

KIGALI INDEPENDENT UNIVERSITY ULK

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IMPACT OF LOAN MANAGEMENT TO THE PERFORMANCE OF FINANCIAL INSTITUTION IN RWANDA.

**CASE STUDY: EQUITY BANK RWANDA PLC
(2020 – 2023)**

Dissertation Submitted and Presented to the School of
Economics and Business Studies in partial fulfillment
of the Academic Requirements for the Award of a
Bachelor's Degree with Honors in Accounting

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Kigali, October 2024

DECLARATION

I, **SHIMUSENGE Anuarite**, do declare that this dissertation titled ***“Impact of Loan Management to the Performance of Financial Institution in Rwanda. Case study: Equity Bank Rwanda Plc (2020 – 2023)”*** is my own work and it has never been presented to any institution for any academic award, and all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Date...../...../2024

Signature:

APPROVAL

I, **NYIRAKAGEME Alice** herewith certify that this dissertation titled *“Impact of Loan Management to the Performance of Financial Institution in Rwanda. Case study: Equity Bank Rwanda Plc (2020-2023)”* has been conducted by **SHIMUSENGE Anuarite** under my guidance and supervision as a partial fulfillment for the award of the Master’s degree in Finance.

Signature.....

Date: / / 2024

Supervisor: NYIRAKAGEME Alice

DEDICATION

From SHIMUSENGE Annuarite

To My Mummy

To My Aunt Elizabeth

To My Sister

To My friends,

To My classmates and colleagues.

ACKNOWLEDGEMENTS

I praise the Almighty God Jehovah who gave me knowledge, power and patience in every endeavor of my life.

Completion of this dissertation has been a result of both direct and indirect support of many people to whom I owe acknowledgement.

I would like first of all to extend my gratitude on the mind behind the establishment of a great institution of high learning ULK, herein **Prof. Dr. RWIGAMBA BALINDA** the Founder and President of ULK.

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May God bless you all.

SHIMUSENGE Annuarite

LIST OF ABBREVIATIONS, ACRONYMS AND SYMBOLS

FHA : Federal Housing Administration

FI : Financial Institution

Frw : Franc Rwandais

I&M : Investment and Mortgage

IPOs : Initial Public Offerings

LDR : Loan to Deposit Ratio

MFIs : Microfinance

MPT : Modern Portfolio Theory

NBR : National Bank of Rwanda

NPL : Non-Performing Loan

P&L : Profit and Loss

Plc : Public Limited Company

RHS : Rural Housing Service

ROA : Return On Asset

ROE : Return on Equity ratio

SACCOs : Saving and Credit Cooperatives

ULK : Universite Libre de Kigali

USA : United State of America

VA : Veterans Administration

% : Percentage

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ABSTRACT

The purpose of the study is to analyse the impact of loans management on performance of financial institutions in Rwanda with a case study of Equity Bank Rwanda Plc (2020-2022). Where the main objective of this research is to found out the impact of loans management on performance of financial institutions in Rwanda with a case study of Equity Bank Rwanda Plc (2020-2022) and the specific objective of the study is to evaluate the effectiveness of loan management in EQUITY BANK RWANDA PLC and to assess the contribution of loan management to the financial performance of Equity Bank Rwanda Plc. The data collection techniques are document technique and the methods of data analysis are analytical statistical, synthetic and comparative methods. The results of the findings shows that the bank's success in loan recovery, maintaining a recovery rate of around 95%, which aligns with NBR standards. Moreover, the management of Non-Performing Loans (NPL) has remained compliant with NBR regulations, staying below the threshold of 7% with a stable ratio around 5% from 2022 onward. The analysis shows that Equity Bank Rwanda Plc has demonstrated effective loan management practices through its loan issuance, recovery strategies, and adherence to regulatory requirements, positioning itself favorably for sustainable growth in the banking sector. This shows that first hypothesis has been verified and confirmed. Based on annual reports and interviews, highlights significant growth in customer deposits, with an increase from RWF 215.9 billion in 2020 to RWF 742.6 billion in 2023, indicating effective credit management strategies that attracted customers. The net income trend reflects a robust financial position, with profits rising from RWF 10.3 billion in 2020 to RWF 36.4 billion in 2023. This increase showcases the bank's operational efficiency and effective cost management, primarily driven by favorable credit management practices. Liquidity ratios, including the current ratio, demonstrate the bank's ability to meet short-term obligations, remaining above the Central Bank's standards. The return on equity (ROE) and return on assets (ROA) ratios indicate a positive trajectory in profitability, underscoring the bank's effective use of loans to enhance shareholder value. Overall, the analysis confirms that loan management has significantly contributed to the financial performance of Equity Bank Rwanda Plc, enhancing both profitability and liquidity. The researcher recommended that Equity Bank Rwanda Plc should enhance their collection policy by adapting a more stringent policy to a lenient policy for effective debt recovery.

Key Words: Loan, Management, Performance, Financial and Institutions

CHAPTER I. GENERAL INTRODUCTION

This section presents the background of the study, problem statement, objectives of the study, research question, hypotheses the study, scope of the study, significant of the study and finally the structure of the study.

1.1. Background of the Study

Loan is the principal business activity for most commercial banks. The loan portfolio is typically the largest asset and the predominate source of revenue. As such, it is one of the greatest sources of risk to a bank's safety and soundness (Worku et al., 2019). The financial institutions sector is the important sector that contributes to the economic development of a country. Among them banking sector is responsible for maintaining a regulative climate leading to the wealth competitive growth and development of the economy. Banking sector contribute to the good relationship of members and to the realization of government policies particularly poverty reduction and job creation, the global financial service providers serve all business in terms of the loans in developing countries, including big, small and medium enterprises, cooperatives, MFIs (micro finance institutions), and others such as private economic agents (Banke & Yitayaw, 2022).

In USA, effective management of the loan portfolio's credit risk requires that the board and management understand and control the bank's risk profile and its credit culture. To accomplish this, they must have a thorough knowledge of the portfolio's composition and its inherent risks. They must understand the portfolio's product mix, industry and geographic concentrations, average risk ratings, and other aggregate characteristics. They must be sure that the policies, processes, and practices implemented to control the risks of individual loans and portfolio segments are sound and that lending personnel adhere to them (Chen, 2020). For decades, good loan portfolio managers have concentrated most of their effort on prudently approving loans and carefully monitoring loan performance. Although these activities continue to be mainstays of loan portfolio management, analysis of past credit problems, such as those associated with oil and gas lending, agricultural lending, and commercial real estate lending in the 1980s, has made it clear that portfolio managers should do more (Worku et al., 2019).

In Africa, performing loans is usually understood to entail the credit management of financial services to micro-entrepreneurs and small businesses, which lack of access to banking and related services due to the high transaction costs associated with serving these client categories. The two main mechanisms for the delivery of financial services to such clients are relationship-based banking for individual entrepreneurs and small businesses; and group-based models, where several entrepreneurs come together to apply for loans and other services as a group in order to develop their activities in the whole country (Chen, 2020).

Loans operations are central to the sustainability of the financial banks in Africa and their eventual success to attain sustainability, the financial banks in Africa need to increase their outreach as well as grow the group loan management portfolio. The challenge for most financial banks in Africa is how to achieve and maintain a desired level of economic growth of African population. It is in that prospective that a bank can excel and be able to build a product strategy in its management and positioned itself as competitive successful bank and contribute to the development of the country (Banke & Yitayaw, 2022).

In Rwanda, banking sector is the nerve center and blood vessel of the whole economy. As result, when its operations generate good effects, it will contribute much to the country's wealthy and growth. Financial institutions are the most important intermediaries that serve the public today and they hold more assets than any other institution, in providing loans, they involve the risks of lending and recovering loans, therefore it is necessary to remove the burdens of nonperforming loans, and implement loan managements management to prevent the problem re-emerging, so these loans can strongly influence the economic development of the nation (Ali & Atan, 2020).

Most of Rwandan banks had a cut dawn in the process of loan Granting in the last quarter of the year 2012 up to first quarter 2013 and this Drastic dawn word trend is suspected to be associated with inability to apply right credit risk Management techniques. Credit risk refers to the probability of loss due to a borrower's failure to make payments on any type of debt. Credit risk management, meanwhile, is the practice of mitigating those losses by understanding the adequacy of both a bank's capital and loan loss reserves at any given time – a process that has long been a challenge for financial institutions. Better credit risk management also presents an opportunity to greatly improve overall performance and secure a competitive advantage (Joseph et al., 2023).

The purpose of the credit and policies and procedures manual is to create a set of standardized policies and procedures for the lending activities of banks. The main objective is to ensure through group loan appraisal and proper monitoring of all outstanding group loans. This loans manual provides a detailed description of all stages of the lending process.

EQUITY BANK RWANDA PLC in Rwanda is one of the most financial institutions which is preferred because of their facilities offered to their members and low interest rate charger on short term loans and loans compared to other financial institution such as commercial institution. Equity Bank Rwanda Plc is one of the banks operating in Rwanda and it is exposed to risk management. Equity Bank Rwanda Plc concentrates to the facilities of lending and saving on low income earners. This is a source of economic development because it increases their revenue the set-up of petty businesses (BNR report, 2014).

1.2. Problem statement

According to Simon (2020), the 2020-09 financial crisis was caused by failure to manage credit risk properly, he emphasized that there were failures of implementation in relation to both risk management and corporate governance. Notably most commercial banks did not implement credit risk management and corporate governance frameworks that were aligned with accepted good practice. This poor performance has been attributed to combination of many factors including, low net interest margins, inflation, exchange rates, Good managerial ideas, credit risk management

The banking institutions in Rwanda are those business organizations that act as mobilizes depositors of savings and provide credit. The engagement of credit portfolio management in rural areas is very little; this reflects, in part, the absence of standard elements upon which lending decisions are made. Individuals, enterprises and cooperatives lack formally registered assets, which a bank can accept as collateral. There is a lack of organization and capacity to develop and define standard business plans and there are severe difficulties of communication. In response to this environment for lending, certain specialized institutions have been created or strengthened to help channel financial resources towards rural activities and the financing of financial institutions (Chen, 2020).

This loans creation process exposes the banks to high default risk, which might lead to financial distress including bankruptcy. All the same, beside other services, banks must create loans for their clients to make some money, grow and survive stiff competition at the market place. One of the key challenges for economic development is providing financial services to

the population in remote areas where the population density is low, the market is smaller, and providing service entails high costs. Innovative corresponding banking whereby a bank link itself with its own branches located in remote areas has emerged as a solution to this problem of outreach. To be effective and successful, this strategy requires a conducive macroeconomic environment; the strategy also needs total involvement of all players: Central government, Central bank, community based organizations and the population concerned (Daniel et al., 2020). With the discussion on loans and its management, it is noticed that loans are the source of income once there are well managed but on the other hand loans can be the source of loss of the banks once they are not well managed. In other words, apart from the managerial expenses related to different activities of the bank management, which can increase the operating costs, the main reason of the banks loss is the loans and their management. In this regard, the researcher chooses the topic” Impact of loans management on the performance of financial institutions in Rwanda” Case study of Equity Bank Rwanda Plc (2020-2022).

1.3. Objectives of the Study

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

1.3.1. General Objectives

The main objective of this research is to found out the impact of loans management on performance of financial institutions in Rwanda with a case study of Equity Bank Rwanda Plc (2020-2022)

1.3.2. Specific Objectives

The following are the specific objectives of the study:

- i. To evaluate the effectiveness of loan management in EQUITY BANK RWANDA PLC .
- ii. To assess the contribution of loan management to the financial performance of Equity Bank Rwanda Plc

1.4. Research questions

To achieve both general and specific objectives of the study, the following research questions are formulated:

- i. Does Equity Bank Rwanda Plc manage its loans effectively?
- ii. Does loan management contribute to the financial performance of EQUITY BANK RWANDA PLC ?

1.5. Research Hypothesis

According to (MARTYN SHUTTLE worth 2011) a research hypothesis is statement created by researchers when the speculation upon the outcome of research or experiment. It is any anticipated answer to the research question.

