IMPACT OF LOANS MANAGEMENT ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN RWANDA A CASE OF BANK OF KIGALI GROUP PLC (2020-2023)

By

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DECLARATION

Thesis titled "**Impact of Loan Management on the financial Performance of Commercial Banks in Rwanda**" is my original work, it has never been submitted before for any other degree award to any other University.

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APPROVAL

Thesis titled "**Impact of Loan Management on the financial Performance of Commercial Banks in Rwanda"** has been done under my (our) supervision and submitted for examination with my approval.

Name: Dr. Roger MUGABE

Sign: _____   **Date:** _____

DEDICATION

To my beloved Wife,

To my Parents

To my Beloved Brothers and Sisters.

ACKNOWLEDGEMENTS

I acknowledge this project to the glory of Almighty God, the Lord of Universe for giving me the grace and for making it possible for me to successfully complete this project.

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MUTANGANA Olivier

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LIST OF ACRONYMS, ABBREVIATION AND SYMBOLS

ANOVA   **:** Analysis of Variance

BK   **:** Bank of Kigali

BNR   : Banque National du Rwanda

BNR   : Banque Nationale du Rwanda

CRB   : Credit Reference Bureau

LTD   : Limited

M   **:** Mean

MINECOFIN: Ministry of Finance and Economic Planning

ROA   : Return on asset

ROE   : Return on equity

RWF   : Rwandan Francs

SD   **:** Standard Deviation

SPSS   **:** Statistical Product and Service Solutions

ULK   :Université Libre de Kigali

%   :Percentage

&   **:** And

ABSTRACT

The general objective of this study was to assess the impacts of the loans management to the financial performance of commercial banks in Rwanda with reference of Bank of Kigali during the period from 2020 up to 2023. This study has the following specific objectives: Assessing the effectiveness of loans management in Bank of Kigali, assessing financial performance in Bank of Kigali, and assessing the impact of Loan management practices on the financial performance of Bank of Kigali. The research used explanatory research design to analyze the data collected throughout financial reports of the Bank of Kigali Plc and multiple regression analysis was used for hypotheses testing. The secondary data collected from the financial statements of Bank of Kigali Plc, in a 4 years period (2020-2023), formed the base of statistical analysis using the SPSS version 27. In assessing the loan management practices within the Bank of Kigali Plc, From 2020 to 2023, Bank of Kigali's loan management practices showed significant trends in the Non-Performing Loan (NPL) Ratio and Loan Recovery Rate. In 2020, the NPL Ratio was high, but the Loan Recovery Rate was low. By 2021, the bank improved its loan management practices, reducing the NPL Ratio to 0.05 and increasing the Loan Recovery Rate to 0.07. In 2022, the NPL Ratio decreased to 0.03, and the Loan Recovery Rate increased to 0.31. Despite a slight increase in non-performing loans in 2023, the Bank maintained a strong recovery rate. In assessing the financial performance within the Bank of Kigali Plc, The bank's Return on Equity (ROE) and Return on Assets (ROA) have shown an upward trend, indicating improved profitability. The Current Ratio (CUR) has remained stable, indicating good liquidity management. The Capital Adequacy Ratio (CAR) fluctuated slightly, but remained above regulatory requirements. The Debt-to-Equity Ratio increased from 4.08 in 2020 to 5.16 in 2021, and slightly decreased to 4.80 in 2023. The Cost-to-Income Ratio increased slightly from 0.44 in 2020 to 0.49 in 2022, and the Asset Turnover Ratio improved from 0.08 in 2020 to 0.11 in 2023. The results from regression model 1 shows that the coefficient of determination (R square) was 0.718. This implies that the predictors of Loan management practices contribute 52.8% on the financial performance in Bk Group PLC. The F-test is 4.831 and is significant at .000. Based on the result showed from the result of objectives, it was concluded that loans management policy in Bank of Kigali are effective, that loan recovery rates in Bank of Kigali are effective. That financial performance in Bank of Kigali is good, and that there is a significant impact of Loan management practices on the financial performance of Bank of Kigali. Based on the analysis of Bank of Kigali's loan management practices from 2020 to 2023, it is recommended that the bank continue to strengthen its loan management and recovery strategies, particularly focusing on maintaining a low Non-Performing Loan (NPL) Ratio while further improving its Loan Recovery Rate. 2.Based on the financial performance of Bank of Kigali from 2020 to 2023, it is recommended that the bank continue to focus on maintaining and enhancing its profitability, as indicated by the positive trends in ROE and ROA.

Key words: loans management, financial performance, commercial banks

CHAPTER 1: GENERAL INTRODUCTION

The primary components of chapter one, including the study's background, problem statement, objectives, research questions, hypothesis, scope, significance, and structure, are largely intended to be demonstrated in this chapter.

1.1. Background of the study

All enterprises, including commercial banks, cooperatives, financial institutions, and others, benefit from the loans offered by international commercial banks in Europe, America, Asia, and Africa, claims Taylor (2015). These providers target distinct sub-segments within the corporate landscape and have varying capacities and motives. The majority of commercial banks, such as Barclays Bank in England, are considering small businesses because they present more chances for business expansion. The commercial banks' wish to keep serving a select group of expanding micro clients is another driving force. The creation of a business plan, monthly cash-flow forecasts, audited books of accounts, and a history of the company's banking transactions are essential prerequisites for gaining access to the majority of official sources of funding (Washington, 2016).

In order for banks to succeed financially, the role of loan management is to establish a set of uniform policies and procedures for their lending operations. The sustainability of the central banks in Africa, including the Central Bank of Ghana, the National Bank of South Africa, the Central Bank of Nigeria, and the National Bank of Rwanda, depends on their ability to manage loans. In order to achieve sustainability of loan risks, the commercial banks in Africa must expand their outreach and expand their group loan management.

How to attain and sustain the intended rate of economic growth of the African populace is the dilemma facing the majority of commercial banks in Africa. A bank can succeed in that

regard, develop a product strategy for managing loans, establish itself as a successful and competitive bank, and support the growth of banks generally (World Bank, 2015).

In order to finance their company investment efforts, businesses frequently need to borrow money. These are a few examples of the loans that a company may obtain. One type of debt-based funding arrangement that a firm can establish with a financial institution is a commercial loan. Large capital expenditures and/or operations that a firm might not otherwise be able to afford can be funded with the proceeds of commercial loans. Typically, this kind of loan has a brief duration and is nearly always secured by collateral. A term loan is a bank loan of a certain amount with a variable interest rate and a predetermined payback period. The typical maturity period for term loans is one to ten years. Term loans are used by businesses to buy fixed assets like production equipment or for ongoing operations (Arnold, 2016).

The benefit of a line of loan over a traditional loan is that the borrower can access the line of loan whenever they choose, and interest is often only assessed on the portion of the line of loan that is utilized. The loan line may be categorized as a demand loan, which requires that any unpaid debt be paid right away at the financial institution's request, depending on the terms of the arrangement (Horsley, 2016).

The majority of Bank of Kigali's loans to individuals are obtained through direct requests for loan policy statements made to loan seekers who come to the bank and request to complete the loan application in order to improve financial performance through efficient loan management. On the other hand, business loan requests frequently result from contacting the bank's market area.

Before the customer eventually decides to offer the bank by completing a loan application, loan officials may call the business for months.

When visiting a prospective new client's place of business, the majority of bank loan staff create a customer contract report. Before any additional human interactions are made, this is updated following each subsequent visit, providing the next loan officer with vital information about a potential client. The client's apparent lack of sincerity in admitting the importance of following the loan's terms must be noted as a significant deterrent to the loan request's approval. The applicant may receive guidance on alternative funding sources from the lending officer (Bank of Kigali, 2018).

1.2. Problem statement

Because depositor deposits account for almost 85% of the banking industry's liabilities, the industry is extremely delicate. These deposits are used by banks to create loans for their customers, which is actually how the majority of banks make money. Banks are exposed to a high default risk during this loan generation process, which could result in financial difficulties, including bankruptcy. Nevertheless, in addition to providing other services, banks must issue loans to their customers in order to generate revenue, expand, and endure fierce competition in the marketplace. Commercial banks' loan management is well recognised; the risk is assumed when a loan debtor defaults on a contractual commitment. Commercial banks' losses from outstanding loans have the potential to force them into insolvency and eventual closure. The lender may conduct a loan check on the potential borrower, demand that the borrower obtain the necessary insurance, such as mortgage insurance, or look for security over some of the borrower's assets or a guarantee from a third party in order to lower the lender's risk associated with loan management.

Additionally, the lenders have the option to sell the loan to another business or get insurance against the risk. Generally speaking, the interest rate that the debtor was required to pay on the debt increased with the level of risk.

The primary cause of loan management is when borrowers are unable to make timely or untimely payments. Borrowers' inability to repay long-term loans is one of Bank of Kigali's biggest concerns; another is the adoption of subpar methods and management systems by borrowers. Nonetheless, there is proof that the expansion of commercial banks created a competitive climate that increased credit extensions. More money was lent during a period of increased competition, which had a mild impact on bank loan policies.

1.3. Objectives of the study

The study has two kinds of objectives: general objective and specific objectives.

1.3.1 General Objective

This study's main objective was to evaluate the effects of loan management on Rwandan commercial banks' financial performance, specifically focusing on Bank of Kigali, between 2020 and 2023.

1.3.2 Specific objectives

1. Evaluating Bank of Kigali's loan management efficacy.

2. Evaluating Bank of Kigali's financial results between 2020 and 2023.

3. Evaluating how loan management procedures affect Bank of Kigali's financial results.

1.4. Research questions

The study aimed to respond to the following queries:

1. How well does Bank of Kigali manage loans?

2. What was the performance of Bank of Kigali between 2020 and 2023?

3. How do loan management procedures affect Bank of Kigali's financial results?

1.5. Research hypothesis

1. Bank of Kigali's loan management is efficient.

2. Bank of Kigali is doing well financially.

3. The financial performance of Bank of Kigali is not significantly impacted by loan management procedures.

1.6. Scope of the study

The study's scope was separated into three categories: domain, geography, and time.

1.6.1. Domain scope

Through loan management, the study was conducted in the financial field especially in course of Loan management.

1.6.2. Geographical scope

The investigation was limited to the Bank of Kigali, which is situated in Kigali, Rwanda's Nyarugenge District. I chose BK Main branch because it's where i hope to get data .

1.6.3.Time scope

The study was conducted between 2020 and 2023, a span of four years. This period was used due to the availability of data.

1.7. Significance of the study

In order to effectively deploy skilled staff to apply the proposed procedures where they are required to be employed, the research helped managers and top officials involved in planning comprehend the influence of loan management on Bank of Kigali's financial performance. The significance is divided into the study's socio-interest as well as individual, academic, and scientific interests.

1.7.1. Personal interest

The researchers had a fantastic opportunity to learn more about how loan management affected Bank of Kigali's financial performance thanks to this study. In addition to providing a practical education on how bank services might enhance the quality of life for customers, it supplemented the researchers' theoretical information that they had learnt in class.

1.7.2. Academic and scientific interest

The completion of this work satisfies the academic standards, which state that in order to receive a Master's degree with honors in Finance, a student must complete the offered Masters program of courses, perform research, and prepare and deliver a dissertation. Scientists and upcoming researchers were given pertinent knowledge by this effort that allowed them to carry out additional research in this area.

1.7.3. Social interest

The purpose of this study was to help borrowers comprehend how bank loan management affects them. The findings of this study were applied by Bank of Kigali to enhance loan services provided to clients, assisting them in achieving personal and national growth.

1.8. Structure of the study

The thesis was broken up into five chapters in addition to the general introduction:

In the first chapter, general introductory statements are covered, such as the study's background, goals, problem statement, research questions, significance, and scope. The second chapter reviewed previous research from a global perspective and looked at relevant literature reviews that introduced concepts, hypotheses, and models. The research design and methodology, including the target number to be analyzed, statistical design, data collecting, and analysis, were explained in Chapter 3.

Chapter 4 presented the interpretation of the research findings, and Chapter 5 concluded the paper by summarizing the previous discussions and drawing conclusions. In light of these findings.

CHAPTER 2: LITERATURE REVIEW

The study of the literature on loan management and financial performance is the main objective of this chapter. A definition of some of the important terminology utilized in the study is given first. This literature review's main objective is to evaluate previous research on the subject at hand. This allowed for a deeper understanding of the subject and made it easier to comprehend the results. This literature has been sourced from scholarly publications, the internet, periodicals, newspapers, newsletters, and more.

2.1. Review of Concepts

This focuses on understanding concepts, theories and framework.

2.1.1. Credit

A loan is a sum of money given to another person with the understanding that the value or main amount was repaid in the future. The borrower is required to return the principal amount plus interest and/or finance charges, which are frequently added by the lender. Loans can be available as an open-ended line of credit up to a certain maximum, or they might be for a fixed, one-time sum. There are numerous types of loans, including as personal, business, secured, and unsecured loans (Julia Kagan, 2020).

2.1.2. Administration of loans

Loan management is a strategy that uses a variety of tactics to ensure that purchasers (borrowers) make their payments on schedule, that loan costs are maintained low, and that bad debts are handled such that payments are made without destroying the buyer-lender relationship. The effective control and coordination of the amount to be lent out in order to maintain the loan and the investment in the loan at the best possible level is another definition of loan management (Mathieu M., 2019).

