. The F scale is used to test whether R^2 can have it or not it happened by chance alone. The F value found in the ANOVA measures the chances of departure from a straight line. Credit management practices and loan performance implies that this relationship is superior to $\alpha = 0.05$. With the use of Table F, Table F (5%, 2, 27) was lower F = 23.912 which also indicated that the model was significant.

4.4.3 Test of Co-efficients

The section shows the beta coefficient of actual regression equation. The attention is on "irregular coefficients," because this phase includes the y-intercept noun (beta zero) and diminishing term (beta one). "Normal coefficients" no based on the re-measurement of the variable so that the y-intercept equals zero.

Table 4.7: Regression coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.207	.527		1.102	.001
Credit rationing	.356	.031	.362	3.534	.001
Client appraisal	.408	.052	.317	3.098	.001
Debt collection	.445	.063	.271	2.872	.000
Credit monitoring	.312	.057	.174	3.112	.001

a. Dependent variable: loan performance

Source: *Author (2021)*

Based on the results, the following regression model was obtained.

$Y=0.207 + 0.356X_1+ 0.408X_2+ 0.445X_3 + 0.312X_4+ e$

Meaning;

Where: Y = loan performance;

$\beta 0$ = constant;

X_1 = credit rationing,

X_2 = client appraisal

X_3 = debt collection

X_4 = credit monitoring

$\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficients of credit management practices

ε = error term

Based on the retrospective results shown in Table 4.7 considering all types of credit management practices with a constant zero, loan performance would be 0.207. Keeping some of the variables unchanged, an increase in unit on credit rationing could lead to an increase in loan performance by 0.356. In addition, a unit increase in the client appraisal could lead to an increase in loan performance by 0.408; the debt collection of the unit increase would lead to an increase in loan performance by 0.445, and an increase in the credit monitoring would lead to an increase in loan performance by 0.312. The analysis also found that at 95 percent confidence level, the p-value for credit rationing (p-value = 0.001) was less than 0.05 that led to the rejection of the formulated hypothesis that credit rationing does not significantly affect loan performance of commercial banks. Similar results were found for client appraisal practice (p-value = 0.001), debt collection (p-value = 0.000), and credit monitoring (p-value = 0.001). This showed that at 95% confidence level, null hypothesis for client appraisal, debt collection, and credit rationing practices were rejected. This led to the conclusion that client appraisal practice, debt collection practice and credit rationing practices have significant effect on the loan performance of commercial banks in Kenya.

The findings of this study were in agreement with Kisaka (2016), Ata *et al*. (2015) and Absanto and Aikaruwa (2013) that credit rationing positively and significantly affect loan performance. Mulyungi and Mulyungi (2020), Njeru, Mohamed and Wachira (2018) and Aliija and Muhangi (2017) found that credit appraisal practice significantly affects loan performance which is similar to the findings of the current study.

The findings of the current study also agrees with those of Kipsang (2020) and Wandera (2017) which found that debt collection practice significantly affect the performance of financial institutions. Additionally, the findings of the current study agrees with that of Idris and Nayan (2016) and Migwi (2013) that credit monitoring significantly affects loan performance of financial institutions.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

The main objective of this study was to obtain the outcome of credit management practices and loan performance of commercial banks in Kenya. The chapter introduces the results of summary, conclusion recommendations, and suggestions for further research.

5.2 Summary of the study

The study sought to investigate the effect of credit management practices, including credit rationing, client appraisal, debt collection, and credit monitoring on the loan performance of commercial banks in Kenya. Descriptive survey design was employed targeting all the 38 commercial banks in the country. Primary data on credit management practices was collected using questionnaires while secondary data on loan performance was collected using document review guide. Data analysis was carried out with the help of descriptive and inferential statistics. The study results were presented, interpreted, discussed and summarised as per the study objectives.

The first objectives was to determine the effect of credit rationing practice on the loan performance of commercial banks in Kenya. The study hypothesised that credit rationing practice does not affect loan performance of commercial banks in Kenya. The hypotheses was rejected since the p-value was less than the threshold indicating that credit rationing practice has a significant effect on the loan performance of commercial banks in Kenya. The findings of the study show that most respondents believe the credit rationing is one of the credits the management practices in place in their banks and that this has had a significant impact on loan performance at commercial banks in Kenya. This meant that the respondents understood and recognized the importance of having debt management practices in place, and the impact this has on the performance of their loan businesses.