- i. EQUITY BANK RWANDA PLC manages its loans effectively.
- ii. Loans management contributes to the performance of EQUITY BANK RWANDA PLC

1.6. Scope of the study

When carrying out a research, the researcher is required to indicate the scope of the study in order to only avoid any misunderstanding that would occur in any time but also to make a research more significant. Therefore, each scientific work has to be delimited. Therefore, this study was delimited in time, space and in domain because of the insufficient financial means and time.

1.6.1. Scope in space

The research was conducted in Equity Bank Rwanda Plc which located in Kigali city, Nyarugenge District.

1.6.2. Scope in domain

The study will focus on the contribution of loans management to the performance of EQUITY BANK RWANDA PLC , in domain of money and banking.

1.6.3. Scope in time

The research was conducted in the period of three years from 2020 to 2022.

1.7. Significance of the study

According to (Amin, 2005), the significance section of a proposal states, “how the results of the research will influence the institution (the context) or society in question, why the study is worth the time, effort and expenses. The significance of this study is based on the following namely personal interest, academic interest, scientific interest and finally social interest.

1.7.1. Personal interest

This study helped the researcher to acquire more added skills and knowledge, which would help her to know broadly loan management on financial performance of commercial banks. This work is important, intellectual and convenient exercise that helps the researcher to emerge the acquired theoretical knowledge, with the reality of field practice.

1.7.2. Academic interest

Under the University program, a dissertation is among the essential components of the academic required program in order to be awarded a degree in any certain field. Conducting this study enabled the researcher to be awarded a bachelor' degree in the field of Accounting.

1.7.3. Scientific interest

On the scientific side, this research is on the great importance, because it uses the scientific methods and techniques of the data collection and analysis and then the interpretation of results. It follows and be aligning to the standards scientifically recognized in the domain of the scientific research. Thus, the results of this research were therefore valuable and reliable so in advance it would serve in future studies.

1.7.4. Social interest

This study provides good image of performance of banking institutions in Rwanda. The result of this study affected the financial sector of Rwanda by providing a good ways of analyzing the loan management.

1.8. Organization of the study

The study was composed by four chapters. The chapter one of this study is made by the general introduction Chapter two presents the literature review. It focused on all theories related to the topic, fundamental concepts and research done by other researchers that researcher was referred on in this study. Third chapter focuses on the assessment of whether customer care services are applied effectively or not in Equity Bank Rwanda Plc within the period of our study. The fourth chapter presents the findings on performance of Equity Bank Rwanda Plc in relation to loan management in this bank. At the end, a short summary that comprises of a short brief view of the study, conclusions, recommendation and suggestions regarding to the study was presented.

CHAPTER TWO: LITERATURE REVIEW

This chapter provides the definition of the keys concepts, a review of existing issues that have been explored and studied by different authors about the topic, it is essentially related to the views extracted from books, internet, and other theories related to loan management, performance, financial institutions, and to the contribution of loan management on performance of financial institutions.

2.1. Conceptual review

In this research, the following key concepts are defined in order to explain the key concepts of the topic.

2.1.1. Loan

Loan is derived from Latin credo “ meaning “ “ I believe” and is usually define as the liability to buy with a promise to pay, or the ability to obtain title and to receive goods for enjoyment in the present although payment is deferred to a future date. It therefore consists of an actual transfer and delivery of goods in exchange for a promise to pay in the future (Muyombano, 2016). A loan is defined as the debt or borrowing but according to Judy Pearsall (2016: page 83), defined a loan as something that borrowed especially some amount of money that is expected to be paid back with interest. According to (Woelfel J. 2014) the term loan and loans are different. According to the Dictionary Collins Robert (2015), loan is defined as money lent advanced, borrowed funds without security etc.

2.1.2. Loan management

Loan management is a function performed within a company to improve and control loan policies that will lead to increased revenues and lower risk including increasing collections, reducing loan losses and extending loans to loan worthy and developing competitive loan control (Daniel et al., 2020). Loan management is the process or processes put in place by a person or organization to assist in the management, coordination, control, delivery, or support of one or more Loan Items. Loan management is simply management of loan and advances. Success of banking business depends on the efficient and effective management of loan. Poor loan management has proved to be one of the major causes of bank failure throughout the world. Thus, loan management is always a challenging task in banking since it involves risk linked with credit operations (Yimka et al., 2015).

Loan management deals with minimizing those risks which are directly or indirectly involved in lending process. Lending is the principal business activity for most of the commercial banks as it provides highest return by the means of interest on loan and advances and fee on non-fund based credit activities. Banks also invest certain part of their loan in social development in the form of deprived sector lending. Effective management of loan portfolio and credit function is fundamental to bank's safety and soundness. Loan management is the process by which risk that is inherent in lending process are managed and controlled. In other words, loan management is concerned with formulating and implementing lending policies. O.P Agrawal in his book "principal of banking", (Macmillan) has written that credit management is the management of credit portfolios of the bankers and financial institutions (Nyanchama Bwoma et al., 2017).

Loan management affects company's profitability and liquidity. The banks take care in analyzing creditworthiness of borrowing customer to ensure that the interest and principal amount on loan are timely recovered without any problem and liquidity. In short, loan mobilization and recovery are too important aspect of loan management but it also includes all the activities related with loan such as loan processing, marketing, monitoring, concentrating risk, hedging risk, and credit reporting (Chen, 2020).

2.1.3. Performance

According to (Jacob et al., 2022) performance is defined as the organization ability to attain goals by using resource in an effective and efficient manner. He emphasized the managers responsibility is to coordinate resources in most efficient and effective manner to accomplish organizational goals. Effective meaning producing a successful result and the efficient means doing something well thoroughly well within a waste of time, money and energy. Performance is strategy that an organization pursues when it increase level of objective upward in significant increment, much higher than an exploration of its past achievement level. However that another factor ,variable showing the increase into the level of the business objective may be considered as indicators of the firm performance (Nwambeke et al., 2020).

According to Brigham and Houston (2023), performance entails effectiveness which refers to the firm's ability to produce and serve what the market requires at particular time and efficiency which means meeting the objectives at the lowest possible cost with the highest

possible benefit. In order to assess performance, the managers use actions designed to generate sustainable long term improvements. Performance refers to “the accomplishment of a given task measured against preset known standards of accuracy, completeness, cost, and speed. Performance is deemed to be the fulfillment of an obligation, in a manner that releases the performer from all liabilities under the contract”

2.1.4. Financial performance

Financial performance is an analysis conducted to see the extent to which a company has implemented it by using financial implementation rules properly and correctly (Subramaniam et al., 2023). Financial performance is one of the factors that indicate the effectiveness and efficiency of an organization in order to achieve its goals. Effectiveness if management has the ability to choose the right goals or an appropriate tool to achieve the goals that have been implemented. While efficiency is defined as the ratio (comparison) between input and output, namely with certain inputs obtaining optimal output. Financial performance appraisal is one way that can be done by the management in order to fulfill its obligations to the funders and also to achieve the goals set by the company.

Financial performance is the level of performance of a firm over a specific period of time and expressed in terms of the overall profits or losses incurred over the specific period under evaluation (Claude, 2022). Kathryn (2023) defined financial performance as a contextual concept associated with the phenomenon being studied. Financial performance is a measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. There are many different ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales (Barguelligil & Bettayeb, 2020).

2.1.5. Financial institution

A financial institution is a bank engaged in the business of dealing with financial and monetary transactions, such as deposits, loans, investments and currency exchange. Financial institutions encompass a broad range of business operations within the financial services sector, including banks, trust companies, insurance companies, brokerage firms and

investment dealers. Virtually everyone living in a developed economy has an ongoing or at least periodic need for the services of financial institutions (Bakari & Makulilo, 2022).

According to Goldsmith (2022), financial institution is referred to those institutions that can provide financial service. Generally, financial institutions are also an organization in a given economy that provides financial services for the purpose of their own existence and also satisfying user need. Financial institutions are entities which provide services and allow agents access to financial instruments and markets. Those institutions collect funds from the public in financial and place them in financial assets.

A financial institution (FI) is a company engaged in the business of dealing with financial and monetary transactions such as deposits, loans, investments, and currency exchange. Financial institutions include a broad range of business operations within the financial services sector, including banks, insurance companies, brokerage firms, and investment dealers. Financial institutions are vital to a functioning capitalist economy in matching people seeking funds with those who can lend or invest it (Sarpong, 2016).

2.2. Theoretical framework

The theoretical framework of a research project relates to the philosophical basis on which the research takes place, and forms the link between the theoretical aspects and the practical components of the investigation undertaken. The study was guided by the following theories:

2.2.1. Financial Accelerator Theory

(Elizabeth, 2022) seeks to explain how small economic shocks have relatively large effects on the lending and borrowing activities. It relies on the interplay between economic agents' net worth and the external finance premium that arises due to asymmetric information between lenders and borrowers. Where economic agents' net worth is defined as the sum of liquid assets plus collateral value of illiquid assets less outstanding obligations and the external finance premium is defined as the difference between the cost of funds raised externally and opportunity costs internal to the firm (Bernanke, et al., 2015).

The theory argued that the less the amount of his own wealth the borrower contributes to the project, the more his interests will diverge from the interests of the supplier of the external funds. Borrowers were more eager to undertake riskier projects. That is, projects that has a high probability of large return, but also those offering low returns.

From the borrower's perspective these projects are preferred since the firms' losses in the cases when the project's return is low are limited to zero by legal regulation. From the lenders' point of view, these projects are unfavorable since they bear all, or most of, the costs in the case of low project returns. The theory further indicates that due to economic shocks, the borrowers may not have the ability to borrow and are likely to avoid repayment of their loans (Wadesango, 2020).

This theory is relevant for this study because it recommends the commercial banks that should actively screen loan applicants to assess their characteristics and credit worthiness. However, the process of appraising and assessing borrowers by commercial banks before issue of loans require reliable and timely information. This is supported in the symmetric information theory.

2.2.2. Modern Portfolio Theory (MPT)

The basic portfolio model was developed by Harry Markowitz in the 1950s and early 1960s. Markowitz is considered the father of modern portfolio theory since he originated the portfolio model that underlies modern portfolio theory. He derived the expected rate of return for a portfolio of assets and the expected risk measure. Markowitz established that under reasonable assumptions, the variance (or standard deviation) of the expected rate of return was a meaningful measure of portfolio risk. From his model, the expected rate of return of a portfolio is the weighted average of the expected return for the individual assets in the portfolio.

The traditional portfolio theory, Modern Portfolio Theory (MPT), is a theory which attempts to maximize investors' expected return for a given amount of risk, or minimize investors' risk for a given level of expected return. MPT therefore includes two factors when choosing assets to form a portfolio, the mean and the variance and goes therefore also by the name of mean-variance theory. Portfolio theory deals with the selection of portfolios that maximize expected returns consistent with the individual acceptable levels of risk. The theory provides a framework for specifying and measuring investment risk and to develop relationships between risk and expected returns. Its main basic assumption is that investors often want to maximize returns from their investments for a given level of risk.

The full spectrum of investments must be considered because the returns from all these investments interact hence the relationship between the returns for assets in the portfolio is important (Of et al., 2022). This theory related to the study in such way that, it explains more about returns on investment where by DTSs equally invests by loan portfolios as assets with aim of getting returns from the investment. In such kind of investment, there are risks involved which in turn affect the financial performance of the DTS. It is therefore important for SACCOs to deploy prudent loan management practices in order to instill control within the various portfolios with a target of maximizing returns on each portfolio.

2.2.3. Liquidity Preference Theory

The general idea of the liquidity preference theory was developed by J.M Keynes`s within a simplified model in which there is only two types of financial assets money, the liquid and the bonds with no maturity, the illiquid assets. According to him, an increased preference for liquidity in the model is equivalent to increased demand for money and therefore demand for money increases wherever more people think interest rates are likely to rise than believes they are likely to fall (Imeokparia & Bola, 2020). The demand for money as an asset was theorized to depend on the interest foregone by not holding bonds (here, the term "bonds" can be understood to also represent stocks and other less liquid assets in general, as well as government bonds). Interest rates, he argues, cannot be a reward for saving as such because, if a person hoards his savings in cash, keeping it under his mattress say, he will receive no interest, although he has nevertheless refrained from consuming all his current income. Instead of a reward for saving, interest, in the Keynesian analysis, is a reward for parting with liquidity.