The likelihood of suffering a loss as a result of a borrower's failure to make payments on any kind of debt is referred to as loan management. Understanding the sufficiency of a bank's capital and loan loss reserves at any one time is the practice of loan management, which has long been a problem for financial institutions. Loan management is a strategy that uses a variety of tactics to ensure that borrowers make their payments on schedule, that loan costs are maintained low, and that bad debts are handled such that payments are made without destroying the buyer's relationship. The effective control and coordination of the amount to be lent out in order to maintain the loan and the investment in the loan at the best possible level is another definition of loan management (Sean Ross, 2020).

A crucial procedure in commercial banking is loan management, which entails evaluating, awarding, and overseeing loans to guarantee efficient payback and reduce risks. Well-designed loan management systems are crucial for protecting lending institutions' financial stability by lowering loan default rates and improving asset quality, claim Nsengiyumva and Harelimana (2020). According to Chege et al. (2018), it includes a variety of tasks such as evaluating credit, establishing repayment plans, and regularly keeping an eye on loan portfolios. In addition to reducing risks, effective loan management promotes banks' long-term financial expansion.

The function that loan management plays in preserving commercial banks' liquidity, profitability, and operational effectiveness makes it significant. Effective loan management techniques, like thorough credit appraisal and regular follow-ups, have a direct impact on banks' financial success, according to research by Bwoma et al. (2017). Additionally, banks can optimise resource allocation while complying with regulatory requirements by effectively managing loan portfolios (Thiong & Kiama, 2018). Successful credit management techniques

support the preservation of client stability and trust, both of which are essential to a bank's long-term competitiveness, according to Obae and Jagongo (2022).

Poor loan management can have serious consequences, including increased non-performing loan (NPL) levels, decreased profitability, and systemic concerns. According to Gabriel et al. (2019), NPLs have a major negative impact on banks' financial performance since higher bad loan provisioning reduces capital buffers. In a similar vein, Serwadda (2018) discovered that Ugandan banks' insufficient credit risk management systems resulted in lower revenue and slower growth. More generally, recurring loan defaults can damage a bank's standing and restrict its access to outside capital, according to Moseti (2021). According to Rukundo (2018), proactive approaches to late loan resolution and credit monitoring are essential for enhancing loan performance and guaranteeing financial sustainability.

2.1.2.1 Ratio of Non-Performing Loans (NPL)

A key metric in loan management is the Non-Performing Loans (NPL) ratio, which calculates the percentage of a bank's loans that are in default or near default, usually following a borrower's failure to make payments for ninety days or longer. The NPL ratio is a crucial indicator for evaluating credit risk and the calibre of a bank's loan portfolio, according to Nsengiyumva and Harelimana (2020). High non-performing loan (NPL) percentages indicate that a sizable percentage of loans are non-performing, which is indicative of subpar credit monitoring and evaluation procedures. The NPL ratio is crucial for preserving the financial stability of commercial banks and is a key indicator of how well banks are running their lending operations (Chege et al., 2018). A reduced NPL ratio suggests that a bank is successfully managing its loans, which raises profitability and operational effectiveness, claim Gabriel et al. (2019). Banks can take corrective action before financial instability occurs because it acts as an early warning system.

Thiong and Kiama (2018) stress that in order to make sure banks preserve their financial stability and safeguard depositor money, regulatory bodies frequently keep an eye on NPL ratios. By guaranteeing sustainable lending practices, effective NPL management not only stabilises the bank's operations but also promotes overall economic growth.

The performance and reputation of a bank are significantly impacted by a high non-performing loan ratio. According to Rukundo (2018), a rise in non-performing loans (NPLs) results in increased bad debt provisioning, which lowers profitability and makes it more difficult for banks to lend. Furthermore, Moseti (2021) points out that ongoing non-performing loan problems can undermine shareholder trust, which makes it harder for banks to draw in investments. Moreover, unresolved NPLs can cause liquidity problems that force banks to rely on expensive external borrowing, according to Obae and Jagongo (2022). These difficulties highlight how crucial strict credit risk management procedures are to maintaining financial performance and lowering NPL ratios.

2.1.2.2 Rates of Loan Recovery

The percentage of the loan amount that is retrieved from borrowers upon default is known as the loan recovery rate. They show how well a bank's recovery procedures—such as restructuring agreements, collateral liquidation, and legal enforcement procedures—are working (Bwoma et al., 2017). Strong credit management methods are demonstrated by a greater loan recovery rate, which shows that the bank can recover a sizable amount of its funds even in the event of defaults. According to Nsengiyumva and Harelimana (2020), loan recovery rates are a standard by which to measure the effectiveness of commercial banks' debt collection tactics.

Sustaining a bank's liquidity and profitability requires high loan recovery rates. Effective recovery procedures enable banks to reduce bad debt losses, freeing up funds for more

lending and investment, claims Serwadda (2018). In order to maintain financial stability, they also improve the bank's capacity to meet regulatory capital requirements. According to Chege et al. (2018), strong recovery rates help improve asset quality, which in turn increases investor confidence and permits long-term expansion. Banks can strengthen their bonds with borrowers and promote payments while deterring defaults by concentrating on recovery.

A bank's operations and financial health are severely harmed by low loan recovery rates. Low recovery rates raise the percentage of bad loans, which lowers overall profitability and puts pressure on a bank's capital reserves, according to Thiong and Kiama (2018). Ineffective recovery systems can also result in lengthy legal challenges and extra expenses, further taxing the bank's resources, according to Gabriel et al. (2019). Furthermore, low recovery rates damage the bank's reputation and make it more difficult to draw in new clients and investors, as noted by Moseti (2021). These ramifications highlight how important it is to have strong recovery plans in order to improve financial performance and reduce risks.

2.1.3. Results in terms of finances

A summary of the business's revenue and expense generation from both operational and non-operating activities is used to evaluate financial performance. Additionally, it displays the net profit or loss for a given accounting period, usually a fiscal quarter or year. One of the three main financial statements is the income statement. The statement of cash flows and the balance sheet are the other two. The operational and non-operating divisions make up the two sections of the income statement (Weygandt K., 2016).

In order to assess if a firm, project, budget, or other finance-related entity is suitable for investment, financial analysis is usually done to establish whether the entity is stable, solvent, liquid, or profitable enough to warrant investment. Financial analysts frequently concentrate on the cash flow, balance sheet, and income statement when examining a particular business.

Furthermore, projecting the company's historical performance to predict its future performance is a crucial component of financial analysis (Peter K., 2017).

Good Lending Quality

The goal of credit management, according to Murali (2012), is to guarantee that the funds provided are returned on time and without default. The client's choice becomes crucial in order to guarantee this. A merchant used to employ the "3cs of lending," which stand for character, capacity, and capital, while deciding whether to sell products on credit to a new prospect. These criteria are applicable to banks as well. Collateral, conditions, and credit history are the three additional Cs that have been added over time. Therefore, the lender must use these six Cs to assess any prospect.

Character: the customer should be a decent person. We are all aware that character is a very hard quality to assess and is not readily quantifiable. Speaking with a person's friends, business associates, and other acquaintances can reveal a lot about their character.

Capacity: even if a potential customer is a very honest businessman with excellent character, he may lack the necessary abilities to perform the work. He should possess entrepreneurial skills, such as understanding business procedures, taking risks with products, and coming up with ways to outperform rivals. According to Oliver (2004), the business he plans to launch should be profitable and produce enough cash flows.

Capital: Until an individual has invested their portion of money in the firm, they will be more committed to any endeavour they do. If the client does not contribute any money to the business, this is referred to as capital or owners' take. This is known as capital or owner's take. If the client made no investment and the bank financed the entire amount, there is a possibility that the business will not be operated competently (Arnold, 2004).

The term "collateral" literally refers to something that is subordinate but supplementary.In the context of banking, it refers to obtaining additional security beyond the core securities, which are assets derived from bank credit. A bank may pledge shares and securities, hypothecate movable property, mortgage the property, or take other forms of collateral security.

Conditions: The country's political stability, product demand, industry prospects, raw material availability, infrastructure facilities, etc. are all considered conditions.

Credit History: what is the client's historical history of nonpayment of credit from the same bank or other banks, credit card defaults, etc.? Information from the recently established Credit Information Bureau of India Ltd. (CIBIL) might be helpful in determining the proponent's credit history. (Crouhy, 2005).

2.1.3.1 Financial Profitability

The ability of a bank to earn a profit from its activities is known as financial profitability, and it is commonly assessed using important metrics like return on equity (ROE) and return on assets (ROA). These measurements evaluate how well a bank uses its assets and resources to produce returns for shareholders. Profitability is a crucial indicator of a bank's long-term viability and financial health, claim Bwoma et al. (2017). It shows how well a bank can make money from its main business (lending and deposit-taking) as well as from supplementary services like fees and investments.

Return on Equity (ROE), which gauges profitability in relation to shareholders' equity and demonstrates how well the bank uses shareholder capital to turn a profit, is especially important. Comparably, the bank's ability to produce a profit from all of its assets is evaluated by Return on Assets (ROA), which shows how effectively resources are used to create value

(Chege et al., 2018). A bank with high profitability can recruit investors, maintain its competitiveness, and finance expansion plans.

A popular indicator of financial performance, return on equity (ROE) assesses how well a bank uses the equity of its shareholders to produce profit. According to Nsengiyumva and Harelimana (2020), ROE is the profitability produced per unit of invested equity and is calculated as the ratio of net income to shareholders' equity. This indicator is crucial for determining how well a bank generates value for its investors. According to Gabriel et al. (2019), a high ROE is a sign of sound financial management and profitability, which attracts stakeholders and possible investors.

When evaluating a bank's competitiveness and financial sustainability, ROE is essential. A continuously high ROE indicates efficient use of resources, which increases investor confidence and improves a bank's capacity to draw in more equity financing, claims Rukundo (2018). According to Chege et al. (2018), ROE facilitates strategic decision-making by acting as a standard for evaluating financial performance across institutions and geographical areas. Furthermore, ROE is a crucial metric that regulatory bodies use to assess the stability and profitability of commercial banks in the financial system, according to Bwoma et al. (2017).

Consequently, return on equity is equal to net profit divided by shareholders' equity (100).

A low ROE may put off investors since it shows inefficiencies in the use of shareholder funds. According to Moseti (2021), low credit management techniques, including a large percentage of non-performing loans, are frequently the cause of lowering ROE since they lower net income. Furthermore, according to Obae and Jagongo (2022), a bank's market position may be weakened by a consistently low ROE, which would restrict its capacity to grow and effectively compete. According to Thiong and Kiama (2018), changes in ROE may indicate financial instability and lead authorities to look into underlying operational

problems. These ramifications highlight how crucial sound lending and financial management procedures are to maintaining stable ROE levels.

A financial indicator called return on assets (ROA) assesses a bank's capacity to produce a profit in relation to its total assets. It represents the effectiveness of asset utilisation and is computed as net revenue divided by total assets (Nsengiyumva & Harelimana, 2020). ROA, according to Chege et al. (2018), is a crucial measure of operational performance that aids banks in determining where resource optimisation might boost profitability. A greater ROA indicates efficient management and the smart use of financial resources to optimise returns, according to Gabriel et al. (2019).

To comprehend the operational effectiveness of a bank's asset base, ROA is essential. Serwadda (2018) claims that this statistic gives information about how well a bank converts its resources into profits and may be used as a tool for management and stakeholders to assess performance. According to Thiong and Kiama (2018), ROA is particularly crucial for banks with sizable asset bases because it guarantees that increases in assets will result in corresponding increases in income. Furthermore, Bwoma et al. (2017) stress that ROA contributes to the general health of the financial sector by assisting regulators in evaluating the stability and profitability of banks.

Consequently, return on assets is equal to net profit divided by total assets (100).

Ineffective asset use is indicated by a low ROA, which may be a symptom of operational flaws. High non-performing loan levels and low loan recovery rates, for example, might have a detrimental effect on ROA and lower profitability, according to Rukundo (2018). According to Gabriel et al. (2019), a bank's capacity to obtain capital for expansion may be hampered by a dropping ROA, which may deter investors. Obae and Jagongo (2022) also point out that a bank's capacity to fulfil its responsibilities may be impacted by liquidity

issues brought on by consistently poor ROA. According to Moseti (2021), maximising returns through strategic asset allocation and efficient risk management are necessary for increasing ROA.

2.1.3.2 Liquidity of Finances

The ability of a bank to pay its short-term debts on time using cash or easily accessible assets is known as financial liquidity. A key component of financial soundness, liquidity enables banks to effectively manage withdrawals, payments, and other urgent liabilities without turning to distressed asset sales, claim Nsengiyumva and Harelimana (2020). Strong liquidity management is crucial for preserving stability and investor confidence in commercial banks, according to Bwoma et al. (2017).