The second objective was to establish the effect of client appraisal practice on loan performance of commercial banks in Kenya. The study hypothesised that client appraisal practice does not affect loan performance of commercial banks in Kenya. The hypothesis was rejected since the p-value was significant. This led to the conclusion that client appraisal practice significantly affects the loan performance of commercial banks in Kenya. Client appraisal proved that most respondents believe that there is a credit policy in place in their banks and that this has had a significant impact on their loan performance, at moderate levels. This meant that respondents also understood they have recognized the importance of having a client appraisal, and the result of this affects the performance of their loan businesses.

The third objective was to determine the effect of debt collection practice on loan performance of commercial banks in Kenya. The formulated hypothesis was that debt collection practice does not significantly affect loan performance. Findings showed that the majority of respondents agreed that the debt collection has a significant impact on loan performance. This meant that respondents realized the importance of having an efficient debt collection policy to help direct collection processes loans issued to borrowers, and how it affects the performance of loans in commercial banks in Kenya.

The fourth objective was to establish the effect of credit monitoring practice on loan performance of commercial banks. The study hypothesised that credit rationing practice does not affect loan performance. Formulated hypothesis was rejected indicating that credit rationing significantly affect loan performance of commercial banks in Kenya. Most respondents believed that the credit level is one of the credits the management systems in place in their banks and that this has had a significant impact on loan performance at commercial banks in the country. This meant that the respondents understood and recognized the importance of having credit monitoring in place, and the impact this has on the performance of their loan businesses. Based on the regression results, credit management practices have a positive and significant effect on loan performance of commercial banks in Kenya. Credit rationing has ($B=0.356$, $p=0.001<0.05$), client appraisal ($B=0.408$, $p=0.001<0.05$), debt collection ($B=0.445$, $p=0.000<0.05$), and credit monitoring ($B=0.312$, $p=0.001<0.05$).

5.3 Conclusion

Based on the findings, the study made conclusions on the basis of the formulated objectives and hypothesis. The study concluded that credit management practices significantly affect the loan performance of commercial banks in Kenya. Accordingly, loan performance of commercial banks depends on credit management practices. Secondly, the study concluded that credit rationing practice significantly affect loan performance of commercial banks. The study also concluded that debt collection has significant impact on loan performance of commercial banks. This means that it is better to collect debt. The shorter debt collection period would lead to improved performance of commercial bank loans. The study further concluded that client appraisal has a significant effect on credit performance of the banking sector. This indicates that the development of client appraisal would improve the performance of loans in the banking sector. The study concluded again that credit rationing has a significant impact on the performance of commercial bank loans. This means that the development of effective credit rationing could lead to the development of loans banking sector performance.

5.4 Recommendations

The study made several recommendations based on the findings. The suggestions would guide policy formulation and practice.

5.4.1 Recommendations for Policy

Policymakers and regulators of the commercial banking sector should design effective policies to promote loan performance of these banks. The Central Bank of Kenya as well as Kenya Bankers Association should borrow the study findings to make decisions to improve loan performance also referred to as the asset quality of these banks. Policy decisions of tax rebates and tax exempt on training costs on the implementation of new credit management practices should be developed based on assessment findings.

5.4.2 Recommendations for Practice

Commercial banks' management in the country should borrow the study results to establish the most significant credit management practices. The managers should also identify the loan performance determinants influenced by credit management practices under assessment. The understanding of how credit management practices relates to loan performance should enable commercial banks to implement the most effective credit management practices for better loan performance. The findings should also be replicated to other financial institutions in the country.

The analysis recommended that all commercial banks in Kenya should regularly check and update the practices relating to debt collection, client appraisal and as well as credit monitoring to ensure that all credit risks of loan defaults and non-performing loans are identified and recorded by the credit department at the institutional level. Further, the analysis also recommended that commercial banks should have an independent internal control system to operate further evaluation of bank debt collection, client appraisal procedures, and credit monitoring system. In addition, commercial banks must develop suitable customer appraisal ways to reduce loan default risk. A proper customer credit plan should also be available based on their ability to repay their debt as well as customer loyalty. The commercial banks should also monitor emerging risks associated with credit management practices to limit adverse effects on loan performance.

5.5 Limitation of the study and suggestions for further Research

Further assessment should be done to determine the correlation between customer's credit worth, financial information, and loan performance of commercial banks in Kenya. The study findings are hypothesised to generate more insight on the effect of accurate client credit rating on loan performance of commercial banks.