According to the Liquidity Preference Theory, money is held for different motives. These are the transactions motive, precautionary motive, and speculative motive. Transactions Motive: We get income only periodically. We must keep some money with us till we receive income next, in order to be able to carry out transactions. Transactions motive also includes business motive. It takes some time before the businessperson can sell his product in the market. But he must be able to pay wages to the workers, cost of raw material, etc. as these become due. He must therefore keep some cash for this purpose. Precautionary Motive: Everyone puts something aside for a rainy day. Some money must be kept to meet unforeseen situations and emergencies (Imeokparia & Bola, 2020).

Speculative Motive: The future is uncertain and the rate of interest in the market continues changing. No one can guess what turn the change will take. But everybody hopes, and with confidence, that his guess is likely to be correct. It may or may not be so. Some money, therefore, is kept to speculate on these probable changes to earn profit. According to this theory, investors will always prefer short-term securities to long-term securities. To encourage them hold long term bonds, long term securities should yield higher interests than short term bonds. Therefore, the yield curve will always be upward sloping. A hypothesis about the term structure of interest rates (the relationship between interest rates and term to maturity) holding that investors demand a premium for bearing interest rate risk (Elizabeth, 2022).

The extent of the premium increases with term to maturity but at a decreasing rate. The two reasons behind the decreasing rate of increase are that duration, a measure of a bond's price sensitivity to interest rate changes, increases at a decreasing rate with term to maturity and that long term interest rates are typically less volatile than short term interest rates (Thennakoon & Rajeshwaran, 2022). This theory addresses the interest rate loan management technique. This theory is related to the study addresses the independent variable of time and interest rates. It evaluates the relationship between of time and interest rates in relation to loan repayment and financial performance.

2.3. Review on loan management

Key loan management activities include;

2.3.1. Compliance with the loan policy of Banks in loan appraisal

According to (Mathura, 2013); loan appraisal is a very important stage in the loan process. The loan appraisal is the process of analyzing the member's loan worthiness (capacity and willingness to repay a loan in a given period of time). The Loan Officers must determine the following 6 Cs: (Ndikubwimana, 2019)

Character is assessed through interviews with neighbors, other Bank members, business suppliers and community leaders.

Capacity which is the member's business and the household generate enough profits to repay the loan. The loans officer should assess capacity by viewing and analyzing the business

record to determine the total income and expenses of the member's projects and the net profit.

Collateral where the Bank took collateral where possible. If tangible collateral is not available, they rely heavily on information as a collateral substitute, although they do not issue large unsecured loans.

Conditions where both regulatory and economic conditions are considered. Regulatory conditions apply to the lenders individual circumstances; for example, when banks are not lending in specific areas. Economic conditions determine the lender's general policy towards loans. Economic conditions determine the lender's general policy towards loan. Both are affected by the current economic cycle. When applicant fulfills the conditions of getting a loan his/her application is approved otherwise rejected.

Capital which is the net worth on an individual as indicated by personal financial statements. After the assessment of the loan approval done within the Bank, the research realized that they applied these conditions in all the loans disbursed over the last three years.

2.3.2. Loan processing in financial institutions

There is risk in the provision of credit to borrowers. This risk exists because an expected payment may not occur. Credit risk is defined as potential losses arising from the inability of credit customers to pay what is owed in full and on time. Bank lending involves a bank, providing a loan in return for the promise of interest and principal repayment in the future (Elizabeth, 2022). The lender should aim at assessing the extent of the risk and try to reduce the amount of uncertainty that will exist over the prospect of repayment. The lender must therefore gather all the relevant information and then apply his or her skills in making judgment. In view of these credit risks that might lead to bad loans, banks have some loan request procedures and requirements contained in their credit policy documents to guide loan officers in the processing of loans for customers. The following are some of the factors considered in granting loans: applicant's background, background of the Business, the purpose of the request, the amount of credit required the source of repayment, repayment terms of the borrower, security proposed by the borrower, technical and financial soundness of the credit proposal (Nsengiyera, 2020).

Kay Associate Limited (2022) identified five techniques of credit vetting known as the five Cs framework used in assessing a customer's application for credit. Firstly, the character of the customer is assessed. This determines the willingness of the customer to pay the loan and may include the past credit history, credit rating of the firm, and reputation of customers and suppliers. Secondly, the capacity of the customer which is described as his or her ability to pay in terms of cash flow projection is critically assessed. Thirdly, the capital or soundness of the borrower's financial position in terms of equity is assessed. In addition, conditions such as the industry and economic conditions of the business are also assessed. These are important because such conditions may affect the customer's repayment ability. The last C is collateral. This is referred to as the secondary source of repayment. This is considered in appraising the customer's request.

2.3.3. Components of a Credit Risk Management Framework

There are five traditional components to a credit risk management framework:

2.3.3.1. Risk Identification

Whereas risk management can cover a broad range of operational, regulatory, legal, strategic, and IT risks, credit risk management focuses on identifying potential risks in financial transactions such as loans and leases. For measurement and mitigation, financial institutions and financial institutions must identify key risk factors inhibiting performance and growth. Risk identification applies to individual lenders and organizations. Enterprises should regularly do risk modeling to look at different scenarios that may change their risk posture. For example, how would an economic downturn affect default rates, and how would increased defaults in specific areas impact your overall financial health? This points to the need for a regular risk assessment to predict the best potential threats that may be present or on the horizon (Ndikubwimana, 2019).

2.3.3.2. Risk Measurement and Analysis

Once a risk is identified, it must be analyzed to determine its scope and impact. Understanding the contributing factors and links between risk factors and performance is also important. In every industry, there are key risk indicators (KRIs) that improve the likelihood of performance or nonperformance.

Credit risk management is no different. Your credit risk analysis should examine the leading indicators common to risk exposure and analyze applications concerning these risks. This technique should be applied anytime you consider new loans, leases, or borrowers (Worku et

al., 2019). Assessments should also be carried out on your entire portfolio to ensure compliance with regulatory, industry, and company performance measures. Stress testing provides banks and other institutions a baseline for where potential breakdowns may occur within practices or unforeseen blind spots can be addressed within a risk framework. You need to understand where you are as an organization and the potential impact any new credit can have on your business (Cohen & Burjorjee, 2003).

2.3.3.3. Risk Mitigation

Credit risk management also requires a deep dive into how you extend credit, including the credit terms you offer and the rates you provide. Risk mitigation balances risk and reward to ensure you align with organizational frameworks. For example, you can manage credit concentration, so your financial institution has enough diversification to limit exposure in particular areas. Risk mitigation also requires discipline to avoid taking on unnecessary risks.

2.3.3.4. Risk Reporting and Measurement

Measurement should occur each time a new borrower comes forward. Maintaining robust reporting on aggregate risk is also important to ensure risk levels are within your organizational tolerance. Based on a financial institution's framework, individual credit ratings are a quick way to spot-check a potential borrower's ability to handle a loan properly.

2.3.3.5. Risk Governance

Governance is a broad term that covers many areas. Credit risk governance includes the set of policies and mechanisms that ensure employees work within the parameters set by the credit risk management framework. Risk governance provides a regimented set of rules that must be followed, including how loans are assessed, what scores or metrics must be achieved for lending, authority and approvals, risk limits, and general oversight.

2.3.4. Loan Risk Controls

Key loan risk controls include (Daniel et al., 2020):

2.3.4.1. Loan product design

Financial institutions can mitigate a significant portion of default risk by designing loan products that meet client needs.

Loan product features include the loan size, interest rate and fees, repayment schedule, collateral requirements and any other special terms. Loan products should be designed to address the specific purpose for which the loan is intended.

2.3.4.2. Credit Committees

Establishing a committee of persons to make decisions regarding loans is an essential control in reducing credit (and fraud) risk. If an individual has the power to decide who will receive loans, which loans was written off or rescheduled, and the conditions of the loans, this power can easily be abused and covered up. While loan officers can serve on the credit committee, at least one other individual with greater authority should also be involved. The credit committee has the responsibility not only for approving loans, but also for monitoring their progress and, should borrowers have repayment problems, getting involved in delinquency management.

2.3.4.2. Delinquency Management

To minimize such delinquency MFIs can use the following delinquency management methods Institutional Culture: A critical delinquency management method involves cultivating an institutional culture that embraces zero tolerance of arrears and immediate follow up on all late payments. MFIs can also remind clients who have had recent delinquency problems that their repayment day is approaching.

2.3.4.4. Client Orientation

A logical first step toward developing a zero-tolerance institutional culture is to communicate this concept to each new client before she receives a loan.

2.3.4.5. Staff Incentives

Creating staff involvement in discouraging delinquency, through a staff incentives system, can be effective. Delinquency Penalties: Clients should be penalized for late payment. This could include delinquency fees pegged to the number of days late and limiting access to repeat loans based on repayment performance.

2.3.4.6. Loan Rescheduling

Given the vulnerability of the target market, it is common for borrowers to be willing but unable to repay. After carefully determining that this is indeed the case it may be appropriate to reschedule a limited number of loans. Only done under extreme circumstances, this may involve extending the loan term and/or reducing the installment size.

2.3.4.7. Collection Policy

There are various policies that an organization should put in place to ensure that credit management is done effectively; one of these policies is a collection policy which is needed because all customers do not pay the firms bills in time. Some customers are slow payers while some are non-payers. The collection effort should, therefore aim at accelerating collections from slow payers and reducing bad debt losses (Munyao, 2021).

2.3.5. Types of loan

Loan types vary because each loan has a specific intended use. They can vary by length of time, by how interest rates are calculated, by when payments are due and by a number of other variables (Banke & Yitayaw, 2022).

2.3.5.1 Open-ended loans

They are loans that can be borrowed over and over. Credit and lines of credit are the most common types of open-ended loans. Both of these loans have a credit limit, which is considered as the maximum amount that can be borrowed by a client at one time. One may use all or part of your credit limit based or depending on needs. Each time one makes a purchase, the available credit decreases. As one makes payments, the available increases are allowing you to use the same credit over and over as long as you abide by the terms.

2.3.5.2. Closed-ended loans

They are one-time loans and cannot be borrowed again once they have been repaid. As payments are made on closed-ended loans, the balance of the loan goes down. However, you don't have any accessible credit you can use on closed-ended loans. Alternatively, if you need to borrow more money, have to apply for another loan and go through the approval process over again.

2.3.5.3. Mortgages loan

Mortgages are loans distributed by banks to allow consumers to buy homes they cannot pay for upfront. A mortgage is tied to your home, meaning you risk foreclosure if you fall behind on loan payments. Mortgages have among the lowest interest rates of any loans.

2.3.5.4. Personal Loans

Personal loans can be used for any personal expenses and do not have a designated purpose. This makes them an attractive option for people with outstanding debts, such as credit card debt, who want to reduce their interest rates by transferring balances. Like other loans, personal loan terms depend on your credit history.

2.3.5.6. Small Business Loans

Small business loans are granted to entrepreneurs and aspiring entrepreneurs to help them start or expand a business. The best source of small business loans is the U.S. Small Business Administration (SBA), which offers a variety of loan types depending on each business's needs.

2.3.5.7. Commercial and industrial loans

According to (Peter S, 2013), Commercial and industrial loans are loans to business or industrial firms. These primarily short- term working capital loans (Loans to finance the purchase of material or labor) or long term loans (loan to purchase machines and equipment).

2.3.5.8. Secured Loans

These are loans that rely on an asset as collateral for the loan, and In the event of loan default, the lender can take possession of the asset and use it to cover the loan. Interest's rates for secured loans may be lower than those for unsecured loans. The asset may need to be evaluated to confirm its value before a secured loan can be borrowed. The creditor may only agree to borrow up to the value of the asset. A title loan is a good example of a secured loan. These are secured (or borrowed) against an asset you own, such as your home, which is offered up as collateral. Ultimately, if you default on the loan, the bank will get their money back by way of foreclosing your house (or otherwise seizing the collateral).