Operational, regulatory, and reputational aspects are all affected by financial liquidity. Lack of liquidity can result in solvency issues, requiring banks to borrow money at exorbitant rates or sell assets at unfavourable prices, as noted by Chege et al. (2018). Liquidity shortages damage consumer confidence and can lead to regulatory actions, such as fines or forced mergers, according to Gabriel et al. (2019). On the other hand, too much liquidity might be a sign of underutilised assets, which lowers profitability. According to Thiong and Kiama (2018), preserving ideal liquidity levels is essential for striking a balance between risk and profitability and guaranteeing long-term viability.

Current Ratio: This ratio shows how well a bank can use its short-term assets to pay off its short-term liabilities. According to Nsengiyumva and Harelimana (2020), it is computed by dividing current assets by current liabilities. A bank's short-term financial health is shown by this ratio, which shows if it has enough cash on hand to cover its immediate liabilities without taking out new loans. According to Gabriel et al. (2019), a current ratio below one suggests possible liquidity stress, whereas a greater ratio shows careful liquidity management.

When evaluating a bank's operational soundness, the current ratio is essential. A healthy current ratio guarantees that banks can handle unforeseen cash flow demands, improving resilience against market swings (Chege et al., 2018). According to Bwoma et al. (2017), this ratio is a crucial metric for regulators and stakeholders, giving them confidence regarding the bank's ability to handle short-term risks. Additionally, because it indicates prudent risk management and financial planning, a stable current ratio boosts investor trust.

As a result, current ratio is equal to current assets divided by current liabilities.

The way a bank manages its liquidity is significantly impacted by changes in the current ratio. According to Rukundo (2018), a decreasing ratio can force asset sales or borrowing, which would raise operating expenses and lower profitability. On the other hand, an overly high current ratio might be a sign of idle assets, which Chege et al. (2018) speculate could be a sign of inefficient asset use. According to Thiong and Kiama (2018), an ideal current ratio strikes a balance between profitability and liquidity, guaranteeing seamless operations and optimising returns.

The bank's capacity to tolerate short-term liquidity disruptions by maintaining enough high-quality liquid assets (HQLA) to offset net cash outflows over a 30-day stress test is gauged by the liquidity coverage ratio, or LCR. According to Nsengiyumva and Harelimana (2020), the LCR promotes stability and resilience in the banking industry by guaranteeing adherence to Basel III criteria. Since liquidity limitations are most noticeable during financial crises, this ratio is especially important (Chege et al., 2018).

Both operational stability and regulatory compliance depend on the LCR. A strong LCR guarantees that banks may continue to operate throughout economic downturns, maintaining consumer trust and market stability, as Serwadda (2018) points out. According to Gabriel et al. (2019), the LCR improves risk management procedures by requiring banks to keep

enough liquid assets on hand to handle any future liquidity issues. Furthermore, Thiong and Kiama (2018) point out that the LCR promotes uniformity and resilience among banking systems by acting as a baseline for global financial stability.

Consequently, LCR is equal to (HQLA)/(total cash outflows).

A bank's reputation and financial stability may suffer significantly if its LCR is not maintained at a sufficient level. According to Chege et al. (2018), failure to comply with LCR standards may lead to fines from the government, higher borrowing costs, and a decline in investor confidence. According to Gabriel et al. (2019), a low LCR may indicate poor liquidity management, which could result in worse market competitiveness and credit rating downgrades. On the other hand, Serwadda (2018) contends that overly cautious LCR procedures could reduce profitability by limiting the usage of assets for revenue-generating endeavours. Therefore, achieving an ideal LCR is essential for striking a balance between profitability, compliance, and liquidity.

2.1.3.3 Stability of finances

The ability of a bank to fulfil its long-term commitments and withstand losses while preserving operational stability is referred to as financial solvency. According to Nsengiyumva and Harelimana (2020), a bank's solvency serves as the cornerstone of its financial strength, guaranteeing its ability to withstand economic downturns and financial suffering. According to Chege et al. (2018), solvency, which represents the institution's total financial health, is essential for maintaining investor trust and regulatory compliance.

Sustaining financial solvency is essential for both market confidence and operational sustainability. According to Gabriel et al. (2019), banks that are solvent are able to endure unfavourable market conditions, shielding shareholders and depositors from large losses.

However, Rukundo (2018) points out that insolvency might lead to closure, a loss of market confidence, and regulatory action. According to Thiong and Kiama (2018), attaining optimal solvency allows banks to encourage economic growth while preserving their financial stability by striking a balance between risk-taking and profitability.

The Capital Adequacy Ratio (CAR) gauges a bank's ability to withstand losses while safeguarding depositors and creditors by comparing its available capital to its risk-weighted assets. According to Nsengiyumva and Harelimana (2020), CAR is a crucial Basel III regulatory requirement that aims to improve financial stability by guaranteeing banks have adequate capital buffers. A high CAR denotes great financial resilience, allowing banks to resist market uncertainties and economic shocks, according to Chege et al. (2018).

Promoting financial stability and reducing systemic vulnerabilities require CAR. According to Serwadda (2018), this ratio protects against insolvency by guaranteeing that banks have sufficient capital to cover unforeseen losses. According to Gabriel et al. (2019), CAR gives stakeholders confidence about the bank's financial stability by acting as a standard for regulatory compliance. Furthermore, Thiong and Kiama (2018) contend that CAR upholds investor confidence by exhibiting responsible capital allocation and risk management procedures.

Consequently, CAR is equal to (Tier 1 Capital + Tier 2 Capital)/(Risk-Weighted Assets)*100.

There may be serious financial and regulatory consequences if a CAR is not maintained. Moseti (2021) asserts that failure to comply with CAR regulations may lead to fines, operational restrictions, and a decline in investor confidence. A low CAR might heighten the risk of financial distress and force banks to seek more capital on unfavourable terms, according to Gabriel et al. (2019). On the other hand, Chege et al. (2018) warn that an overly

high CAR could be a sign of cautious risk-taking, which would limit prospects for growth and profitability. Thus, maintaining an ideal CAR is essential for striking a balance between operational effectiveness, risk, and compliance.

By comparing a bank's total liabilities to shareholders' equity, the debt-to-equity ratio calculates the bank's level of financial leverage. This ratio shows how much of a bank's funding comes from debt as opposed to equity. According to Nsengiyumva and Harelimana (2020), a larger ratio denotes a greater reliance on borrowed funds, whilst a lower ratio denotes a more conservative financial structure. According to Gabriel et al. (2019), this measure is essential for comprehending the capital structure and risk profile of a bank.

One important measure of risk management and financial stability is the debt-to-equity ratio. According to Chege et al. (2018), an ideal ratio balances debt and equity funding to promote sustainable growth. According to Bwoma et al. (2017), this ratio helps stakeholders evaluate a bank's long-term solvency and leverage levels by offering insights into its financial strategy. Furthermore, the Debt-to-Equity Ratio helps regulators assess a bank's ability to handle financial commitments without jeopardising operational stability, according to Rukundo (2018).

As a result, the debt-to-equity ratio is equal to the total liabilities divided by the shareholders' equity.

A bank's market position and financial stability are significantly impacted by an unbalanced debt-to-equity ratio. According to Thiong and Kiama (2018), a high ratio could indicate undue leverage, raising the possibility of insolvency and decreasing financial flexibility. On the other hand, Gabriel et al. (2019) warn that an extremely low ratio could be a sign of underutilised debt capacity, which could limit prospects for growth. According to Moseti

(2021), banks must maintain a suitable debt-to-equity ratio in order to balance profitability and financial stability and enable them to promote expansion while reducing risks.

2.1.3.4 Economic Effectiveness

The ability of a bank to maximise revenue while minimising expenses through the optimal use of its resources is known as financial efficiency. Financial efficiency, according to Bwoma et al. (2017), evaluates how effectively a bank uses its resources to produce revenue and maintain operations. Since efficient banks typically have reduced operating expenses and higher profitability, Chege et al. (2018) stress that it is essential to maintaining the institution's competitiveness.

The profitability, stability, and market position of a bank are all directly impacted by the effectiveness of its financial operations. According to Thiong and Kiama (2018), inefficiency can result in excessive operating expenses, which lowers net income and returns to shareholders. On the other hand, by increasing profitability and cutting waste, financial efficiency strengthens the institution's resistance to changes in the economy, according to Gabriel et al. (2019). According to Nsengiyumva and Harelimana (2020), efficiency fosters investor confidence since it demonstrates efficient use of resources and cost control.

By comparing a bank's operating expenses to its operating income, the cost-to-income ratio calculates how efficiently the bank operates. Better cost control in relation to revenue growth is indicated by a lower ratio. This ratio is a crucial metric for evaluating the operational effectiveness of commercial banks, claims Moseti (2021). According to Serwadda (2018), a high cost-to-income ratio indicates inefficiency and may reduce market competitiveness and profitability.

Grasp the operating dynamics of commercial banks requires a grasp of this ratio. An ideal cost-to-income ratio ensures that revenue generation exceeds expenses, which promotes sustainable growth, according to Gabriel et al. (2019). According to Chege et al. (2018), banks can spot inefficiencies and implement remedial measures to increase profitability by keeping an eye on this ratio. Furthermore, according to Nsengiyumva and Harelimana (2020), a favourable ratio shows sound financial management techniques and boosts investor trust.

Operating Expenses / Operating Income * 100 is the cost-to-income ratio.

A bank's long-term survival and financial performance may suffer from a low cost-to-income ratio. According to Thiong and Kiama (2018), consistently high ratios could result in lower shareholder returns, decreased profitability, and possible regulatory scrutiny. On the other hand, Serwadda (2018) emphasises that attaining a low ratio by increasing revenue and decreasing expenses can improve financial stability and market competitiveness. Gabriel et al. (2019) stress that in order to increase efficiency without compromising service quality, cost management measures must be balanced.

The asset turnover ratio assesses how well a bank makes use of its resources to produce income. A greater ratio suggests that assets are being used more effectively to generate income. According to Bwoma et al. (2017), this measure is a crucial sign of operational effectiveness that aids in determining how productive a bank's asset base is. According to Thiong and Kiama (2018), this ratio shows how well assets are deployed to meet financial goals.

Understanding a bank's operational performance and resource utilisation requires knowledge of the asset turnover ratio. According to Chege et al. (2018), a high ratio denotes effective asset management, which boosts revenue and profitability. According to Nsengiyumva and Harelimana (2020), this ratio helps in decision-making and performance assessment by

offering insights into the bank's strategic asset allocation. Serwadda (2018) adds that it assists in locating underutilised assets, allowing institutions to allocate resources as efficiently as possible.

Ineffective asset management practices may be indicated by an unfavourable asset turnover ratio. According to Moseti (2021), a low ratio could be a sign of underutilised resources or less-than-ideal asset allocation, which would have an impact on income creation. On the other hand, overly high ratios can indicate an over-reliance on current assets, which could limit prospects for future growth, according to Gabriel et al. (2019). Maintaining an ideal ratio is crucial for striking a balance between short-term performance and long-term growth and sustainability, according to Thiong and Kiama (2018).

2.1.4 Policy for loan management

The set of rules and practices used by financial organisations, especially commercial banks, to evaluate, authorise, and efficiently manage loans is known as loan management policy (Serwadda, 2018). It lays forth the requirements and standards for loan origination, repayment terms, credit risk management, and collection activities. The policy guarantees that creditworthy clients receive loans and that lending risks are kept to a minimum. A robust loan management policy protects the institution's finances by assisting banks in assessing borrowers' creditworthiness, setting fair interest rates, and guaranteeing timely loan repayment (Thiong & Kiama, 2018).

An efficient loan management policy has important ramifications for the bank and its clients. A well-designed strategy helps the bank maintain healthy profit margins, improves financial stability, and reduces the chance of loan defaults. Additionally, it lowers the possibility of facing legal and financial repercussions by ensuring adherence to regulatory regulations. Clear loan management policies promote trust and long-term relationships between the bank

and its customers by providing clarity to them on loan eligibility, interest rates, repayment plans, and default penalties (Serwadda, 2018).

Understanding every facet of a proposition and cost, standardising facilities, and customising to meet the demands of each individual are all necessary for effective loan risk management standards. Repayment plans should align with consumer cash flow, and facilities designed to safeguard the bank should be advantageous to both the bank and the client. It's critical to strike a balance between the bank's obligation to prevent loss and the sensibility of its customers. To maintain good credit standards, spot deterioration, and take proactive corrective action, monitoring and control are crucial. Throughout the economic cycle, loan requirements must to be maintained, not loosened during prosperous periods or overtightened during difficult ones (Nsengiyumva & Harelimana, 2020; Bwoma, Muturi, & Mogwambo, 2017).

Because this can result in losses in the next recession, banks should resist the impulse to prevent losses in the current one. During a recession, a company's ability to survive might serve as the best indicator of its management calibre and overall resilience. Previously, bankers were thought to need to be skilled in lending, but things have changed, and because of the little capital involved, lending is now frequently viewed as "value destroying." consumers still need to borrow money, though, and studies indicate that the willingness of bankers to provide loans is the service that most consumers appreciate the most (Thiong & Kiama, 2018; Chege, Olweny, & Opuodho, 2018).

In order to prevent loan losses and preserve a healthy business and market share, banks must strike a balance between market norms and shareholder desires. Because banks need to know their customers and have a good relationship with them, a strong loan culture can help them

achieve this balance. Relationship banking may reduce losses during recessions, but it is not a perfect remedy for bad debts (Obae & Jagongo, 2022; Gabriel, Victor, & Innocent, 2019).