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APPENDICES

Appendix I: List of Commercial Banks in Kenya

1. UBA Kenya Bank
2. The Co-operative Bank
3. Suntra Investment Bank
4. Sterling Investment Bank
5. Standard Investment Bank
6. Standard Chartered
7. Prime Bank
8. Paramount Bank
9. Oriental Commercial Bank
10. NIC Bank
11. ABC Bank
12. National Bank
13. K-Rep Bank
14. KCB Bank
15. Investments & Mortgages Bank Limited – I&M Bank
16. Imperial Bank
17. Guardian Bank.
18. Giro Commercial Bank
19. Fina Bank
20. Fidelity Bank
21. Faida Investment Bank – FIB

22.	Equity Bank
23.	Equatorial Investment Bank
24.	Equatorial Commercial Bank
25.	Dyer & Blair Investment Bank
26.	Dubai Bank Kenya
27.	Dry Associates
28.	Development Bank Of Kenya
29.	Co-operative Bank
30.	Consolidated Bank
31.	Commercial Bank of Africa
32.	Citibank N A
33.	CFC Stanbic Bank
34.	Bank of Baroda (Kenya).
35.	Bank of Africa Kenya
36.	Afrika Investment Bank
37.	African Development Bank Group
38.	African Banking Corporation

Source: CBK (2020)

Appendix II: Questionnaire

Part A: General information of respondents

1. Name of Bank

----

2. Designation

----

3. Years of service in the bank

0-4 [ ]

5-9 [ ]

10-14 [ ]

15-19 [ ]

20+ [ ]

Part B:

Show your level of agreement in the table below by ***ticking*** in the column. The ratings range from 1 to 5 as follows:

5: Strongly Agree; 4: Agree; 3: Undecided; 2: Disagree; 1: Strongly Disagree

Statement	**5**	**4**	**3**	**2**	**1**
Credit Rationing:					
1.The limit put for the maximum amount of loan advanced determine the success of our loan repayments					
2. Interest rate charged on loans affects the performance of loans					
3. Our interest rate has contributed to high default rates of loan repayments					
4. The threshold for loans advanced by our bank has locked out clients from taking loans with us					
Client Appraisal:					
5. Amount of loan granted by our bank determines our loan performance					
6. Actual loan repayment is influenced by our clients' individual character.					
7. Client appraisal has enabled our bank to have fewer outstanding loans					
Debt Collection:					
8. Average collection period for loans advanced has significantly reduced in our bank					
9. A shorter average collection period has driven the success of our loan performance					
10. Our bank experiences a high debtor's turnover					
11. A favourable loan performance is driven by our debtor's turnover					
Credit monitoring:					
12. Our bank has made a provision for bad debts					

13. The provision for bad debts has severely affected the performance our loans					
14. Credit monitoring has enabled our bank to reduce the amount of bad debts written off.					
15. Credit monitoring has enhanced the performance of loans advanced to our clients.					

Appendix III: Document Review Guide

Loan performance

Item/Year	2018	2019	2020
Defaulted loans			
Total loans advanced			

Appendix IV: Research Approval

KENYATTA UNIVERSITY
GRADUATE SCHOOL

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P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School

DATE: 20th January, 2022

TO: Geoffrey Obae
C/o Accounting & Finance Dept.

REF: D53/NKU/PT/21759/2010

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 19th January, 2022 approved your Research Project Proposal for the MBA Degree Entitled, **"Credit Management Practices and Loan Performance of Commercial Banks in Kenya".**

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

KENYATTA UNIVERSITY OFFICE OF DEAN 24 JAN 2022

HARRIET ISABOKE
FOR: DEAN, GRADUATE SCHOOL

c.c. Chairman, Accounting and Finance Department.

Supervisors:

1. Dr. Ambrose Jagongo
   C/o Department of Accounting and Finance
   Kenyatta University

HI/nn

Appendix V: Research authorization

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: D53/NKU/PT/21759/2010

DATE: 20th January, 2022

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR GEOFFREY OBAE REG. NO. D53/NKU/PT/21759/2010

I write to introduce Mr. Geoffrey Obae who is a Postgraduate Student of this University. He is registered for MBA degree programme in the **Department of Accounting and Finance.**

Mr. Obae intends to conduct research for a MBA Project Proposal entitled, **"Credit Management Practices and Loan Performance of Commercial Banks in Kenya".**

Any assistance given will be highly appreciated.

Yours faithfully,

KENYATTA UNIVERSITY OFFICE OF DEAN
24 JAN 2022
GRADUATE SCHOOL

PROF. ELISHIBA KIMANI
DEAN, GRADUATE SCHOOL

EK/nn