The interest rate should be very low (and often negotiable), hovering close to prime rate. The better your credit rating is, the more bargaining power you have with the terms, including loan amount and repayment period. Payment terms are flexible, and can even be structured as "interest-only". If the loan is secured against the equity in your home, the application process usually involves a "drive by appraisal" of your home and some legal fees, that together amount to a few hundred (up to a thousand) dollars. As such, it is usually best to apply for a higher loan qualification amount than you think you need (as long as you know yourself well enough not to get into more debt unnecessarily). This way if you wish to borrow more money later on, new appraisals and legal fees can be avoided.

2.3.5.9. Unsecured Loans

These are type of Loans that don't require an asset for security. These loans may be considered as more difficult to get and have greater interest rates. Unsecured loans rely solely on credit history and income of borrowers to be qualified for the loan. If a default on an unsecured loan, the creditor has to exhaust collection choices, including debt collectors and the lawsuit to recover the loan. These are (as they sound) not secured against any assets. The bank can only utilize collectors (and freeze your accounts) if you default.

The loan amount granted is largely attributable to your credit history and income/assets/debts at the time of application. There is a considerably higher assumption of risk on the bank's part with an unsecured loan. Thus, the interest rate is much higher.

Examples of Unsecured Loans: Personal lines of credit, Student loans, Credit cards/department store cards and Conventional Loans. Conventional loans are those Type of loans that aren't insured by a government agency like the Rural Housing Service (RHS), Federal Housing Administration (FHA), or the Veterans Administration (VA). When it emanates to mortgage loans, the term "conventional loan" is frequently used. Conventional loans may be compliant, meaning they follow the procedures set forth by Fannie. Non-conforming loans don't meet Fannie and Freddie's qualifications

2.3.6. Loan classification and provision

2.3.6.1. Loan Classification

Loans can be classified as performing and non-performing; a performing loan is a loan that payments of both principal and interest charges are up to date as agreed between the creditors and debtor. Generally, loans that are outstanding in both principal and interest for a long d to the terms and conditions contained in the loan contract are considered as non-performing loans (NPLs). We have already mentioned strategies such as effective lending policy, credit analyzing and rating, securitizing loans. However, at some degree, losses will still incur and reduce equity (earnings) of banks. This requires lenders to consider potential loan losses in their financial forecast as business expenses. According to (Chen, 2020), loan loss provision is a noncash charge against operating income made to account for expected or unexpected loan losses. Based on business experiences, banks estimate potential loan losses that might happen and determine loan loss provisions. Using the provisions, they create credit loss reserves in balance sheets by saving proportions of their incomes from the previous financial periods. Credit loss reserve can affect the value of banks in investors' evaluation because this account can reduce bank profits. Nevertheless, provision for credit losses is still a popular method to mitigate credit risk.

The benefits of this approach are not very visible if there are only few unrelated losses. However, if there are many losses occur in a short time due to systematic risk such as financial crisis or recession, loan loss reserve can minimize the actual effect of the losses by using the money that is saved into this account. The losses will first diminish the loan loss reserve before they affect the bank earnings and thus, the income statement will not record these losses (Alecia et al., 2014).

Provisions for loan losses are reported on the income statement as a deduction in income statement from income and represent an allocation to the loan loss reserve. It is management's estimate of reported income that will not be received due to anticipated defaults. It is also a non-cash expense. Foremost is the fact that provisions for loan losses involve a subjective estimate. It can be manipulated at management's discretion within certain bounds. If provisions are understated, the loss reserve was too low relative to expected losses (Mateka et al., 2017).

Table 2.2: Classification of loans

Classifications	Criteria for classification	Provision
1. Pass (Normal)	Loans or advances that are fully protected by the current financial and paying capacity of the borrower and are not subject to criticism.	Not less than 1% of the outstanding balance.
1. Watch (Special Mention)	past due for more than 30 days but less than 90 days	Not less than 3% of the outstanding balance.
3. Substandard	Past due for more than 90 days but less than 180 days.	20% of the outstanding balance of the facility.
4. Doubtful	past due for more than 180 days but less than 360 days	50% of the outstanding balance of the facility
5. Loss	Past due over 360 days	100% of the outstanding balance of the facility

Source: Researcher compilation, 2024

In Rwanda, credit facilities in the last three categories: Substandard, Doubtful and Loss are NPL and must be classified according to the classification criteria provided for as follows (Official Gazette; 2017). In addition to loans classification, regulation N° 12/2017 of 23/11/2017 on Credit Classification & Provisioning requires that a bank must write off loans that have been classified as "Loss" for more than 360 days. However, a bank may continue the recovery process after writing off the loan in line with other applicable laws. Only BNR's prior approval is required before writing off loans to a bank related party.

2.3.6.2. Loan Provisioning

In any economy, a major factor considered in making loans is the ability of the borrower to repay the loan. However, to mitigate the risk of default, banks ensure that loans are well secured.

Though advances shall be granted on the basis of the borrower's ability to pay back the advance and not on the basis to pledge sufficient assets to cover the advance in case of default, it is highly desirable for all advances made to customers and staff to be well secured. This means that in the event of default the bank shall fall on the collateral used in securing the facility to mitigate the effect of loss of principal and interest (Chikwira et al., 2022). In view of the above, banks take into account the assets used in securing the facility to determine the level of provision to be made. Bank of Ghana regulations indicate that certain amount of provisions are made on the aggregate outstanding balance of all current advances, and aggregate net unsecured balance of all other categories as shown in the table below (Asare & Sakoe, 2015).

Table 2.3: Categories of loans and their provisions

No	Category	Provisioning Rate	No. of Days of Delinquency
1	Current	1%	Less than 30 days
2	OLEM	10%	30 less than 90 days
3	Substandard	25%	90 less than 180 days
4	Doubtful	50%	180 less than 360 days
5	Loss	100%	360 days and above

Source: Section 53(1) of Banking Act 2004 (Act 673)

The review of the above literature on classifications and provisioning implies that the higher the non-performing loan category the higher the provisions and charges for such bad loans. For example in December 2008, the total banking industry loan classification depicted an increase in the nonperforming categories which were 85.97%, 78.47% and 63.73% for substandard, doubtful and loss respectively. This led to an increase in the total non-performing loans which increased from 6.37% in 2007 to 7.68% in 2008 (Sayankar & Mali, 2022).

2.3.7. Regulation on credit in general

Every bank shall have sound administrative and accounting procedures and adequate internal control mechanism for the purpose of identifying and monitoring all credit to insider lending and subsequent changes to them ,in order to ensure compliance ,at a consolidated level ,with the limits on credit concentration (Joseph et al., 2023).

2.3.7.1. Provision on classified credit facilities

Banks shall maintain specific provision for all non-performing credit facilities. All credit facilities classified as substandard, Doubtful or loss shall be subject to specific provision, regardless of whether the subjective or objective or criteria were used in determining classification (Nsengiyera, 2020).

Specific provision for substandard asset shall be maintained at not less than 20% of the outstanding balance of credit facility. Specific provision for doubtful assets shall be maintained at not less than 50% of the outstanding balance of the credit facility (BNR Law n° 21 /2011 on credit classification and provisioning). Specific provision of loss assets shall be maintained at 100% of the outstanding balance of the credit facility. The outstanding balance consists of the principal.

2.3.7.2. Credit policy

A credit specific the criteria and procedures in the evolution, processing, approval documentation and disbursement of credits. Such Policy should include the procedure for credit administration and recovery, the recording of transaction and maintenance of appropriate credit and document. The levels of discretion given to appropriate credit and document files. The levels of discretion given to approving executive officer or committees must be defined in such credit policy or in a separate resolution of the board of directors (Munyao, 2021).

2.3.7.3. Limitation to credits granted to insiders

A bank shall not grant or promise to grant to an insider, an advance, credit or commitment which is more than 5% of its net Worth. Credits to a group of related parties are considered as single insider borrower.

2.3.7.4. Credit facility considered as non-performing

A credit facility with a pre-established repayment schedule shall be considered non-performing if (Chikwira et al., 2022): The principle or interest is due and unpaid for ninety days or more, Principle or interest is due and unpaid for ninety days or more, the principal or interest payment equal to ninety days interest or more have been capitalized, refinanced renegotiated, restructured or rolled over (Art 4 of Law n° 21/2011 on credit classification and provisioning). A credit facility without a fixed repayment program

,such as overdrafts or others forms of open – ended credit ,shall be considered non-performing when any one of the following exists: The credit facility exceeds the customer’s established borrowing limit for ninety days, The customer’s borrowing line has expired for ninety consecutive days or more, Interest is due and unpaid for ninety days or more or the overdraft or account is inactive.

2.3.7.5. Overdrafts

Upon meeting the non- performing criteria under article 8 , overdrafts and other credit facilities without a pres-established repayment schedule are to be converted to a reasonable amortization schedule consistent with the borrower’s financing condition. The conversion of overdrafts and other credit facilities without pre-established repayment schedules into term credits shall not change the classification category and the corresponding level of provision for an observation period of three (3) month subject to which the account can be upgrade based on performance (Nsengiyera, 2020).

2.3.7.6. The written off of the unrecoverable portion

The unrecoverable portion of credit shall be written off after disposal of related collateral. this credits is posted in the account “ losses on irrecoverable credits “ if a corresponding provision had been made ,the bank shall make a write back equivalent to the booklet loss. Prior approval of central bank is require before writing off credits to a bank related party the recovery report of written of credits must be submitted to the central bank as well as the other non- performing credits recovery report (Tuyisenge & Rusibana, PhD, 2021).

2.3.7.7. Interdiction to grant Credits Facility

No credit facility shall granted to borrower classified substandard, doubtful and loss unless it is a restructured credits.

2.3.7.8. Restructured Credit Facility

A restructured facility is a facility which has been refinanced , rescheduled ,rolled .or otherwise modified because of weaknesses in the borrower ‘s financial position or the non- payment of the debt arranged and shall be subjected to the following condition : It is evidence that the financial position of the borrower can service the debt the condition (BNR Art 18 of law n° 21/2011 on credit classification and provisioning)

A account classified as Doubtful or loss shall not be restructured unless an up-front payment is made to cover ,at the least ,unpaid interest ,or these is an improvement . Make them restructured account ,including unpaid interest ,or a well –secured account ; A commercial credit facility other than overdraft not be restructured more than twice over the life of the original facility. A restructured credit facility shall not be classified upward for a minimum of 3 months following the new arrangements (Chen, 2020).

2.3.8. Certificates deposit

The certificates of deposit are the instruments of the debt issued on the money market by the institution referred to under article 1 of law n° 08/99of 18/6 /1999 on the regulation of banks and other financial institutions, in order with prudential standards, in particular those relating to the division and covering of risks by own capital stocks ,the solvency and working capital ratio (BNR Art 1 of Law no 08 /99 of 18/06/1999 on the regulation of banks and other institutions).

2.3.8.1. Maximum outstanding certificates of deposit

The outstanding certificates of deposit cannot exceed the highest the two following levels. 80% of the portion of the assets (application of funds) with less than two year to run. 25% of total outstanding assets. The assets referred to in the preceding paragraph are those which are applied in the form of credits to customers , of sales credit financing and leasing operations (renting with option to buyer just renting) ,on every settlement of account ,the ratios set forth under paragraph 1 of this article must be submitted to the bank which published them at the disposal of subscribers (BNR Art 11 of law no 08 /99 of 18/06 1999 on the regulation of the banks and other institutions).

2.3.8.2. Statutory reserves of deposit

The certificates of deposit are subject to the regulations regarding statutory. A bank shall not grant or promise to grant to a single person or to related parties ,an advance ,credit or commitment which is more than 25% of its net Worth .