In addition to using skill and judgement when making decisions, lenders must evaluate the likelihood that a customer won't repay by the scheduled date. Lenders must obtain pertinent information and use their expertise to make well-informed decisions; there is no secret recipe for doing so. Expert lenders ought to defy outside pressure and demand enough time and information to comprehend and assess the offer (Rukundo, 2018; Moseti, 2021).

Because they provide loans to the underprivileged without collateral and are unable to ensure complete repayment, microfinance institutions (MFIs) are dangerous enterprises. In order for MFIs to eventually become self-sustaining, high loan collection rates are essential. Understanding how internal practices impact the lending process can be achieved by measuring the impact of risk management on loan portfolio performance (Serwadda, 2018; Nsengiyumva & Harelimana, 2020).

Risk management techniques encourage strategic risk assessment and can provide a sustained competitive edge. Certain risk management techniques can make consumers prefer an MFI's products over time, giving the company a long-term competitive edge over its competitors (Gabriel et al., 2019; Obae & Jagongo, 2022).

For the loan risk economic capital frameworks of financial institutions, Merton-type models like Portfolio Manager and Loan Metrics are frequently employed. These models use systematic risk factors related to the condition of the economy to estimate default correlations between various borrowers. However, the majority of research on loan allocation strategies ignores variance covariance-based allocation approaches in favour of more sophisticated risk metrics like value at risk (VaR) and expected shortfall (ES) (Bwoma et al., 2017; Serwadda, 2018).

Although it exposes banks to credit risk, loan management continues to be the primary source of revenue for banks around the world. Loan risk is defined by the Basel Committee on Banking Supervision as the likelihood of losing an outstanding loan amount whole or substantially as a result of certain loan occurrences. According to Chege et al. (2018) and Thiong & Kiama (2018), a bank's likelihood of encountering financial trouble increases with its exposure to loan risk.

The sustainability of banks depends on efficient and effective risk management since it allows them to allocate resources to risk units while taking return on investment and risk into account. Banks keep a careful eye on counterparties and goods and perform thorough loan analyses, which helps them estimate risk in volatile markets (Rukundo, 2018; Gabriel et al., 2019).

Banks are encouraged by regulatory bodies to periodically do audits and pay particular attention to loan risk assessments. In order to carry out risk-based supervision and assess banks' performance in order to control risk, the World Bank has put in place an oversight surveillance capacity system (Serwadda, 2018; Obae & Jagongo, 2022).

Banks are subject to a variety of hazards that have an impact on their operations and financial performance. Managers should evaluate cash flows and expected risks in order to allocate financial resources across various sectors of utilisation in order to optimise shareholders' wealth (Nsengiyumva & Harelimana, 2020; Bwoma et al., 2017).

2.2. Review of theory

The following hypotheses were covered in this chapter and are consistent with the study's goals.

2.2.1. The Theory of Appropriate Loan Standards

It is worthwhile to consider the context in which lending choices are made before looking at the methods of individual loan appraisal.

There is a common belief that banks never learn from their mistakes and that, regardless of what happened during the last recession, the pressure to do new business during better times and the pull of "marketers" will always result in reckless lending and more catastrophes, according to Weston (2020). According to Adams et al. (2021), effective loan risk management requires both appropriate lending criteria and a positive loan culture in which to implement them. What are the characteristics of a good loan culture and standards?

2.2.2. Theory of Loan Culture

According to Kamath et al. (2015), a bank's perspective on all issues pertaining to its loan risk management is known as Loan Culture Theory. It must: Complement the bank's entire operations and structure in order to generate a healthy loan risk portfolio. The culture must be able to provide the services the bank needs to satisfy its clients. It can only accomplish this if it aligns with the bank's overarching business plan and is supported by the bank's senior leadership. The lending culture will inevitably encounter resistance of many kinds since it must strike a balance between taking on new risks and minimising the amount of risk. Only top management can guarantee that the culture not only upholds proper loan standards but is also sufficiently commercial to not negatively impact the bank's ability to do business.

According to Rouse (2021), the bank unavoidably lost some business as a result of having strong loan rules, which would have been beneficial in retrospect. However, there was no 20/20 hindsight accessible at the time of the choice. The bank as a whole must agree that it is losing some business and that there are certain criteria that should be applied when determining which businesses to eliminate. Top management must establish this policy,

which should outline the kind and degree of risk the bank is willing to accept as well as the expected return for varying degrees of risk at the loan and portfolio levels.

The degree to which a loan has a veto over the company developers' actions must be made clear when evaluating the relative standing and power of the bank's loan risk function.

According to Phelan (2017), top management's backing in upholding the established authority is crucial, as is their willingness to cover the expenses associated with preserving the culture. This include e analysis, training, and keeping an eye on the calibre of computer systems, decision-makers, and other components.

Nevertheless, the expense in this case cannot be easily estimated in monetary terms. It also addresses the need to overcome customer resistance, educate coworkers and clients about the advantages of a solid loan structure, and eventually lose business if the client turns out to be uneducable. A work culture that adapts to shifting economic conditions is weak because it is strong enough to withstand economic cycles. Gallinger and Ifflander (2021) believe that loan criteria translate culture into action. They must consider the structure and nature of the bank's operations as well as the calibre and education of the employees who make loan decisions. Many banks are rethinking how they handle loan risk in order to meet the stricter regulatory requirements and absorb the increasing capital costs for loan risk. However, banks are being shortsighted if they see this as only a compliance exercise. Additionally, improved debt management offers a chance to get a competitive edge and significantly boost overall performance.

The method of allocating quantifiable and comparable values to the probability of default risk is known as loan risk quantification, and it represents a significant advancement in contemporary finance. Loan risk is influenced by a variety of factors, including market-wide

conditions and borrower-specific requirements. Liabilities may be forecast and priced objectively, according to the theory, which helps shield the lender from monetary loss.

When assessing loan risk, a number of important factors are taken into account, including the borrower's financial stability, the magnitude of the consequences of a default (both for the borrower and the lender), the size of the loan extension, past trends in default rates, and a range of macroeconomic factors like interest rates and economic growth.

Risk is an essential component of financial services, according to the World Bank's 2020 framework for risk management in financial institutions. Financial organisations run the risk of loan default when they provide loans.

Banks risk their customers' savings when they take deposits and then lend them to other customers (a practice known as financial intermediation). Any organisation that engages in cash transactions or investments runs the danger of losing such money, according to the World Bank framework (2020). Risk is something that development finance organisations should neither ignore nor avoid. Microfinance organisations must properly and efficiently handle risks, much like other financial institutions, in order to succeed. The banks are likely to fall short of their financial and social goals if they do not effectively manage their risks..

2.2.3. Transaction Cost Theory

"To carry out a market transaction, it is necessary to discover who one wishes to deal with, to conduct negotiations leading up to a bargain, to draw up the contract, to undertake the inspection needed to make sure that the terms of the contract are being observed, and so on," according to Ronald (2008), who developed the transaction cost approach to the theory of the firm.

One way to think of the transaction cost is as a non-monetary expense that the borrower and the lender incur before, during, and after the loan is disbursed. The lender's expenses include the cost of finding funds to lend, creating loan contracts, screening borrowers, determining the viability of the project, carefully reviewing loan applications, training staff and borrowers on loan terms, and monitoring and implementing loan agreements.

However, the borrowers, who are MSEs in this instance, may have to pay for things like screening group members (group borrowing), building a group, negotiating with the lender, filling out paperwork, transportation to and from the financial institution, project appraisal time, meeting attendance, etc.

The transaction cost rate was decided by the project's participants. It is entirely their duty to lower any risk they may encounter.

2.2.4. Theory of Credit Default

The theory was developed in 2007 by David Sy. It was founded on the notion that the main purpose of a credit default theory should be to determine expected losses by understanding the causes of loan default. In practice, a loss arising from a specific default sometimes requires lengthy (months or years) delays, either in selling the collateralised asset, selling that item to a debt collector to recoup the loan value, or submitting a claim to an insurer. As a result, the practical definition of a default as a delinquency with a time lag serves the sole aim of raising awareness of possible loss early on. This definition may vary from nation to nation due to cultural and legal variations (Rout, 2021).

The credit default hypothesis consists of two parts: delinquency and bankruptcy. debt delinquency is a condition in which there is insufficient cash flow or liquidity to repay the debt. A solvency evaluation brought on by delinquency may conclude in a negative equity

position, which would terminate the loan and cause the lender to expect a loss (Tamon, 2014).

The idea is supported by Klein's (2014) assertion that a credit default event for a secured debt is essentially a series of two temporally separated events—a delinquency event followed by an insolvency event. If a borrower regularly makes full loan payments by the due date, insolvency is irrelevant. Tamon (2014) also backed up the notion, arguing that insolvency alone cannot induce a credit default because an entity's assets aren't always obvious, even to insiders, particularly if they comprise intangibles like intellectual property, trademarks, and franchise value.

The author claims that merely a delinquent is assumed to initiate the assessment of a net equity condition, which may ultimately lead to an insolvency-related credit default.

Kerzner (2014) challenges the theory, arguing that if a corporation or an individual has strong and steady cash flows, such as businesses in certain service industries or utilities, then very high debt levels in relation to assets can be carried without the risk of the entity's solvency condition being assessed. In the Hong Kong real estate market from 1998 to 2003, the author provided yet another example, showing how many homeowners had negative equity but yet had access to sufficient liquidity to prevent default. In these situations, the risk of default would be overestimated by structural models that employ insolvency as a condition for default.

By supporting Kerzner's argument and providing yet another instance of national debt that, even though it is past due, usually does not lead to a credit default in accordance with the theory, Rowan (2018) contested the notion. On July 2, 1998, the Republic of Venezuela failed to pay a Treasury Bond obligation; however, on July 9, it made up the difference. The

idea states that this was a momentary delinquency occurrence rather than a credit default event.

2.2.5. The Credit Market Theory

A key idea in economics, the theory of credit markets examines how money is distributed among lenders and borrowers in an economy. In contrast to certain economic theories that can be traced back to certain people, the theory of credit markets does not have a single creator or inventor. The understanding of credit markets and their function in the economy has been greatly advanced by economists such as Hyman Minsky, Irving Fisher, and John Maynard Keynes. For instance, Keynes' General Theory of Employment, Interest, and Money examined how CRM and liquidity preference affected credit markets.

Fisher helped to clarify how CRM and debt levels relate to one another. Minsky is well-known for his research on credit market dynamics and financial instability, especially as they relate to financial crises (Louzis, 2012).

 The hypothesis is supported by Nicolo and Ivaschenko (2014), who contend that credit markets are essential to the effective distribution of financial resources within an economy. Credit markets support economic growth by directing funds to borrowers who can spend them effectively. Additionally, Pulkol (2019) contends that by lending to a diverse group of borrowers, credit markets enable lenders to diversify their risk. And Because it makes it possible to invest in enterprises, infrastructure, and human capital—especially in emerging economies—access to credit markets can support economic development.

Klein (2013) challenges the idea, claiming that information asymmetry frequently affects loan markets and that lenders may not have full knowledge of borrowers, which can result in issues with moral hazard and adverse selection. According to Gorter and Bloem (2014),

credit markets have the potential to exacerbate economic crises and financial instability. Financial bubbles and subsequent crashes can result from excessive lending during boom times.

Furthermore, Borio (2015) notes that access to credit markets is not egalitarian because marginalised and low-income groups may encounter obstacles to borrowing at affordable rates, hence escalating income inequality.

This theory looks at how the supply and demand for credit are influenced by CRM, risk assessment, and other economic factors. This theory was chosen by the researcher to support the study because it enables her to evaluate the efficacy of lending policies in the case study and examine a variety of factors that affect loan repayment.

2.2.6. Theory of Anticipated Income

H. V. Prochnow created the anticipated income hypothesis in 1945 and included it in his book "Term loan and Theories of Bank Liquidity." The main idea is that while keeping cash and near-cash assets improves liquidity, it also sacrifices potential revenue. As resources began to shift from the public to the private sector, commercial banks' earnings and assets began to shift as well. This led to the development of this hypothesis at the close of World War II. The remarkable surge in loan demand in the immediate postwar years provided commercial banks with tremendous incentives to expand their loan portfolios and, in turn, bank profits. Following the war, commercial banks began offering loans with longer maturities, a wider range of borrowers, and far more uses than originally anticipated. As a result, bank management became more proficient in handling withdrawals and learnt that the required level of total liquidity could be reached by combining highly liquid and less liquid assets. Because of this, commercial banks' loan portfolios in the years following World War II contained things like intermediate and long-term loans to customers, homeowners, and

business enterprises that, according to the conventional theory of bank liquidity, would only partially, if at all, qualify as liquid assets. However, based on the anticipated income theory, these loans are admissible (Anwar, 2019).

A bank's liquidity can be controlled by appropriately phasing and structuring the loan commitments it makes to its clients, according to Rowan's (2018) argument in favour of this approach. In this case, the liquidity can be planned if the customer's planned debt repayments are determined by the borrower's expected future financial flows.

The notion states that a borrower's earning potential and credit worthiness serve as the best assurance for ensuring adequate liquidity.

Furthermore, Klein (2014) asserts that the expected income theory of commercial banks' liquidity maintains that banks' liquidity can be calculated and satisfied if planned payments are contingent on borrowers' income.

According to Anwar (2019), the theory is criticised for denying the applicability of the self-liquidating and appropriateness theories because it emphasises tying loan repayment to income rather than relying primarily on collateral. Karar (2020) challenged the premise, arguing that bank liquidity might be impacted by the maturity structure of investment portfolios and short-term commercial and consumer installment loans, which would have higher liquidity than those secured by real estate. Effective credit risk management procedures will therefore increase interest income and ultimately ensure sufficient liquidity for a bank. According to Ngum (2023), banks' liquidity can be fully estimated and satisfied using a mix of collateral and borrower income in addition to schedule payments depending on the borrower's earning potential as per Klein (2019).

In conclusion, projected income theory forms the theoretical basis of this study since it incorporates strategies for managing credit and liquidity and fairly evaluates borrowers' credit worthiness. Additionally, the theory provides banks with standards for evaluating a borrower's probability of timely loan repayment, which ultimately impacts interest income and can be utilised to influence the impact of credit risk management on return on equity and return on assets..

2.2.7. Financial institutions Services Boost Theory

According to Vonderlack's 2001 thesis, financial institutions offer a variety of services, such as money transfers, loans, savings, insurance, and payments.

Savings Facilities: More savings lead to wealth accumulation and an increased ability to invest in oneself. Additionally, the potential to buy more productive assets is enhanced and there is less need to borrow money from private money lenders at exorbitant interest rates. Regarding investment opportunities, the majority of the additional benefits and effects of savings facilities that are discussed under loan facilities (below) also apply to savings facilities. The recent transition from microloan to microfinance reflects the idea that borrowing is riskier than saving, and that savings services, rather than just loans, may serve to improve the well-being of the poor in general and women in particular.

The microloan portion of microfinance services is known as loan facilities. It entails providing low-income rural residents with small loans for comparatively brief periods of time with frequent and consistent repayment. However, small loan amounts are a relative phrase that fluctuates from time to time and from institution to institution.

Improved credit facilities allow farmers and small- and micro-business owners to adopt new technology. At the local, regional, and even national levels, this inevitably resulted in

economic expansion and diversification. Rural households can smooth their spending throughout the year, particularly during periods of low income, by having access to lending facilities.

Microloans also lessen dependency on costly, unofficial, and exploitative personal sources. It lessens distressed asset sales and improves the impoverished's resilience to outside shocks. Higher income, more varied revenue sources, higher household consumption, and improved kid education were the ultimate effects on the home. Additionally, the rural poor are empowered and their social marginalisation is lessened when poverty is lessened.

It should be noted that, as this study previously shown, the total effect of lending facilities on the regional and national economies depended on other factors like market facilities, decent roads, and so forth.

Insurance services lower risk and potential losses in unexpected situations and promote greater savings in financial assets. Insurance services in particular lessen the effects of outside shocks. The rural poor are more inclined to invest as a result of the aforementioned factors. More income, less consumption fluctuation, and increased security are the end results.

Payments and Money Transfer Services: these services allow money to move freely, which in turn facilitates trade and investment. Easy money transfers between individuals and between locations are a very useful tool for promoting trade between people in close and distant locations. As a result, more rural residents have access to higher incomes and higher levels of consumption thanks to banking services that make it easier for investors and even individuals to obtain funds.

Financial literature is one of the additional services that MFIs provide by teaching people the fundamentals of finance, which can help them protect their assets from being depleted by misusing the resources that are currently available. Financial management and counselling help people learn how to manage their debt so they don't fail on their loans, which can result in the loss of collateral security or securing assets (Gwynne, 2019).

2.2.8 Theory of Portfolios

For many years, financial education has effectively linked future risk to the existing portfolio theory. Banks today frequently employ value at risk models to control interest rates and identify risk exposures. Unfortunately, progress in applying advanced portfolio theory to credit risk has lagged, even though credit risk remains the primary risk that the majority of educated people experience (Mutua, 2014). Businesses are aware of the negative impact credit concentrations can have on financial performance. As a result, many academics are always looking for quantitative methods to determine credit risk. Additionally, this business is making significant strides in developing solutions that reduce credit risk in a portfolio setting. Additionally, they use credit subsidiaries to efficiently swap risks while maintaining client relationships. Both portfolio quality ratios and efficiency indicators have undergone modifications (Niyonsaba & Shukla, 2017). The convergence of these advances has led to an unimaginably quick advancement in portfolio-based credit risk management.

Banks have always handled credit risk on an asset-by-asset basis. While every bank has a different strategy, this generally entails evaluating the quality of credit exposures on a regular basis, utilising a credit hazard assessment, and combining the results to calculate the projected losses for a portfolio (Maina, 2018). It might be necessary to incorporate a reliable credit survey into a framework for evaluating credit risk in order to build up the asset-by-asset approach. Management can identify shifts in certain credit trends or portfolio patterns

with this methodology. Depending on the alterations identified, credit evaluation, credit survey, and credit chance rating framework management can either improve credit supervision appropriately or drastically alter portfolio processes (Zhang et al., 2019).

Although the asset-by-asset approach is an important component of credit risk management, it does not give a complete picture of portfolio credit risk, where "hazard" is the chance that actual losses may surpass planned losses. In order to provide a more realistic picture of credit risk, banks are thus making an increased effort to integrate the asset-by-asset method with a quantitative portfolio analysis utilising a credit demonstration (Niyonsaba & Shukla, 2017). By adopting a portfolio approach, financial education is seeking to address the shortcomings of the asset-by-asset technique for managing unanticipated disasters. The difficulty of identifying and evaluating concentration is a disadvantage of the asset-by-resource approach (Heffernan, 2015). A network of linked lessees or more exposure to credit expansion might result in concentration risk, which is an increase in portfolio risk (Maina, 2018).

2.2.8 Model of Credit Scoring

According to Kanchu and Kumar (2017), loan scoring models are a component of the system that lending companies employ to give credit to clients. For corporate and commercial borrowers, these models often include both subjective and quantitative divisions that separately present a variety of perspectives on the risk, such as working experience, administration expertise, resource quality, and use and liquidity proportions. Following a thorough examination of this data by credit officers and credit committees, the bank provides the reserves in conformity with the terms and conditions specified in the contract. A comprehensive risk analysis should always be carried out before making any lending decisions, and the findings should serve as a guide (Heffernan, 2015). Since credit ratings and default rates are significantly correlated, it is safe to draw conclusions about likelihood

from these validated facts (Rowan, 2018).

At least six grades of performing resources and two grades of non-performing resources may be used in the demonstration. Depending on how the ratings are allocated, no more than 30% of the propellers should be put together with ratings lower than one. (Zhang, et al, 2019).

2.3 Empirical review

The researcher would like to give the empirical review (critical review) of the studies (researchs) conducted by earlier scholars that have relevant goals to the current research in this section. These studies include the following:

Klein (2018) looked on operational and credit risk in British commercial banks. From 2005 to 2010, 11 commercial banks provided financial data. To determine the cause-and-effect relationship for the subject of the study, a variety of statistical tools and techniques are employed.

The findings indicated that while operational risk had a positive and very significant association with bank size, it had a big but negative relationship with operating efficiency and non-performing loans. Regression results for credit risk and gearing ratio were both positive and statistically significant.

There was a weak and unfavorable correlation between credit risk and NPL, bank size, and operational performance. The gearing ratio and operational risk are not causally related. However, the study's overall conclusion highlights how crucial banks are to the funding of many firms. These institutions also require a cautious approach to risk management and more administrative control.

In Kosovo, Mahamad and Arbana (2016) investigated the impact of credit risk management on banks. They used time series data that was extracted from the banks' annual reports to calculate the return on equity, which served as a dependent variable for profitability, and the nonperforming loan ratio, which served as a credit risk management metric in conjunction with the risk asset ratio as an independent variable.

 Simple linear regression was used as the data analysis approach, and SPSS software was used to run the data. The results demonstrated a strong correlation between the variables and indicated that while a larger nonperforming loan ratio had a more significant and beneficial impact on profitability, a higher risk asset ratio would only slightly reduce it.

Saeed and Zahid (2016) used descriptive statistics, correlation analysis, and multiple statistical 20 analyses to examine the effect of credit risk on the profitability of five major commercial banks in the United Kingdom. The data covered the financial crisis period from 2007 to 2015. Two independent variables for credit risks were net charge off (or impairments) and nonperforming loans, while two dependent variables, such as ROA and ROE, were taken into consideration for determining profitability.

 It was discovered that the profitability of the banks was positively correlated with credit risk indicators. This indicates that UK banks continue to take credit risks and profit from interest rates, fees, commissions, and other sources despite the severe consequences of the 2008 financial crisis.

Poudel (2022) looked at a number of pertinent factors to determine how credit risk management impacts banks' financial performance in Nepal. Among the variables discussed were the capital adequacy ratio, cost per loan asset, and default rate. The data was examined using financial reports from 31 banks during an 11-year period (2011–2020).

The profitability ratio was compared to the capital adequacy ratio, cost of per loan assets, and default rate using descriptive, correlational, and regression analysis. The study found that while all of these factors negatively affect banks' financial health, the default rate is the best indicator of a bank's financial health. Banks are advised to create and carry out strategies that would lower their exposure to credit risk and boost their profitability.

All commercial banks listed in Nairobi County were the study's target population, and Maina (2016) used a descriptive research design to accomplish the study's goals about the impact of lending policies on the financial performance of Kenyan commercial banks. 57 respondents were chosen through the use of purposeful sampling.

This study was motivated by the recognition that non-performing loans (NPLs) remain a significant issue that could jeopardise commercial banks' financial performance, including customer service, interest rates, and bank credit policies. The t-statistic value t (56) =7.64, p = 0.525, at the 95% confidence level, indicates that credit policy rules have a statistically significant impact on the financial performance of commercial banks. The financial performance of commercial banks changes by 0.486 units for every additional modification in credit policy criteria.

The study on credit risk management and the profitability of banks listed on Bursa Malaysia is conducted by Izzaamirah et al. (2016). When compared to the ROA model, the ROE regression model demonstrates the model's importance.

Credit risk and bank performance are the financial ratios that are employed. Data for three banks was gathered between 1998 and 2015. Return on equity and return on assets are indicators of profitability, whereas total loan to total assets, total loan to total deposit, and non-performing loan to total loan are indicators of credit risk.

Sulieman (2015) investigates how Jordanian commercial banks' financial performance was affected by credit risk management between 2005 and 2013. Using ROA and ROE as dependent variables and non-performing loans/gross loans, provision for facilities loss/net facilities, and the leverage ratio as independent variables, the study employed two mathematical models to assess the relationship between credit risk management and the financial performance of Jordanian commercial banks.

Using secondary data (annual reports) from the six chosen banks as well as the Ghana banking survey for the relevant years, Ernest and Fredrick (2017) examined the effect of credit risk management on the profitability of a subset of commercial banks listed on the Ghana Stock Exchange. The Random Effect Model was used in the study's panel estimation approach framework. In addition to non-performing loans, loan loss provisions ratio, loan to asset ratio, and capital adequacy ratio as credit risk management, the study employed return on equity (ROE) to gauge the bank's profitability.

The results demonstrated that there is, in fact, a substantial correlation between bank profitability and credit risk management. Non-performing loans, the loan loss provisions ratio, and the loan to asset ratio all have statistically significant negative relationships with a bank's profitability, although the capital adequacy ratio had a positive link with it. To lessen their exposure to these risks, the report advises banks to carefully evaluate and control credit risk indicators.

As a result, the studies do not use loan loss provision and non-performing loans (NPLs) to quantify CRM, and ROA and NIM to measure profitability.

In order to ascertain the degree to which the correlation between credit risk and liquidity risk affects the probability of bank failures, Ejoh, Okpa, and Inyang (2018) studied First Bank of

Nigeria Plc. As part of its experimental research methodology, questionnaires were distributed to the study's sample of 80 participants.

The results of the study indicate a positive correlation between credit risk and liquidity risk. The fact that an increase in credit risk (bad loans) has an effect on a bank's loan (asset) portfolio and raises bank illiquidity lends credence to this. Both credit risk and liquidity risk have an impact on bank default risk. Based on the results, it was recommended that internal loan and credit monitoring procedures be fully put into place to guarantee that loans and credit extended to clients are repaid in full, plus interest, and that deposit money banks do not keep excess liquidity just for the sake of efficiently managing their liquidity position.

Githaiga (2023) investigated the connection between the credit risk management practices of Kenyan commercial banks and their financial performance. Descriptive research methodology was used in this study. The data in the study was analyzed using multiple regression analysis, and the findings were presented using tables and regression equations.

 The study found that the financial performance of commercial banks is significantly impacted. Additionally, the study discovered a strong link between financial performance and the efficiency of liquidity (ROA) and capital adequacy management. The study also discovered a weak and negative relationship between financial performance (ROA) and credit risk.

Otieno (2016) aimed to ascertain the relationship between Kenyan microfinance banks' financial performance and credit risk management. The following particular objectives were established: to determine the correlation between MFB performance and the portfolio at risk (PAR) indicator and the loan loss provision coverage ratio (LLPCR). Panel data from 2011 to 2015 and a longitudinal study technique were used. Twelve licensed MFBs were included in the target population.