2.3.8.3. Collaterals

A bank may grant an advance or credit facility in excess of 25% but not more than 50% of its net worth ,if its maturity does not exceed 5 years and adequately secured by the following collaterals or securities(BNR Art 4 of Law n° 08/99 of 18/06/1999 on the regulation of banks and other institutions).

Fixed deposits held by the lending bank, Guarantees issued by the world Bank or other similar multilateral lending organizations; a financial guarantee issued by a reputable and highly rated foreign financial institution, acceptable to the central Bank; a guarantee issued by a parent financial institution where the parent institution is highly rated and is acceptable to the central Bank; a bank shall not have large exposures which, in the aggregate, exceed 8 times its Net Worth.

2.3.8.4. Recovering of credits given

Every bank shall have sound administrative and accounting procedures and adequate internal, Control mechanisms for the purpose of identifying, recoding and monitoring all large exposures, And subsequent changes to them, in order to ensure compliance, at a consolidated level, with the limits on credit concentration and large exposures. Every bank shall submit, on a quarterly basis, to the central Bank, a return titled ‘Credit Concentration and large exposure.

2.3.8.5. Disclosure of credits granted to insiders

The Bank shall disclosure detailed insider related credits in audited annual financial statements. The non-performing component should be clearly stated in the report. The external auditor should also give an opinion in the financial statement on the insider related credits on the regulation of the banks and regulations. Insider related credits should not be secured by the bank’s own shares (BNR Art of law n^o 08/99of 18/06 /1999).

2.3.8.6. Limitation to Credits granted to insiders

A bank shall not grant or promise to grant to an insider, an advance, credit or commitment which is more than 5% of its Net Worth. Credit to a group of related parties is considered as a single insider borrower recovering 5% of credits given. Every bank shall submit ,on a quarterly basis ,to the central bank , a return titled “ credit concentration and large exposure (BNR Art 3 of law n^o 08/99 of 18/6/1999 on the regulation of banks and others institution).

2.4. Financial performance of financial institutions

Cicea and Hincu (2020) state that financial institutions represent the core of the credit for any national economy. In turn, the credit is the engine that put in motion the financial flows that determine growth and economic development of a nation. As a result, any efficiency in the activities of financial institutions has special implications on the entire economy.

The management of every financial institution must establish a system for assessing investment performance which suits its circumstances and needs and this evaluation must be done at consecutive intervals to ensure the achievement of the Bank's investment objectives and to know the general direction of the behavior of investment activity in the past and therefore predict the future. However, the size of the bank, profitability, total income, return on assets, customer deposits could be deemed as more reliable performance indicators.

2.4.1. Profitability of financial institutions

Profitability refers to the difference between income and expenses. One important measure of profitability is net farm income. Return on equity capital and total assets can be calculated and compared to interest rates for loans or rates of return from alternative investments. Profitability is the primary goal of all business ventures. Without profitability the business will not survive in the long run. So measuring current and past profitability and projecting future profitability is very important (Worku et al., 2019). There are different financial ratios related to both the owners and depositors used to measure the profitability of financial institutions. However, the following two ratios are the most important earnings ratios used in assessing the profitability.

2.4.1.1. Net profit margin or rate of return on sales

According to Cohen (Ndikubwimana, 2019) commercial viability relates to the pricing policy applied by the company and the margin it takes on goods and services. It is expressed by the ratio of the net profit on sales

$$\text{Net profit margin} = \frac{\text{Net profit}}{\text{Sales}} \times 100$$

Gross profit mark up, margin and net profit margin show how well a business is doing in terms of profit earned from trading and the whole business activity. This is a ratio that expresses the Net profit margin or simply the index of profitability of the company. This ratio is an economic indicator that is great importance because it measures the profit earned by the company for each monetary unit of sale. It also shows the market share customer loyalty new customer attraction, customer satisfaction, profitability by market segment, customer, product, market etc.

2.4.1.2. Gross profit margin

The gross profit margin is a measure of how efficiently a company converts its cost of goods sold into sales. $\frac{\text{Profit before taxes}}{\text{Total revenues}} * 100$

2.4.1.3. Profit margin on sales

Profit margin on sales measures a company's efficiency in converting sales into net income.

$$\text{Profit margin on sales} = \frac{\text{Net income}}{\text{Net sales}} * 100$$

2.4.1.4. Return on assets (ROA)

Return on assets (ROA) measures the efficiency with which a company is utilizing its assets to generate net income.

$$\text{Return on assets} = \frac{\text{Net income}}{\text{Total assets}} * 100$$

2.4.1.5. Total Asset Turnover or Profitability

It is obtained by comparing the total assets of the company and the result expressing all company's activities. According to BERNARD and COLL, asset turnover is calculated as follow:

$$\text{Asset turnover} = \frac{\text{Turnover}}{\text{Total Asset}} \times 100$$

2.4.1.6. Return on Equity (ROE)

This involves the relationship between the net result for the period on the equity the shareholders have invested in the co. it express the ratio between net income and shareholders' equity this ratio is referred to as return on equity is a tool of financial analysis that interests most shareholders. It measures what their investment gives back to them.

$$\text{Return on equity(ROE)} = \frac{\text{Net income}}{\text{Equity}} \times 100$$

2.4.1.7. Liquidity ratios

It is also called as short-term ratio. This ratio helps to understand the liquidity in a business which is the potential ability to meet current obligations. This ratio expresses the relationship between current asset and current liabilities of the business concern during a particular period (Bouckart G., 2015). Some of the liquidity ratios are given

$$\text{Current ratio} = \frac{\text{current asset}}{\text{current liabilities}} \times 100$$

2.5. Theories related to the financial institutions

A financial institution (FI) is a company engaged in the business of dealing with financial and monetary transactions such as deposits, loans, investments, and currency exchange. Financial institutions include a broad range of business operations within the financial services sector, including banks, insurance companies, brokerage firms, and investment dealers.

2.5.1. Types of Financial Institutions

Financial institutions come in various forms, each serving distinct functions to support economic activities and financial stability. Here are the main types of financial institutions:

2.5.1.1. Commercial Banks

A commercial bank is a financial institution that accepts money from individuals and businesses and provides loans to those in need. It offers services such as loans, savings, certificates of deposits, bank accounts, bank overdrafts, etc., to its customers. These organizations earn money by granting loans to individuals and gaining interest on loans. Business loans, house loans, personal loans, car loans, and education loans are the different types of loans offered by commercial banks.

2.5.1.2. Investment Banks

Investment banking helps individuals, organizations, governments, and other institutions raise capital and provides financial consultancy advice. It doesn't deal with customer deposits but rather assists with financing through securities such as bonds and stocks.

They are a type of financial institution that provides services that specialize in facilitating business operations, such as financing and offerings of capital expenditure and equity, mergers and acquisitions, and new issues of initial public offerings (IPOs). They also commonly act as market makers for trading exchanges, provide brokerage services for investors, and other corporate restructurings.

2.5.1.3. Credit Unions

A credit union is a financial institution similar to a commercial bank. However, it is a non-profit institution created, owned, and operated by its members. Credit unions provide traditional banking services only to their members, such as account opening, issuing credit cards, loans, etc. Credit unions charge interest and account fees just like a bank, but they reinvest those profits into the products they offer; however, banks provide these profits to their shareholders.

Historically, credit unions only served a particular demographic according to their field of membership, such as military members, teachers, etc. Nowadays, they have liberated the restrictions on membership and provide their services to the general public.

2.5.1.4, Insurance Companies

Insurance companies are familiar kinds of non-bank financial institutions. They offer insurance services to both individuals and organizations. The insurance can be related to the protection against financial risk, life insurance, health, home, shop, company, products, vehicles, etc. These institutions put the money from insurance premiums into a pool to fund the policy coverage. Insurance companies can be necessary for the stability of financial systems mainly because they are significant investors in financial markets.

As a result of the growing links between insurers and banks, insurers are insuring the risks of households and firms to guarantee their financial stability.

2.5.1.5. Brokerage Firms

A brokerage firm or company is a middleman who facilitates the transaction by connecting the buying and selling parties. Brokers assist in the dealing of securities such as stocks, mutual funds, shares, bonds, options, and other financial instruments. Once the transaction is completed, brokers receive both parties' brokerage (commission). Some brokerage companies also provide financial advice and act as consultants.

2.5.2. Role of Financial Institutions

Financial institutions are vital to the economy, providing essential services such as lending, investment, and risk management, facilitating economic growth and stability. Let's understand the role of financial institutions in detail.

2.5.2.1. Economic Growth of the Nation

At the national level, financial institutions are subject to government regulation. They serve as government agents and develop the country's economy. For instance, following government regulations, financial institutions may extend a selective credit line with lower interest rates to assist a struggling industry in resolving its problems.

2.5.2.2. Capital Formation

Financial institutions offer financial services to investors who require external cash to raise their capital stocks by accepting individual savings. Investors may want financial services to

carry out development plans by setting up new machinery, tools, and equipment, constructing a new facility, and purchasing new transport vehicles, among other things. Financial institutions contribute to the creation of capital in this way.

2.5.2.3. Regulate Monetary Supply

The financial institution assists in controlling the amount of money in the economy. These organizations keep the money supply stable and manage inflation. The Federal Reserve Bank regulates the nation's liquidity in several ways, including adjusting repo rates, participating in open markets, and setting cash reserve ratios. To control liquidity, financial institutions purchase and sell government assets.

2.5.2.4. Banking Services

Commercial banks and other financial institutions assist their clients by offering savings and deposit services. Additionally, they provide their clients with credit options, including overdraft facilities, to meet their short-term funding needs. Additionally, commercial banks offer their clients loans such as house loans, mortgages, personal loans, and loans for schooling.

2.5.2.5. Pension Fund Services

Financial institutions assist people in retirement planning through the different types of investment plans they offer. A pension fund is one of these investing possibilities. Employers, banks, or other institutions contribute to the investment pool on behalf of the individual, who then receives a lump sum or monthly income upon retirement.

2.5.3. Importance of financial institutions

Financial institutions are essential because they provide a marketplace for money and assets so that capital can be efficiently allocated to where it is most useful. For example, a bank takes in customer deposits and lends the money to borrowers. Without the bank as an intermediary, any individual is unlikely to find a qualified borrower or know how to service the loan. Via the bank, the depositor can earn interest as a result. Likewise, investment banks find investors to market a company's shares or bonds to.

2.6. Relationship between loan management and performance of financial institutions

Loan management and bank performance are key factors that determine the development, sustainability, survival, growth and performance of a banking industry and the ability to handle the trade-off between loan management and performance is a source of concern for

bank managers. Poor loan management affects earnings and capital. In extreme cases, it leads to insolvency and bank failure. Distressed banks can only access funds from the market at high interest rate. This eventually causes a decline in the banks' performance. Moreover, a bank's further borrowing to meet depositors' demand may place the bank's capital at stake. (Akomah et al., 2020) argues that adequate level of loan management is positively related to profitability.

Loan management thus refers to the identification, measurement, monitoring and control of risk arising from the possibility of default in loan repayments (Joseph et al., 2023). According to Agbaje et al. (2023), loan management has significant effect on financial performance of commercial banks and further recommend that maintaining minimum level of nonperforming loans vis-à-vis provision for loans and advances will enhance financial performance through its positive effect on return on equity. In any organization especially financial institutions, financial performance is affected by credit risk management. According to (Chen, 2020) the effective management of credit risk is a critical component of comprehensive risk management which is essential for long-term success of a banking institution. Credit risk management practices and poor credit quality continue to be a dominant cause of bank failures and banking crisis worldwide (Daniel et al., 2020). The extent to which banks manage their credit risk management have an impact on their entire financial performance or survival.

According to Pyle (2023), unless a seller has built into his selling price additional costs for late payment, or is successful in recovering those costs by way of interest charged, then any overdue account will affect his profit. In some competitive markets, companies can be tempted by the prospects of increased business if additional credit is given, but unless it can be certain that additional profits from increased sales will outweigh the increased costs of credit, or said costs can be recovered through higher prices, then the practice is fraught with danger.