A deliberate sampling strategy was used to sample six MFBs. A document analysis guide was used to gather secondary quantitative data from the MFB's financial reports. Descriptive statistics were used to show the trend of MFB risk exposure and performance. Pearson correlation was used to evaluate the degree of association and strength between the variables. A multiple regression model must be built in order to assess the importance of the relationship between risk management and financial performance.

The study found that there was a significant negative association (r=-0.68) between credit risk management with PAR and LLPCR parameters and both ROA and ROE performance metrics, as indicated by a regression coefficient of -0.2. Consequently, the study concluded that credit risk management influences MFBs' performance and that there is a significant correlation between the two.

Credit managers should operate under a sound credit-granting process, according to the study, which includes well-defined credit-granting criteria, such as knowledge of the MFB's target market, a comprehensive grasp of the borrower, the goal and structure of the credit, and the source of repayment.

Onango (2017) conducted a study to ascertain the impact of credit risk management on the performance of commercial banks in Kenya that are listed on the Nairobi Securities Exchange. Ten banks were selected as a purposive sample based on the criteria that they met and had complete data for the study period.

The main sources of secondary data used to create the study's variables were financial statements and the Nairobi Stock Exchange. Panel regression problems were diagnosed and treated as needed using the data.

While the capital adequacy ratio, loss given default ratio, and loan loss provision ratio did not have a statistically significant effect on bank stock performance during the study period, the non-performing loans ratio did have a negative and statistically significant impact.

To achieve its primary goal, Gitonga (2020) uses both qualitative and quantitative methodologies to investigate the connection between profitability and credit risk management. A straightforward linear regression model was employed to predict ROE for commercial banks since NPLR, an independent variable, had a linear relationship with ROE, the dependent variable.

Regression analysis was employed in the study to determine the relationship between ROE and NPLR. A structured questionnaire was used to gather the primary data, and inferential statistics were used to analyse the results. The secondary data was gathered over a ten-year period from the commercial banks' published annual reports.

The regression model's findings demonstrate that, at an acceptable level, credit risk management affects profitability. According to the study, banks should manage credit risk carefully in order to increase their levels of profitability. Nevertheless, only the ROE model as a profitability indicator and NPLR as a credit risk management indicator were used in this study, which was conducted at Kenyan commercial banks.

Manike and Rathnasiri (2020) investigated the connection between profitability and credit risk management in Sri Lankan commercial banks. Secondary data from Sri Lankan commercial banks was used in the study. Ten banks from 2019 to 2020 made up the sample.

The data was analysed using the Ordinary Least Square (OLS) regression approach. This credit risk management is linked to the banks' overall risk management, profitability, and liquidity. 22 This study examined how capital sufficiency, asset quality, management

effectiveness, earning effectiveness, and liquidity relate to credit risk management and its effect on profitability.

The results showed that the performance of Sri Lankan commercial banks and credit risk management are positively correlated. Additionally, the profitability of Sri Lankan commercial banks is significantly positively correlated with capital adequacy, earning efficiency, and liquidity coverage ratio. The financial performance of Sri Lankan commercial banks is negatively correlated with asset quality and management effectiveness.

Using questionnaires, open interviews, and documentation as data collecting methods, Rugira (2023) evaluated the Credit Risk Management and Profitability of Commercial Banks in Rwanda: a case study of Bank of Kigali. The linear regression model was employed in the study to examine the connection between profitability and CRM.

Whereas ROE is used to assess profitability, NPLR is used to measure CRM. Based on 96.1% of NPLR in ROE, the results demonstrate a very high level of credit risk management in profitability.

In their research at Banque Populaire Rwanda, Sabeza et al. (2015) verified that some commercial banks had shown subpar financial results. Ineffective mechanisms for managing credit risk have been linked to this disaster. This study used a descriptive and analytical approach based on both qualitative and quantitative data to evaluate the connection between banks' profitability and credit risk management.

Information was being extracted from questionnaires intended to be completed by 150 respondents, which included 23 employees of BPR Ltd at various levels. Additionally, information was gathered from newspapers, books, journals, and online resources.

According to the study's conclusions, BPR Ltd. has a credit management system, but it has to be updated and more widely used in the present Rwandan context.

Mohammad (2015) sought to determine how Jordanian listed commercial banks across various size bank categories were affected by their size in terms of profitability. Banks were categorised into three groups based on the size of their total assets using data for Jordanian commercial banks for the 2007–2012 period. Return on Equity (ROE) was used as a dependent variable to quantify profitability. The purpose of the study is to determine whether size has a statistically significant impact on profitability. To simulate asset size, simple regression was used with dummy variables for categories.

In 2016, Kagecha conducted research on the topic of "Bank Performance: Does Bank Size Matter?According to economic theory, lending rates may be high while deposit rates for larger institutions stay lower because they are seen as safer if they have more control over the domestic market and operate in an environment that isn't competitive.

Larger banks may therefore make more money, although the empirical data is still equivocal. The purpose of this study was to determine how bank size affected Kenyan commercial banks' performance. To solve the indigeneity issue, we used the system generalised method of moment (GMM) estimate technique using panel data from 2007 to 2014.

The empirical results demonstrate that size has little bearing on bank profitability in the context of Kenyan commercial banks. This suggests that while scale savings are crucial for profitability, they don't always result in increased profitability in Kenyan local markets. In order to explain bank profitability, the control variables of GDP growth, inflation, market concentration, and lagged profitability were all important.

The goal of Karar (2020) was to evaluate how COVID-19 affected Kenyan commercial banks' financial results. The goal of this study was to provide light on the impact the epidemic has had on the banking industry. The eleven commercial banks that are listed on the Nairobi Stocks Exchange (NSE) were the study's target population, and it used a descriptive research design. The complete target population was used in the study.

The Central Bank of Kenya (CBK) and the financial statements of the commercial banks listed on the NSE provided secondary data for this study.

Descriptive statistics and regression and correlation analysis were used in this investigation. The SPSS software was used to analyse the data. It was shown that there was a negative correlation between non-performing loans and bank performance as indicated by Return on Equity, or ROE; this means that a high number of non-performing loans causes financial performance to drop.

Kagoyire and Shukla (2016) sought to determine the impact of loan management on Rwandan commercial banks' financial performance. A descriptive survey methodology was employed in the study. The study's target population consisted of 57 employees of Equity Bank's credit department. The study found that collection policies, credit risk management, and client evaluation all had an effect on Equity Bank's financial success.

The financial performance of Equity Bank and its policies for credit risk management, client assessment, and collection were found to be significantly correlated by the study. According to the study, client assessment, credit risk management, and collection practices have a significant influence on Equity Bank's financial performance. It was found that a rigorous strategy was somewhat successful in recovering debt and that the collection policy had a higher impact on financial performance. The poll indicates that Equity Bank has to enhance its methods for collecting debt.

Sangwayire (2016) investigates the Urwego Opportunity Bank's credit risk management strategy in order to optimise its financial performance.

The financial performance was measured using return on equity (ROE), return on assets (ROA), and the efficiency of the credit risk management systems. According to the study, loan recovery was impacted by the use of credit risk procedures, with loans granted taking into account the five c's of credit.

The analysis indicates that there is no significant correlation between ROA and bad debt costs. However, the study did show that kids use these credit systems differently depending on the circumstance.

Ugirase (2023) looked at how credit risk management affected Rwandan banks' financial performance. A descriptive research methodology and correlational analysis were employed in the study. According to the study's overall findings and conclusion, every credit risk management parameter included in this investigation—aside from risk monitoring—is a highly important predictor of the financial performance of Rwandan banks.

It was found that identifying credit risk was crucial to understanding the profitability of Rwandan banks. It has also been discovered that credit risk evaluation, analysis, and grading play a significant role in explaining financial performance.

Using Bank of Kigali (BK) PLC as a case study, Harelimana and Uwibambe (2022) evaluated the impact of central bank of Rwanda rules on the financial performance of Rwandan commercial banks. According to the central bank of Rwanda's standards, the data was gathered from the bank's audited financial statements and 13 department heads at the Bank of Kigali.

Interviews and documentary methods were employed in the data collection process, and both descriptive and inferential statistics were employed to analyzed the results. According to the results, most respondents stated that capital adequacy regulations assist BK in safeguarding shareholder equity from potential threats. The findings showed that 38.9% of respondents agreed that Bank of Kigali PLC is able to lower NPLs thanks to BNR's credit risk management criteria.

The study came to the conclusion that the financial performance of Rwanda's commercial banks and the rules of the central bank of Rwanda are significantly correlated.

By using AB Bank Rwanda as an example, Niyimbonera (2022) sought to evaluate how credit risk management affected financial institutions' performance.

A combination of surveys, interviews, document reviews, and other reports were employed to achieve the previously indicated goals. A total of 71 respondents were given questionnaires, all of which were correctly completed and sent back for examination. Additionally, Universal Sampling was used to interview the director of Credit Delivery.

The impact of CRM on Rwandan commercial banks' performance was investigated using SPSS descriptive statistics, and it was determined to be substantial. The relationship between the research variables was ascertained through the use of regression and correlation analysis.

2.4. The research gap analysis

The current researcher discovered that there aren't many studies on loan management and its components, such as financial data management, banking loans management, and banking risks management, among others, based on various reports produced by the Bank of Kigali and other books (papers & journals) written by other scholars (and/or authors). Despite this,

the research findings indicate that the contents of loan management with regard to financial performance are frequently described in great detail.

To put it another way, there aren't many studies by various authors that have examined the relationship between loans and commercial banks' financial performance, particularly when it comes to Rwandan banks. As a result, current researchers were inspired to investigate "The loans management towards financial performance of Bank of Kigali (BK); during the period from 2020 up to 2023" in order to effectively contribute to academic research.

2.5. The connection between financial organisations' performance and loan management

Pyle (1997) asserts that any past-due account would reduce a seller's profit unless he has included additional expenses for late payments in his selling price or is able to recoup those costs through interest charges. Businesses may be enticed to extend credit in certain competitive markets by the possibility of more business, but this practice is risky unless it can be guaranteed that the extra revenue from higher sales will balance the higher credit costs or that the costs can be recouped through higher prices.

Koch and MacDonald (2000) contend that the riskiness of a bank's operations and portfolio will typically have a direct impact on its profitability. Therefore, banks must determine which risk variables have a bigger impact on profitability, which ultimately affects bank financial performance, in order to maximize the return. Additionally, as we indicated in the previous section, the most important aspect for commercial banks is credit risk. This indicates that there is a high likelihood that credit risk will affect profitability.

James (2005) states that the mark-to-market book used for active portfolio management should be subject to suitable market risk restrictions and that its profit and loss should be tracked on a daily basis. Activities related to portfolio rebalancing should be carried out

centrally by a dedicated team. The execution function of credit portfolio management should have its own execution capabilities and be separate from the institution's own trading areas.

Performance measurement goals for the portfolio management function should be well-defined. Targets for performance evaluations should be agreed upon by senior management to guarantee alignment with overarching institutional goals.

The goals of performance evaluations ought to align with the portfolio management function's mission. A financial institution's credit portfolio management department often changes over time. Indeed, its mandate frequently broadens to include more offensive aspects of portfolio management, such as the adoption of more return-oriented strategies, from defensive measures regarding concentrations and credit issues. Once more, top management needs to make it obvious that it supports this kind of mandate change, both in terms of its commitment to the change and its proven readiness to compensate those who take more risks. Organisations vary greatly in the extent of their credit portfolio management efforts, which may include any or all of the following objectives:

Reduction of exposure to deteriorating credits; reduction of event risk (headline risk) by lowering single-name and industry concentrations; improvement of the risk-adjusted return of a retained credit portfolio; and reduction of the economic capital needed to support the extension of credit and an increase in capital velocity so that it can be redeployed in higher-margin activities. The mandate of portfolio management should be clear and well-communicated because these objectives may occasionally conflict and must be accomplished within financial restrictions. James, 2005.

Tafri et al. (2009) assert that risk management is crucial for banks and policymakers alike since a robust banking system may support national financial stability and boost an

economy's ability to withstand economic downturns. For this reason, it is essential for commercial banks to research and quantify how risk management affects their performance.

2.6 Conceptual Structure

A conceptual framework is composed of a collection of general concepts and theories that assist a researcher in correctly defining the issue they are examining, formulating their enquiries, and locating pertinent material..

INDEPENDENT VARIABLES   **DEPENDENT VARIABLE**

Independent variables   **Dependent variables**

| **Factors of loans management**
• Non-Performing Loans Ratio
• Loan recovery | → | **Financial performance**
Return on Equity (ROE),
Return on Assets (ROA),
Current Ratio
Capital Adequacy Ratio (CAR),
Debt-to-Equity Ratio
Cost-to-Income Ratio
Asset Turnover Ratio |
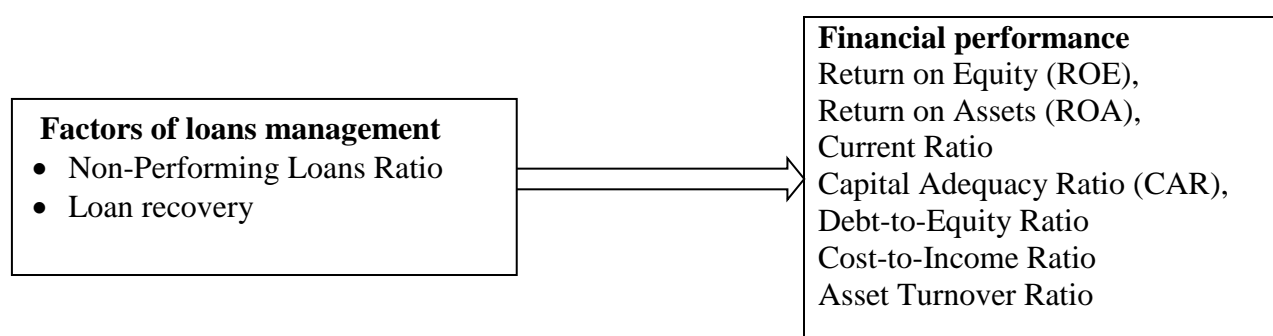
Figure 2.1: Conceptual framework

Source: Researcher (2024)

According to the conceptual framework, loan recovery rates and the non-performing loan (NPL) ratio were the two main measures used to assess Bk Group PLC's credit management procedures. These metrics aid in assessing how well the bank manages its loan portfolio, particularly with regard to handling defaulted loans and collecting unpaid balances. The loan recovery rates demonstrate how successfully Bk Group PLC is able to recover money from these non-performing loans, while the NPL Ratio sheds light on the percentage of loans that are not performing.

Using a number of important criteria, the study also looks at Bk Group PLC's financial performance. Return on Equity (ROE), which evaluates profitability in relation to shareholders' equity, and Return on Assets (ROA), which measures the bank's capacity to produce a profit from its assets, are two metrics used to analyse financial profitability.

Financial liquidity is assessed using the Liquidity Coverage Ratio (LCR), which makes sure the bank has enough high-quality liquid assets to cover its cash outflows during a 30-day stress period, and the Current Ratio, which gauges the bank's capacity to cover short-term liabilities with short-term assets.

The Capital Adequacy Ratio (CAR), which shows the bank's ability to withstand possible losses, and the Debt-to-Equity Ratio, which shows the bank's financial leverage, are two metrics used to assess financial solvency.

Lastly, the Asset Turnover Ratio, which evaluates how well the bank uses its assets to create revenue, and the Cost-to-Income Ratio, which compares operating expenses to operational income, are used to analyse financial efficiency..

CHAPTER 3: RESEARCH METHODOLOGY

This chapter covers the entire research process, from the study's logical basis to the data collecting and analysis on the effect of loan management on Bank of Kigali's financial performance. The chapter describes the researcher's methodology, the type of data gathered, the location of the data collection, and the analysis process. It outlines the sample strategies, procedures, and methodological approaches used in data collecting, as well as the issues that arose during the study.

3.1. Design of the research

A research plan outlines the steps and techniques for gathering the necessary data. Grinnell (2020) defined research design as the study's methodology and the conceptualization of the problem using research findings. The research was conducted using an ex post facto design, which means that it only used accounting data from Bk Group PLC's websites and the Rwanda Stock Exchange. Secondary data was taken from Bank of Kigali (BK) financial statements for a period of four years each as part of the study's descriptive research design. The 2020–2023 fiscal years were the study period.

Because it enables the analysis of historical data without changing factors, the ex post facto design was selected for this study on the loan management and financial performance of Rwandan commercial banks. The ex post facto method is perfect for investigating connections between previous loan management choices and their results because the study's main objective is to examine how loan management methods affect Bank of Kigali's (BK) financial performance over a four-year timeframe. By using accounting data that is already accessible, this methodology aids in understanding how these practices affect financial performance. This is in line with the study goals of assessing trends and making inferences based on past performance rather than manipulating experiments.

3.2. Data source

The primary data source is an original data source, meaning that the researcher gathered the data directly from the source for a particular project or study goal. There are several methods for gathering primary data. Secondary data, which are not obtained directly from the source like primary data, are essentially second-hand bits of information. Stated differently, secondary data are those that have previously been gathered (Raimo, S., 2018). Therefore, these are not as trustworthy as the original data. As a result, the primary source of data for this study was created using the interview technique, and the secondary source was created using the documentation technique.

3.3. Instruments for gathering data

The data collection methods used in the data collection analysis are covered in this section. Bk Group PLC's 2020–2023 financial statements served as the sole research instrument for this study.

3.3.1. A tool for documentation

Documentation, according to Paige (2021), is a system that formally recognises the sources used in the research. The ability to thoroughly examine the sources in order to gather more information on a certain topic is one of the fundamental benefits of document studies. This is a thorough examination and analysis of the topic's published documents, reports, periodicals, journals, and policy studies. The researcher used this documentary technique to conduct and obtain secondary data because it studies the literature and looks for global viewpoints to create a comparison framework for analysis and evaluation for readers.

3.4. Data analysis using the statistical method

These research investigations made it easier to quantify, number, and exhibit information in

the tables since the descriptive approach to data analysis provided the chance to measure and quantify research findings. In order to measure variables effectively, the model analysis must be presented using an ANOVA table, which the researcher used to calculate, analyse, and interpret the relationship between the variables using the data that was gathered.

Table 3.1: Table of ANOVA

The analysis of variance table that follows examines how the study's variables have regressed.

EVALUATION OF MEAN	
Range	**Interpretation of the mean**
[1-1.8 [	Very weak
[1.8-2.6 [	Weak
[2.6-3.4 [	Neutral
[3.4-4.2 [	Strong
[4.2-5]	Very strong
EVALUATION OF STANDARD DEVIATION-CORRELATION	
Scales	**Interpretation of Scales**
[-1.00 - 0.00 [	Negative correlation
[0.00 - 0.25 [	Positive and very low correlation
[0.25 - 0.50 [	Positive and low correlation
[0.50 - 0.75 [	Positive and high correlation
[0.75 - 1.00]	Positive and very high correlation

Source: (Berman and Saunders,2008)

3.5. Data processing methods

According to Mbaaga (2019), editing is the process of finding mistakes in finished questions, schedules, and mail questions whenever feasible. The researcher followed up with the respondents to get clarification on a few ambiguous answers. Kakooza (2018) defines coding

as the process of giving an answer a symbol or a number in order to identify it. By grouping various replies into categories for simple interpretation and analysis, this was utilised to summarize the data.

After the data was edited and coded, frequency distribution tables were employed. To summarize all of the study's findings, tables were created based on the major themes found in the Research findings could be measured and quantified using the statistical method. This approach made it easier for the researcher to number and quantify the findings of the study and display the data in tables. As a result, data analysis was done using SPSS.

3.6. Techniques for data analysis

The factors that were most essential to the study's objective were those that were present. He contends that after being edited and tallied, the data is combined into tables and may be presented in numerous ways for statistical analysis. Qualitative analysis was applied in this investigation. A method is a way of thinking that involves evaluating, comprehending, and interpreting facts and information that has been updated by researchers. To attain the aspect of knowledge, a method consists of an intellectual process and a systematic system of arrangement. It is a theoretical procedure that synchronises resources for research, operations, and methods.

3.6.1. Method of analysis

According to Grawitz (2016), a technique is a set of focused procedures used to accomplish one or more goals; it is a set of guidelines that guide all planned research and aid in the interpretation of the data gathered.

The researchers found this approach helpful in conducting a more thorough examination of any data pertaining to bank loan services.

3.6.2. The use of statistics

A collection of mathematical techniques known as statistics can be used to create probabilistic models based on the gathering and examination of actual data. The statistical method provides the ability to monitor and quantify study outcomes while permitting predictions. According to Moser and Kalton (2022), data is integrated in various formats for statistical analysis, such as tables after it has been edited and coded. The study's findings were tallied and quantified using this technique. This approach used a formula for counting frequencies and percentages to understand quantitative data and display it in tables.

3.6.3. The synthetic approach

The synthetic method is a technique that involves combining field data to provide a clear and relevant interpretation. According to Kaoul (2018), the synthetic technique assisted in the coherent globalisation of elements. This approach made it possible to synthesise the findings and provide recommendations to the Bank of Kigali.

3.7. Research limitations

One drawback of this study's ex post facto design is that, because it is based on historical data, it could be impacted by confounding variables that were not taken into consideration or taken into account when the data was being collected. Furthermore, because financial statements may have been created using different accounting procedures or may have been exposed to changes in reporting standards over time, the study may encounter difficulties with data availability and accuracy. This could have an impact on the data's comparability and consistency among the chosen banks.

3.8. Considerations for ethics

Some ethical considerations were taken into account when performing the research, and the researcher was able to collect data more efficiently by adhering to these considerations. In order to conduct this study, the researcher was able to obtain consent from the participants. The researcher asked the management of Bank of Kigali to get permission for its staff members to take part in data collecting, which necessitated an authority letter. Privacy and confidentiality are the most important things to keep in mind as the researcher was collecting data from respondents.

CHAPTER 4: DATA ANALYSIS, PRESENTATION, AND INTERPRETATION

This chapter consists of the analysis and the interpretation of the data that were obtained through reports of Bank of Kigali (BK) Plc that was used in this study that aimed to assess the loan management on the financial performance of commercial banks in Rwanda. It is arranged in three parts meaning the assessment of loan management practices; the second is about financial performance while the third is about the hypotheses testing. In this chapter different statistical techniques were used where the analysis was performed with the use of SPSS Version 27 and Microsoft Excel where it was found necessary.

4.1 Assessing the loan management in Bank of Kigali Plc

This section intends to assess the loan management practices within Bk Group PLC in terms of Non-Performing Loan (NPL) Ratio and Loan recovery rates. The Non-Performing Loan (NPL) Ratio was used to assess the effectiveness of loan management policy, while Loan Recovery Rates was measured by measuring it directly, meaning the percentage of defaulted loans that the bank successfully recovers.

These variables were assessed within a period of 4 years (2020-2023), and this may give the image of how Bk Group PLC performed regarding on loan management practices.

Table 4.1: Loan Management Practices

Years	Loan management Practices	
	Non-Performing Loan (NPL) Ratio	Loan Recovery Rate
2020	0.07	0.01
2021	0.05	0.07
2022	0.03	0.31
2023	0.05	0.19

Bank of Kigali Plc (2020-2023)

The loan management practices of Bank of Kigali from 2020 to 2023 reveal significant trends in both the Non-Performing Loan (NPL) Ratio and the Loan Recovery Rate, reflecting the bank's effectiveness in managing and recovering loans during this period.

In 2020, the NPL Ratio was relatively high at 0.07, indicating a higher proportion of loans were not performing as expected. However, the Loan Recovery Rate was notably low at 0.01, suggesting limited success in recovering defaulted loans. This combination points to challenges in both managing loan risks and recovering defaulted loans.

By 2021, the bank improved its loan management practices, reducing the NPL Ratio to 0.05, signaling better control over loan defaults. The Loan Recovery Rate also increased significantly to 0.07, indicating more effective efforts in recovering defaulted loans. This improvement suggests that the bank implemented stronger recovery strategies alongside better loan management.

The most significant changes occurred in 2022, where the NPL Ratio further decreased to 0.03, reflecting stronger loan management and a reduced rate of loan defaults. The Loan Recovery Rate saw a dramatic increase to 0.31, showcasing a substantial improvement in the bank's ability to recover defaulted loans. This indicates a peak in recovery efforts and possibly the introduction of more aggressive or effective recovery mechanisms.

In 2023, the NPL Ratio slightly increased to 0.05, suggesting a small rise in loan defaults compared to the previous year. However, the Loan Recovery Rate, while lower than in 2022, remained strong at 0.19, still indicating effective recovery processes. This shows that despite a slight uptick in non-performing loans, the bank continued to maintain a relatively high recovery rate.

Overall, the trend suggests that Bank of Kigali made significant strides in improving its loan management and recovery practices over this period, particularly from 2021 to 2022, though there was a slight regression in 2023. The overall trajectory indicates a generally effective loan management policy with strong recovery efforts, especially in 2022.

H1 Testing: Bank of Kigali's loan management is efficient .Based on the findings, the study concluded that the loans management in Bank of Kigali are effective, and H1 was accepted.

4.2 Analysis of Financial Performance in Bank of Kigali Plc

The study analyzed the financial performance of the Bank of Kigali Plc. The financial performance was measured in term of financial profitability, Financial liquidity, Financial solvency and Financial efficiency. These were analyzed specifically using financial ratios that follows and all are presented in Table 4.2:

Financial Profitability was measured using:

Return on Equity (ROE): Measures the profitability relative to shareholders' equity.

Return on Assets (ROA): Assesses the bank's ability to generate profits from its assets.

Financial Liquidity was measured using:

Current Ratio: Measures the bank's ability to cover its short-term liabilities with its short-term assets.

Liquidity Coverage Ratio (LCR): Ensures that the bank holds an adequate level of high-quality liquid assets to cover net cash outflows over a 30-day stress period.

Financial Solvency was measured using:

Capital Adequacy Ratio (CAR): Measures the bank's capital in relation to its risk-weighted assets, indicating the bank's ability to absorb potential losses.