Koch and MacDonald (2020) argue that a bank's profitability will generally vary directly with the riskiness of its portfolio and operations. As a result, in order to increase the return, banks need to know which risk factors have greater impact on profitability which eventually leads to bank financial performance. In addition, as we mentioned in previous section, loan risk management is the most significant factors for financial institutions' profitability. According to James L (2024), the mark to market book used for active portfolio management

should be subject to appropriate market risk limits, and its P&L should be maintained and monitored daily. Execution of portfolio-rebalancing activities should be centralized within a specialized group. Loan portfolio management's execution function should be independent of the institution's own trading areas and have its own execution capability. The portfolio management function should have clearly defined profitability measurement targets. Senior management should agree on profitability measurement targets to ensure consistency with overall financial institutional objectives.

Performance measurement targets should be consistent with the mandate of the portfolio management function. The credit portfolio management function within a financial institution tends to evolve over time. Indeed, its mandate often expands from defensive actions around concentrations and credit concerns to more offensive-minded elements of portfolio management, including the adoption of more return-oriented approaches. Here again, senior management must be clear in its support of such a mandate shift, in terms of both its commitment to such a transition and its demonstrated willingness to reward the individuals commensurately for adopting a more risk-taking strategy. The scope of credit portfolio management activities varies widely across organizations may involve any or all of these goals:

Improvement of the risk-adjusted return of a retained credit portfolio; Mitigation of event risk (headline risk) by reducing single-name and industry concentrations.; reduction of exposure to deteriorating credits; minimization of the economic capital required to support the extension of credit and increase in velocity of capital so that it may be redeployed in higher-margin activities.

Because these goals can conflict at times and must be achieved within budgetary constraints, the mandate of portfolio management should be transparent and well communicated James (2005). According to Tafri et al. (2009), loan management is important for both banks and policy makers because a strong banking system can promote financial stability of a country and increase economy's resilience in facing economy crisis. Therefore, the study and measure of effect of loan management to bank's performance are crucial for financial institutions.

2.7. Empirical review

According to William (2023) in his study on impact of risk management on non-performing loans and profitability of banking sector of Pakistan, they stated that non-performing loans are increasing due to lack of risk management which threatens the profitability of banks. The study recommends that MFIs should enhance their collection policy by adapting a more stringent (strict) policy to a lenient policy for effective debt recovery (Nsengiyera, 2020) in his research work on the effect of loan management on the financial performance of commercial bank stated the financial institutions are very prone to credit risk and therefore, there is a need of an effective loan management where loans should be very well managed to minimize potential risks that may affect the bank's performance. The study findings revealed that there is an effect of loan management on financial performance of EQUITY BANK RWANDA PLC , where it was noted that well management of loan was the main source of the positive financial performance achieved by EQUITY BANK RWANDA PLC .

The study conducted by (Areghan, 2023) on impact of loan portfolio management on financial performance of commercial banks in Rwanda. The research findings revealed that loan portfolio management effectively analyzed using (loan risk analysis; risk monitoring; loan risk diversification) affect financial performance of Cogebank through its profitability; liquidity. Cogebank should put more effort on the following actions in order to maintain the increasing of its profit Cogebank Ltd should make sure that all given collateral security are well analyzed in order to avoid the higher rate of non- performing loan.

(Chikwira et al., 2022), carried research on effects of loan portfolio management on financial performance of commercial banks in Rwanda. The study findings reveal that there is a close relationship between loan management and financial performance achieved by BPR from 2013 to 2016. Through the assessment of respondent's views on this relationship, the researcher found out that the loans risk analysis, loan risk diversification and loan risk monitoring were well managed, because all indicators considered at this level shown that the employees working in credit department have experience in credit management, there was professional training organized in order to keep them up to date, they have recognize.

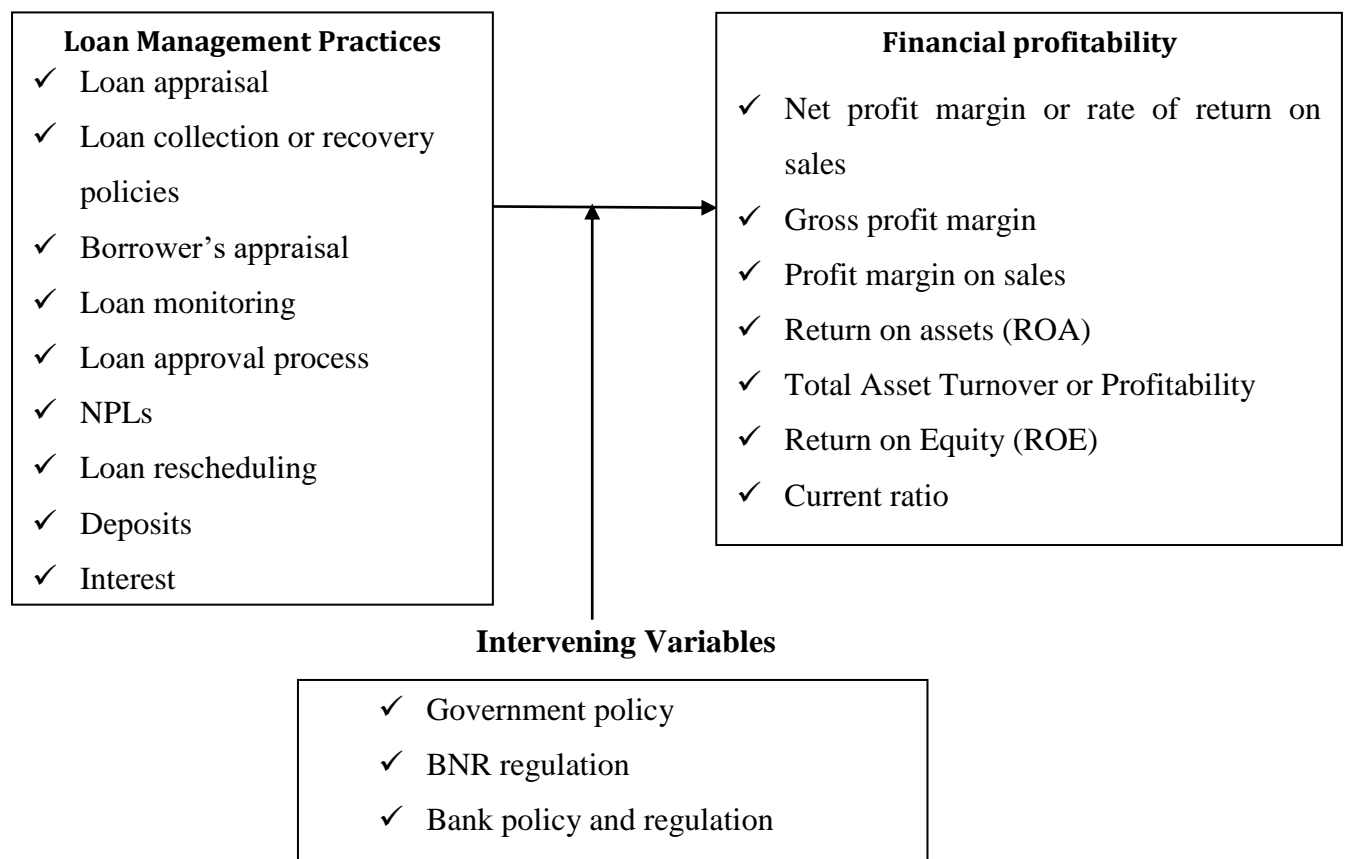
2.8. Research gap

In addition, the researcher found out that the exiting literature related to the relations between Loan management and financial performance in financial institutions left a deep knowledge gap. There are all focusing only on profitability as financial performance while there are others indicators of financial performance like solvency and efficiency. Through this study, the researcher attempted to answer that unanswered question, hence justification of the study.

2.9. Conceptual framework

The conceptual framework interlinks independent variable, dependent variable and intervening variable. In our study, independent variable represented by different loan management practices applied by EQUITY BANK RWANDA PLC . In addition, the conceptual model suggests that the dependent represented by profitability of financial institution. While intervening variable represented by organizational policies and regulations, government policies and regulations, employee's skills, Loan's security, and CRB System.

Figure 2.1: Conceptual Framework



Source: Researcher, 2024

CHAPTER III: RESEARCH METHODOLOGY

The purpose of this section is to describe the methodological approach and techniques that was used by the researcher. It includes the area of study and the study population. It also describes the methods and techniques that was used in collecting data. It further describes how data was collected processed and analyzed to give the implication of findings.

3.1. Research design

According to Churchill & Gilbert (1991) research design is plan for collecting and utilizing data in which the desired information can be obtained with sufficient precision or so that a hypothesis can be tested properly. Descriptive design was used to describe facts in the field and concerned with determining the frequency and re analysis of variables. The study design was used to elucidate the relationship between loans management and performance of financial institutions. This sub-section of the present study specifies the data collection instruments and the process of analysis data to help researcher to achieve the objectives of study, and some qualitative and quantitative data used for achieving objectives of research.

3.2. Techniques of data collection

Grawitz (1979), defined technique as a use of the compilation of knowledge in order to produce means of effective action; generally a technique is a set of ways and processes that help the research to put together this all that and information on this research. In this research, researcher used only documentary technique for collecting data.

3.2.1. Documentary technique

Documentary review refers to the process of reading, analyzing, summarizing and interpretation of the exiting documents (Kothari, 2004). This method will enable to obtain secondary data for the study by reviewing the existing information contained in different textbooks, journal, reports, dissertation and dissertations. According to BAILLEY (1987, p. 266), analysis of documentation is a major aspect in data collection which concern written records in order to relate the study in many different materials such as books, annual reports, dissertations and electronic references. In addition, the researcher visited the libraries nearby such as one of ULK, reading books and journals from internet in relation to the effectiveness of loan management in Equity Bank Rwanda Plc and the contribution of loan management to the financial performance of EQUITY BANK RWANDA PLC .

3.3. Validity and reliability tests

3.3.1. Validity

Mugenda (2020) defines validity of results as a degree to which results obtained from the analysis actually represent the variables of study. Thus, validity refers to whether the findings accurately reflect the situation and are supported by evidence. Validity is established by correlating the scores with a similar instrument. The results of pilot by documents may identify a number of deficiencies such as wording and some missing elements crucial to provide an answer to the specific aspect of the research including the perception of respondents on the effectiveness of loan management in Equity Bank Rwanda Plc and the contribution of loan management to the financial performance of EQUITY BANK RWANDA PLC .

3.3.2. Reliability

According to Drost (2021), reliability refers to random error in measurement. Reliability indicates the accuracy or precision of the measuring instrument. The researcher used the test-retest reliability technique. This enabled the researcher to address errors or irregularities that would appear during the research exercise. According to Donald, (2016) research instruments are expected to yield the same results with repeated trials under similar conditions. Researcher used test retest technique by employing Pearson's product moment formula for the test- retest to compute reliability coefficient.

3.4. Methods of data analysis

Methods are a set of intellectual operations that enable to analyze, to understand and to explain the analyzed reality or else to structure the research (Collins, 2023). Therefore, the following are the methods that researcher used in order to find out the results.

3.4.1. Analytic method

This method helps to analyze systematically the data collected and other information from the field and it helps the researcher to make a deep analysis and understanding theoretical consideration (Olayinka, 2022). The analytical method enabled the researcher to analyze, interpret and discuss about the information that was gathered with documentation technique.

3.4.2. Statistical method

According to Bhattacharyya, (2023) statistical methods are mathematical formulas, models, and techniques that are used in statistical analysis of raw research data.

The application of statistical methods extracts information from research data and provides different ways to assess the robustness of research outputs. It helped the researcher to present the findings or results in form of tables.

3.4.2. Synthetic method

This method helps us to synthesize or to globalize the elements in coherent set. The spirits of synthesizing consider the different elements in their globalist (Thiebaut, 2012). This method will allow the researcher to synthesize the information gathered from different sources. This method was useful because all the data collected were synthesized or summarized to have meaningful data to be used.

3.4.4. Comparative method

According to Grawitz, (2020) it is method used almost in all sciences in order to find similarities and differences among elements. This method helped researcher to make necessary comparison between the information about the impact of loans management on performance of financial institutions in Rwanda and lastly shows the difference about the results during the range of 2021 to 2023 and other ways of things.

3.5. Limitations of the study

In conducting the research, the researcher encountered a number of limitations which limited the researcher to complete the study in the intended period of time and problems which were encountered are discussed below. The process of collecting data was very tiresome and expensive. Financial constraints presents a limitation where by the researcher had no package for transport, printing cost while carrying out the study. However the researcher strives on to accomplish the study. Literature was another source of problem because some books were not found in the library, though efforts were made to consult few available textbooks which made the work successful.

3.6. Ethical considerations

Researcher conducted a research in Equity Bank Rwanda Plc ethically where firstly apply for authorization of conducting research in this sector. Secondly, researcher ensures the readers and all party who interested in this research that the contents have quality and integrity. On the other side, researcher gave manager of this bank a letter explaining the nature of the research project; the letter also was assured the confidentiality of the information.

CHAPTER FOUR: PRESENTATION OF THE FINDINGS, DATA ANALYSIS AND INTERPRETATION

This chapter deals with presentation of the findings. It verifies the hypothesis and specific objectives.

4.1. Effectiveness of credit management offered by EQUITY BANK RWANDA PLC

The performance indicators of Equity Bank Rwanda Plc improved year by year depending the environment and objectives of the bank. To analyze the performance of BK, its better first to present the evolution of each indicators to see if the increase or decrease in time frame of year to year to year.

4.1.1. Trend of loans of Equity Bank Rwanda Plc

The realization of loans disbursed every year was an indicator that shows how loan is managed and that bank loans management has immediately a positive impact on performance, annual reports from 2020-2023 was the guidelines of this section and was focused point to determine if the bank loans management applied in Equity Bank Rwanda Plc effectives.

Table 4.1: Trend of loan granted of Equity Bank Rwanda Plc

Year	2020	2021	2022	2023
Loan granted	189,955,663	220,998,847	381,591,861	430,460,456
Change in Rwf (000)	-	139,167,511	144,244,997	110,330,946
Change in %	-	0.16	0.73	0.13

Source: Equity Bank Rwanda Plc, Annual Report 2020-2023

Table 4.1 presents the trend of loans granted by Equity Bank Rwanda Plc over a four-year period from 2020 to 2023. The table shows the loan amounts granted each year, as well as the changes in Rwandan Francs (Rwf) and percentage change from the previous year.

In 2020, EQUITY BANK RWANDA PLC granted loans amounting to 189,955,663 Rwf. In 2021, this amount increased to 220,998,847 Rwf, representing a positive change of 139,167,511 Rwf. This change corresponds to a percentage increase of approximately 0.16% compared to the previous year. In 2022, the loan amount further increased to 381,591,861 Rwf, with a positive change of 144,244,997 Rwf from the previous year. The percentage change in 2022 was approximately 0.73%.

Finally, in 2023, the loans granted reached 430,460,456 Rwf, showing an increase of 110,330,946 Rwf from the previous year. The percentage change for this period was approximately 0.13%. This table provides a clear overview of how EQUITY BANK RWANDA PLC's loan granting activities have evolved over the specified four-year period.

4.1.3. Comparison between deposit and loan given by Equity Bank Rwanda Plc

The bank stresses the importance of current account and savings account as sources of funds to finance lending to customers. In this section we should the comparison between the deposits and loan issued by Equity Bank Rwanda Plc during our period of study in order to show the compliance with BNR's regulations.

Table 4.2. Loans to deposits of Equity Bank Rwanda Plc

	2020	2021	2022	2023
	RWF'000	RWF'000	RWF'000	RWF'000
Total loan	189,955,663	220,998,847	381,591,861	430,460,456
Total deposit	215,876,054	301,967,056	611,345,385	742,562,135
LDR	69%	68%	62%	58%

Source: Equity Bank Rwanda Plc Annual report from 2020-2023

This table highlights the changes between deposit and loans within Equity Bank Rwanda Plc during our study. The result show that the bank granted loans of 88% in 2020, 73% in 2021, 62% in 2022 and 58% in 2023.

The LDR has decreased from 69% in 2020 to 58% in 2023. This decline suggests that while both loans and deposits have increased, the growth rate of deposits has outpaced that of loans. A decreasing LDR may indicate that the bank is becoming more conservative with its lending practices or is prioritizing liquidity management over aggressive loan issuance. The data reflects a robust growth trajectory for both loans and deposits at Equity Bank Rwanda Plc ; however, the declining LDR raises questions about the bank's lending strategy. It may be beneficial for the bank to assess its risk appetite and consider optimizing its loan portfolio relative to its deposit base to enhance profitability while maintaining adequate liquidity.

According to National Bank of Rwanda (NBR) standard on loan providing, NBR requires all commercial banks operate in Rwanda, for total amount deposit for 100% must be used as follows: 5% reserve requirements, 15% money base and where 80% must be delivered as loan and commercial banks not go beyond on that standard of 80%. Moreover, these figure mentioned in the above table highlight some threats that the bank faced therefore, there may cause of the challenges such as lacking the enough liquidity or cash to be reimburse to the

owners in case they immaturely need to withdraw their money not only that but also difficulties in covering some internal costs like paying the owners deposits.

4.1.4. Loan recovery

Loan recovery is the terminal action that a bank may want to take in a failed credit relationship. It starts when remedial measures taken to revive a delinquent loan prove unsuccessful. Bank management is accountable to its supervising board for avoidable loan losses.

$$\text{Performing Loans to total loans} = \frac{\text{Performing Loan}}{\text{Total Loan}}$$

Table 4.3. Loans Recovery to total loans of EQUITY BANK RWANDA PLC

Year	2020	2021	2022	2023
	RWF'000	RWF'000	RWF'000	RWF'000
Loan recovery	178,326,782	206,071,738	363,857,265	410,547,405
Loan granted	189,955,663	220,998,847	381,591,861	430,460,456
RATIO	94%	93%	95%	95%

Source: Equity Bank Rwanda Plc 's credit management 2020-2023

The table 4.3 shows performing loans to total loan of Equity Bank Rwanda Plc that the ratio was good during our period of study 2020 to 2023, the normal ratio of NBR required to banks should be under 94% in 2020, in 2021 the ratio was 93%, 95% in 2022 also increased up to 95% in 2023. The implications of this trend must be analyzed within the context of the regulations set forth by the National Bank of Rwanda (BNR), particularly concerning the requirement for banks to maintain a minimum recovery rate on loans. The BNR mandates that banks maintain certain standards for loan recoverability, with an emphasis on ensuring that at least 95% of loans are recoverable. This regulation aims to safeguard the stability and soundness of financial institutions while protecting depositors' interests. With an LDR increasing from 94% to 95%, Equity Bank Rwanda Plc appears to be aligning itself with BNR regulations by adopting more prudent lending practices. A lower LDR could indicate that the bank is focusing on improving its loan quality and ensuring compliance with recovery targets set by BNR. In summary, the declining trend in Equity Bank Rwanda Plc 's Loans to Deposits Ratio reflects adherence to BNR regulations regarding loan recovery rates and demonstrates prudent risk management practices aimed at enhancing liquidity and financial stability. The implications extend beyond mere compliance; they encompass strategic decisions that will shape the bank's future operational landscape.

4.1.5. Non-Performing Loans to total loans

As the central bank instruction on nonperforming loans to total loans, each bank should not exceed 7%.

$$\text{Non-Performing Loans to total loans} = \frac{\text{Non-Performing Loan}}{\text{Total Loan}}$$

Table 4.4. Non-Performing Loans to total loans of EQUITY BANK RWANDA PLC

Year	2020	2021	2022	2023
	RWF'000	RWF'000	RWF'000	Frw'000
Non-Performing loan (NPL)	19,628,881	19,927,109	17,734,596	19,913,051
Total Loan Granted (Rwf'000)	189,955,663	220,998,847	381,591,861	430,460,456
NPL To loan Granted	6%	7%	5%	5%

Source: EQUITY BANK RWANDA PLC's credit management 2020-2023

The table 4.5 shows NPL to total loan of Equity Bank Rwanda Plc that the ratio was good during our period of study 2020-2023, the normal ratio of NBR required to banks should not exceed 6%, in 2020 the ratio increase to 7%, in 2021 the ratio increased up to 4.5% and 5% from 2022 and 5% in 2023 which is better compare to the standard of NBR does not exceed 5%.

Non-Performing Loans (NPLs) are loans in which the borrower is not making interest payments or repaying any principal. The classification of a loan as non-performing typically occurs when payments are overdue by 90 days or more. NPLs are a critical indicator of the financial health of banks, as they reflect the quality of the bank's loan portfolio and its risk management practices.

The National Bank of Rwanda (BNR) has established regulations that require banks to maintain certain standards regarding their loan portfolios and provisions for potential losses due to defaults. One such regulation includes maintaining a minimum recovery rate on non-performing loans.

The BNR mandates that banks should aim for at least a certain percentage recovery on their non-performing loans commonly set at around 5%. This requirement serves as a benchmark for banks to ensure they are actively managing their credit risk and working towards minimizing losses.

Overall, monitoring and managing non-performing loans are essential for Equity Bank Rwanda Plc not only for compliance with BNR regulations but also for ensuring its

operational viability and financial health. The fluctuations observed over these years highlight both challenges faced by the bank and its capacity for recovery through strategic interventions. As required by national bank the results from table above shows that Equity Bank Rwanda Plc respect the regulation BNR and that performance was due to reduction of non- performing loans collected from customers.

4.1.3. Loan Provision of Equity Bank Plc

The following table presents the Loan Provision of Equity Bank Plc.

Table 4.6. Loan Provision and Witten off of Equity Bank Plc

Year	2020	2021	2022	2023
Provision for impairment losses on loans and advanced	2,435,790	6,403,787	4,513,168	5,573,111
Total written off loan	36,435,790	42,842,869	67,030,272	101,613,557

Source: EQUITY BANK PLC, Annual Report 2020-2023

Table 4.5 shows the figures for provisions for impairment losses on loans and advances as well as total written-off loans for Equity Bank Plc over the years 2020 to 2023.

In 2020, Equity Bank set aside 2,435,790 for impairment losses, indicating a relatively low expectation of future loan defaults or credit risk. A significant increase occurred in 2021, with provisions rising to 6,403,787, which could suggest a growing concern about the bank's loan portfolio quality or a more conservative approach to managing credit risk. In 2022, provisions dropped to 4,513,168, indicating an improvement in loan performance or a reduction in expected defaults compared to the previous year. However, provisions increased again to 5,573,111 in 2023, suggesting that Equity Bank anticipated a moderate rise in credit risk during that year.

In 2020, Equity Bank wrote off 36,435,790 in loans, which reflects the total amount of loans deemed irrecoverable that year. The total written-off loans rose to 42,842,869 in 2021, showing a substantial increase in unrecoverable loans, aligning with the higher provisions made in the same year. A sharp rise was seen in 2022, with written-off loans reaching 67,030,272, which could indicate a considerable number of bad loans that could no longer be recovered. In 2023, the figure surged even further to 101,613,557, reflecting either more aggressive write-offs of bad loans or worsening conditions in the bank's loan portfolio. This sharp increase may indicate significant challenges in loan recovery or a need to clear non-performing loans from the books.

The provisions for impairment losses show fluctuations over the four years, reflecting changes in the bank's assessment of credit risk. The steady and sharp increase in written-off loans from 2020 to 2023 suggests that Equity Bank faced increasing difficulties in loan recovery, possibly due to macroeconomic conditions, borrower defaults, or sector-specific challenges. The rising loan write-offs likely impacted the bank's profitability and financial health.

4.1.5. Loan classification of Equity Bank Plc

Loan classification refers to the process by which financial institutions categorize their loan contracts based on the risk associated with the borrower's ability to repay. This classification is crucial for managing credit risk and ensuring that banks maintain adequate capital reserves against potential losses.