Debt-to-Equity Ratio: Reflects the bank's financial leverage by comparing its total liabilities to shareholders' equity.

Financial Efficiency was measured using:

Cost-to-Income Ratio: Compares operating expenses to operating income, indicating how efficiently the bank is managing its expenses relative to its income.

Asset Turnover Ratio: Measures how efficiently the bank is using its assets to generate revenue.

Table 4.2: Financial Performance in Bank of Kigali Plc

		Financial Performance					
Years	ROE	ROA	CUR	Capital Adequacy Ratio (CAR)	Debt-to-equity ratio	Cost-to-Income Ratio	Asset Turnover Ratio
2020	0.06	0.01	1.26	0.24	4.08	0.44	0.08
2021	0.08	0.01	1.23	0.21	5.16	0.45	0.09
2022	0.10	0.02	1.20	0.24	4.60	0.49	0.09
2023	0.10	0.03	1.26	0.20	4.80	0.43	0.11

Source: Financial reports Bank of Kigali Plc (2020-2023)

The financial performance of Bank of Kigali from 2020 to 2023, as reflected in the provided ratios, offers insights into the bank's overall financial health and operational efficiency:

Return on Equity (ROE): ROE increased from 0.06 in 2020 to 0.10 in 2022 and remained stable in 2023. This upward trend indicates an improvement in profitability relative to shareholders' equity, suggesting that the bank has been able to generate higher returns for its investors over time.

Return on Assets (ROA): ROA shows a gradual increase from 0.01 in 2020 to 0.03 in 2023. Although still modest, the improvement reflects the bank's increasing efficiency in using its assets to generate profit.

Current Ratio (CUR): The CUR remained relatively stable, with values around 1.20 to 1.26 across the years. A CUR above 1 indicates that the bank has sufficient short-term assets to cover its short-term liabilities, demonstrating good liquidity management.

Capital Adequacy Ratio (CAR): The CAR fluctuated slightly, decreasing from 0.24 in 2020 to 0.20 in 2023. Although slightly lower in 2023, the CAR remained above regulatory requirements, indicating that the bank maintained a strong capital base to absorb potential losses.

Debt-to-Equity Ratio: The Debt-to-Equity Ratio increased from 4.08 in 2020 to 5.16 in 2021, before slightly decreasing to 4.80 in 2023. This ratio indicates that the bank is leveraging its equity to finance a higher level of debt, which can be a sign of growth or increased risk depending on how well the debt is managed.

Cost-to-Income Ratio: The Cost-to-Income Ratio increased slightly from 0.44 in 2020 to 0.49 in 2022, then improved to 0.43 in 2023. A lower ratio in 2023 suggests that the bank became more efficient in managing its operating expenses relative to its income.

Asset Turnover Ratio: The Asset Turnover Ratio improved from 0.08 in 2020 to 0.11 in 2023, indicating that the bank has become more efficient in generating revenue from its assets over time.

Discussion

Bank of Kigali showed positive trends in key profitability and efficiency ratios, such as ROE, ROA, and Asset Turnover Ratio, which suggests that the bank performed well in these areas. The stable Current Ratio and consistent CAR indicate that the bank maintained good liquidity and capital adequacy throughout the period. However, the increase in the Debt-to-Equity Ratio suggests that the bank has taken on more debt relative to equity, which could entail higher risk if not managed carefully. The improvement in the Cost-to-Income Ratio in 2023 reflects better cost management, further indicating that the bank's overall financial performance has been solid.

H2 Testing: Bank of Kigali is doing well financially. Based on these findings, we accept H2 stating that Financial performance in Bank of Kigali is good.

4.3 Impact of Loan Management on Financial performance

To study the impact of Loan management practices on financial performance in commercial banks in Rwanda, specifically in Bank of Kigali Plc, multiple regressions was used. Findings are in the tables below.

Table 4.3: Model Summary between Loan management practices and Financial performance.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.758a	0.718	0.703	1.47123

Predictors: (Constant), Loan management practices

The results from model 1 shows that the coefficient of determination (R square) was 0.718. This implies that the predictors of Loan management practices contribute 52.8% on the financial performance in Bk Group PLC, while 29.7% of financial performance in Bk Group PLC comes from other variables that are not included in the model 1.

Table 4.4: ANOVA between Loan management practices and Financial performance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	57.515	1	1.074	4.831	.000b
	Residual	7.667	4	0.222		
	Total	**65,182**	**5**			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Loan management practices

The F-test is 4.831 and is significant at .000 therefore it means that Loan management practices variable has positive and significant effects on financial performance in Bk Group PLC at 5% significant level. This implies that Loan management practices has a causal contribution to the Financial performance in Bk Group PLC,

H3 Testing: The financial performance of Bank of Kigali is not significantly impacted by loan management procedures. The findings led to the rejection of Ho3 which stated that there is no significant impact of Loan management practices on the financial performance of Bk Group PLC. Therefore, Ho3 is not accepted at 5% level of significance.

Table 4.5: Coefficients between Loan management practices and financial performance

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	6.667	1.785		5.735	0.000
	LMP	0.742	0.444	.686	4.500	0.000

a. Dependent Variable: Financial performance

The results from Table 4.5 indicates that Loan management practices have positive and significant effect on financial performance in Bk Group PLC ($\beta1$= 0.686, t=4.500, p-value=0.000<0.05). This indicates that 1 unit increase in Loan management practices leads to 0.686 units increase in financial performance in Bk Group PLC.

Discussion

The findings of this study align with several empirical studies that have demonstrated a positive relationship between loan management practices and the financial performance of commercial banks. These findings support the previous research by Kanchu and Kumar (2017) who investigated the loan management practices in commercial banks of Pakistan. The study exposed that the loan management practices impact on financial performance of the commercial banks of Pakistan as calculated by ROE and ROA. Also, Mahamad and Arbana (2016) and Saeed and Zahid (2016) found a positive association between credit risk management and profitability in banks, supporting the observed positive trend in Bank of Kigali's loan recovery rate and reduced NPL ratio from 2020 to 2022. Additionally, the findings of the current study resonate with Poudel (2012), who identified default rates as a strong predictor of financial performance in banks, which aligns with the significant improvement in Bank of Kigali's financial performance indicators like Return on Equity (ROE) and Return on Assets (ROA). The results from Maina (2016) and Izzaamirah et al. (2016) also confirm that effective lending practices and credit risk management can positively influence bank profitability, which is consistent with the improved financial performance (ROE, ROA, and Capital Adequacy Ratio) seen in the Bank of Kigali between 2020 and 2023.

However, the findings contradict some studies that highlight the negative impact of high non-performing loans (NPL) on financial performance. For example, Onango (2017) found a negative and statistically significant relationship between NPL and stock performance, which suggests that a higher NPL ratio adversely affects performance. In this study, although there was a slight increase in NPL in 2023, the Bank of Kigali maintained a strong recovery rate, which suggests that the bank's management strategies were effective in mitigating the adverse

impact of NPLs. Similarly, Karar (2020) found that high NPLs lead to a decline in financial performance, but this study showed that despite minor fluctuations in NPL, financial performance remained strong, suggesting that other factors, such as loan management practices and recovery strategies, played a significant role in maintaining profitability.

The study's findings align with several key theories related to loan risk management, particularly the Right Loan Standards Theory and Loan Culture Theory. These theories stress the importance of adopting strong loan standards and fostering a supportive loan culture within banks. Bank of Kigali's emphasis on maintaining high loan quality and managing risks effectively reflects these theories, with top management playing a crucial role in supporting sound lending practices. The Transaction Cost Theory also supports the bank's efforts in reducing non-financial transaction costs, such as borrower screening and loan monitoring, thereby enhancing operational efficiency.

However, the study does not fully support some aspects of the Credit Default Theory, particularly regarding the link between loan delinquency and bankruptcy. While the theory suggests a direct relationship between delinquency and insolvency, the findings indicate that Bank of Kigali's approach to managing loan delinquency through structured repayment schedules and borrower assessment does not always result in the anticipated defaults. Additionally, the study does not find strong evidence supporting the Credit Markets Theory, which argues that credit markets suffer from information asymmetry and lead to adverse selection and moral hazard. Bank of Kigali's robust screening and monitoring practices seem to mitigate these risks, challenging the notion that information asymmetry significantly impacts their loan performance.

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CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter presents the summary of researcher's interpretation and conclusions from data collected, a summary of the results connected to the research problem and purpose of the research project and conclusion and recommendations were also suggested in this chapter.

5.1 Summary

This research study was carried out for the aim of assessing the Loan management practices and the financial performance in commercial banks in Rwanda. The research used explanatory research design to analyze the data collected throughout financial reports of the Bank of Kigali Plc and multiple regression analysis was used for hypotheses testing. The secondary data collected from the financial statements of Bank of Kigali Plc, in a 4 years period (2020-2023), formed the base of statistical analysis using the SPSS version 27.

5.1.1 Effectiveness of Loan Management in Bk Group PLC

In assessing the loan management practices within the Bank of Kigali Plc, From 2020 to 2023, Bank of Kigali's loan management practices showed significant trends in the Non-Performing Loan (NPL) Ratio and Loan Recovery Rate. In 2020, the NPL Ratio was high, but the Loan Recovery Rate was low. By 2021, the bank improved its loan management practices, reducing the NPL Ratio to 0.05 and increasing the Loan Recovery Rate to 0.07. In 2022, the NPL Ratio decreased to 0.03, and the Loan Recovery Rate increased to 0.31. Despite a slight increase in non-performing loans in 2023, the Bank maintained a strong recovery rate.

5.1.2 Financial Performance of Bk Group PLC

In assessing the financial performance within the Bank of Kigali Plc, The bank's Return on Equity (ROE) and Return on Assets (ROA) have shown an upward trend, indicating improved profitability.

The Current Ratio (CUR) has remained stable, indicating good liquidity management. The Capital Adequacy Ratio (CAR) fluctuated slightly, but remained above regulatory requirements. The Debt-to-Equity Ratio increased from 4.08 in 2020 to 5.16 in 2021, and slightly decreased to 4.80 in 2023. The Cost-to-Income Ratio increased slightly from 0.44 in 2020 to 0.49 in 2022, and the Asset Turnover Ratio improved from 0.08 in 2020 to 0.11 in 2023.

5.1.3 Impact of Loan Management on financial performance in Bk Group PLC

The results from model 1 shows that the coefficient of determination (R square) was 0.718. This implies that the predictors of Loan management practices contribute 52.8% on the financial performance in Bk Group PLC, while 29.7% of financial performance in Bk Group PLC comes from other variables that are not included in the model 1. The F-test is 4.831 and is significant at .000 therefore it means that Loan management practices variable has positive and significant effects on financial performance in Bk Group PLC at 5% significant level. This implies that Loan management practices has a causal contribution to the Financial performance in Bk Group PLC.

The results from Table 4.5 indicates that Loan management practices have positive and significant effect on financial performance in Bk Group PLC ($\beta 1$= 0.686, t=4.500, p-value=0.000<0.05). This indicates that 1 unit increase in Loan management practices leads to 0.686 units increase in financial performance in Bk Group PLC

5.3 Conclusion

Based on the result showed from the result of objectives, it was concluded that loans management policy in Bank of Kigali are effective, that loan recovery rates in Bank of Kigali are effective.

That financial performance in Bank of Kigali is good, and that there is a significant impact of Loan management practices on the financial performance of Bank of Kigali. Therefore, objectives of this research were so achieved very well.

5.3 Recommendations

Yet though that Loan management practices hold a vital contribution in financial performance within Bk Group PLC, some weaknesses were found and the researcher gives the following recommendations:

1. Based on the analysis of Bank of Kigali's loan management practices from 2020 to 2023, it is recommended that the bank continue to strengthen its loan management and recovery strategies, particularly focusing on maintaining a low Non-Performing Loan (NPL) Ratio while further improving its Loan Recovery Rate. Given the slight increase in NPL in 2023, the bank should implement more proactive risk assessment and monitoring procedures to prevent loan defaults. Additionally, enhancing the recovery processes that proved effective in 2022 could help sustain and possibly improve the recovery rate, ensuring that the bank remains resilient in managing loan defaults and maximizing recoveries.

2. Based on the financial performance of Bank of Kigali from 2020 to 2023, it is recommended that the bank continue to focus on maintaining and enhancing its profitability, as indicated by the positive trends in ROE and ROA. However, attention should be given to managing the increasing Debt-to-Equity Ratio to ensure that the bank

does not become over-leveraged, which could increase financial risk. Additionally, the bank should continue its efforts to improve operational efficiency, as reflected in the declining Cost-to-Income Ratio in 2023. Strengthening these areas was help sustain the bank's growth while mitigating potential risks associated with higher debt levels..

5.4.1 Suggestion for Further Study

It is recommended that other researchers who are interested in related issues conduct a continuation study by adding more variables, as this one has not yet expressed all of the variables that contribute to the loan management practices and financial performance in commercial banks. This was increase the body of literature on the subject.

Since the study was conducted at the Bank of Kigali, it is advised that, for comparative purposes with this one, a comparable study be conducted at another bank or at another financial institution, such as microfinances or SACCOs.

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