Table 4.6. Loan classification of Equity Bank Plc

Year	2020	2021	2022	2023
Maturing within 1 month	20,895,123	24,309,873	41,975,105	47,350,650
Maturing after 1 month, but before 3 months	1,899,557	4,419,977	3,815,919	4,304,605
Maturing after 3 months, but within 1 year	3,799,113	2,209,988	7,631,837	8,609,209
Maturing after 1 year, but within 5 years	43,689,802	50,829,735	87,766,128	99,005,905
Maturing after 5 years	119,672,068	139,229,274	240,402,872	271,190,087
Total Loan Granted (Rwf'000)	189,955,663	220,998,847	381,591,861	430,460,456

Source: EQUITY BANK PLC, Annual Report 2020-2023

Table 4.6 provides an overview of the loan classification for Equity Bank Plc from 2020 to 2023. The data is segmented by the maturity period of loans, illustrating the bank's lending behavior and strategy over these years. Here's a detailed interpretation of the information:

The total loans granted by Equity Bank Plc have shown a consistent upward trend, increasing from Rwf 189,955,663,000 in 2020 to Rwf 430,460,456,000 in 2023. This represents an increase of approximately 126% over the four-year period, indicating strong growth in the bank's lending operations.

Maturing Within 1 Month: Loans maturing within one month have significantly increased from Rwf 20,895,123,000 in 2020 to Rwf 47,350,650,000 in 2023. This category's growth (over 126%) suggests that the bank has increased its short-term lending, likely reflecting an increase in customer demand for immediate financing.

Maturing After 1 Month, But Before 3 Months: This category saw a substantial increase from Rwf 1,899,557,000 in 2020 to Rwf 4,304,605,000 in 2023, indicating a growing willingness to provide short-term loans, though at a lower volume compared to loans maturing within a month.

Maturing After 3 Months, But Within 1 Year: The loans in this category fluctuated slightly over the years, peaking at Rwf 7,631,837,000 in 2022 before slightly increasing to Rwf 8,609,209,000 in 2023. This stability suggests that the bank has maintained a cautious approach to this medium-term loan category.

Maturing After 1 Year, But Within 5 Years: This segment has shown substantial growth, increasing from Rwf 43,689,802,000 in 2020 to Rwf 99,005,905,000 in 2023. The more than 126% increase indicates that the bank is focusing on longer-term loans, likely for investments in projects that require extended repayment periods.

Maturing After 5 Years: The long-term loans (maturing after five years) have also significantly increased from Rwf 119,672,068,000 in 2020 to Rwf 271,190,087,000 in 2023. This increase, over 126%, suggests a strategic focus on financing long-term projects, possibly reflecting confidence in the economic conditions and the bank's creditworthiness.

The upward trend in both short-term and long-term loans suggests that Equity Bank Plc is adopting a balanced approach to lending. While there is a significant focus on providing immediate funding, the substantial growth in longer-term loans indicates the bank's commitment to supporting sustainable projects and investments. The increase in loans across all maturity periods may also reflect the bank's successful marketing strategies and competitive products aimed at attracting a diverse customer base. The steady growth in total loans signifies not only the bank's expanding operations but also potentially enhanced credit risk management practices, allowing the bank to handle larger volumes of loans while maintaining asset quality.

Overall, the data in Table 4.5 indicates a robust growth trajectory for Equity Bank Plc, showcasing its effective loan classification and management strategy over the four-year period. The increase in both short-term and long-term loans highlights the bank's adaptability to market demands and its commitment to fostering economic growth through diverse lending options.

4.2. Contribution of loan management on financial performance of EQUITY BANK RWANDA PLC

This section analyses the indicators of performance in Equity Bank Rwanda Plc such as the Trend of customers, Trend of deposit, turnover, net result, during the covered period of study. As it is said above, in the methodology part, the researchers used the interview and analyzed the annual reports of Equity Bank Rwanda Plc for that reason; in this part the researchers analyzed the secondary data. During the covered period, the annual reports of the income statement and balance sheet have been used in analyzing of secondary data.

4.2.1. Increase in Customer's deposits

Deposit is defined as the money transferred into a customer's account in a financial institution. Those amounts of deposit constitute the financial means of financial institution.

Table 4.7: Trend of deposit of Equity Bank Rwanda Plc

Year	2020	2021	2022	2023
	RWF'000	RWF'000	RWF'000	RWF'000
Customers Deposits	215,876,054	301,967,056	611,345,385	742,562,135
Change in Rwf (000)	-	28,633,532	30,529,610	181,645,588
Trend in %	-	0.40	1.02	0.21

Source: EQUITY BANK RWANDA PLC, Annual report from 2020-2023

The table 4.7 shows that evolution of deposit of Equity Bank Rwanda Plc Main Branch in 2020-2021 deposit of Equity Bank Rwanda Plc increased by 40%, from 2021-2022 deposit decreased up to 102% and 21% in 2022 to 2023. This analysis the deposit in Equity Bank Rwanda Plc kept on increasing at different rates as from mobilization done by the Equity Bank Rwanda Plc to enhance the increase in deposits. For this, we seen that credit management of Equity Bank Rwanda Plc contribute to the increase of deposit has realized this important increase because it has come up with good services and has implemented the best strategies of credit management.

4.2.4. Trend of net income EQUITY BANK RWANDA PLC

For the financial institution as Equity Bank Rwanda Plc the net income is the total turnover reduced by all charges used in during the functioning of the bank. It is generally the best and main indicator to assess the performance of the bank.

Table 4.8: Trend of net income EQUITY BANK RWANDA PLC

Year	2020	2021	2022	2023
	RWF'000	RWF'000	RWF'000	RWF'000
Net profit for the year	10,287,415	12,379,241	33,275,770	36,405,577
Trend	-	0.20	1.69	0.09

Source: EQUITY BANK RWANDA PLC , Annual reports, 2020-2023

The table 4.8 indicates that the Trend of net result of Equity Bank Rwanda Plc of the research period where from 2020-2021 the net income increased up to 20% and from 2021-2022 the net income increased up to 169% and 2022-2023 net income was 9%. The net income shows how Equity Bank Rwanda Plc minimizes the expenses. Because the net results of the company necessity of the level of cost includes. But all income from to the how the customers appreciate the services delivered by using and this is due to favorable Credit management. Through the interview administrated with chief account of the bank the main profit come from the interest of credit management.

The results that Equity Bank Rwanda Plc achieved during these four years knew an increasing evolution from year to another. The profit plays a very determinant role in performance of an organization: the profit is first criteria of performance and efficiency of EQUITY BANK RWANDA PLC . The researchers conclude that credit management of Equity Bank Rwanda Plc is well used because the benefit increased from year to another. The net profit trend of EQUITY BANK RWANDA PLC from 2020 to 2023 indicates a healthy and growing financial position. The bank has managed to increase its pre-tax profits consistently, reflecting strong operational performance. Although the income tax expense has fluctuated, the overall trend in net profit is upward, showcasing the bank's resilience and ability to grow its earnings year-on-year. This positive trend is a strong indicator of the bank's effective strategies in revenue generation, cost management, and maintaining profitability amidst changing economic conditions.

4.2.4 Liquidity ratios

Liquidity ratios measure the short-term ability of bank to pay its maturing obligations and to meet unexpected need for cash. Liquidity ratios for Equity Bank Rwanda Plc express its ability to meet the short-term liability when they become due for payment. It also measures its ability to meet customers frequent withdraws.

4.2.4.1. Current Ratio

This ratio is calculated according to BNR instruction and it shows the ability of banks to pay short-term obligations when fall due. The current liabilities included customer deposits, due to banks, tax payables, and other payable.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Table 4.9: Current ratio of EQUITY BANK RWANDA PLC

RATIO	2020	2021	2022	2023
	(RWF'000)	(RWF'000)	(RWF'000)	(RWF'000)
Current asset (1)	331,649,283	438,277,805	826,163,973	978,830,389
Current liabilities (2)	274,238,341	375,320,075	714,390,790	845,515,676
Current ratio ¹/₂	1.21	1.17	1.16	1.16

Source: EQUITY BANK RWANDA PLC , Annual Report 2020-2023

During the research period from 2020-2023, current ratio is the following: 121%, 117%, 116% respectively.

Current ratio of Equity Bank Rwanda Plc meets the requirement compared to standard of central bank which ensures that firm is able to cover its short term obligations. And credit management helps Equity Bank Rwanda Plc to increase liquidity which used to daily operation of Bank.

4.2.5 Profitability ratios

The profitability ratios are used to measure how well EQUITY BANK RWANDA PLC is performing in terms of profit. The profitability ratios are considered to the basic bank ratios, in another words the profitability ratios gives the various scales to measure the success of EQUITY BANK RWANDA PLC.

4.2.5.1 Return on Equity

Return on equity reveals how much profit a company earned in comparison to the amount of shareholders equity found on balance sheets. The return on equity all investors to know how efficiently the money that they have invested in firm is being used.

Return on equity (ROE) is a measure of profitability that calculates how many dollars profit a company generates with each Frw of shareholders' equity. The formula for ROE means that $\text{ROE} = \text{Net Income} / \text{Shareholders' Equity}$. ROE is sometimes called "return on net worth."

Table 4.10: Return on equity ratio of EQUITY BANK RWANDA PLC

Formula	2020	2021	2022	2023
	(RWF'000)	(RWF'000)	(RWF'000)	(RWF'000)
Net income	10,287,415	12,379,241	33,275,770	36,405,577
Total Equity	52,857,944	65,176,206	110,586,897	136,404,958
ROE	0.09	0.15	0.13	0.14

Source: EQUITY BANK RWANDA PLC's Annual Report, 2020-2023

Table 4.10 presents the role of credit management on the Return on Equity (ROE) ratio of EQUITY BANK RWANDA PLC over a four-year period from 2020 to 2023. The ROE ratio is a financial metric that measures a company's profitability by calculating the return generated on shareholders' equity. In this case, the ROE ratio is calculated by dividing the net income by the total equity of the bank. In 2020, EQUITY BANK RWANDA PLC reported a net income of RWF 10,287,415 and total equity of RWF 52,857,944,000, resulting in an ROE ratio of 0.09 or 9%. This indicates that for every unit of equity invested by shareholders, the bank generated a return of 9%. In 2021, both net income and total equity increased to RWF 12,379,241 and RWF 65,176,206 respectively. As a result, the ROE ratio improved to 0.15 or 15%, reflecting higher profitability compared to the previous year.

In 2022 and 2023, further improvements were seen in both net income and total equity figures. The net income rose to RWF 33,275,770 in 2022 and RWF 36,405,577 in 2023. Total equity also increased to RWF 110,586,897 in 2022 and RWF 136,404,958 in 2023. Consequently, the ROE ratios for these years were calculated as 0.13 or 13% in 2022 and as 0.14 or 14% in 2023.

The increasing trend in the ROE ratio over the four-year period indicates that EQUITY BANK RWANDA PLC effectively managed its loans to generate higher returns for its shareholders. By efficiently utilizing its equity and generating consistent profits through effective credit management practices, the bank was able to enhance its financial performance and create value for its investors.

4.2.5.2. Return on assets ratio

Return on assets (ROA) is a financial ratio that shows the percentage of profit a company earns in relation to its overall resources.

It is commonly defined as net income divided by total assets. Net income is derived from the income statement of the company and is the profit after taxes.

Table 4.11: Return on assets ratio of EQUITY BANK RWANDA PLC

Year	2020 (RWF'000)	2021 (RWF'000)	2022 (RWF'000)	2023 (RWF'000)
Net Income	10,287,415	12,379,241	33,275,770	36,405,577
Total asset	456,967,593	456,967,593	867,820,479	1,028,616,062
ROA	0.023	0.027	0.038	0.035

Source: EQUITY BANK RWANDA PLC's Annual Report, 2020-2023

The return on assets (ROA) ratio is a financial metric used to evaluate a company's profitability relative to its total assets. It is calculated by dividing net income by total assets. In the context of Table 4.9, we will analyze the ROA ratio of EQUITY BANK RWANDA PLC for the years 2020 to 2023.

In 2020, the ROA ratio was 2.3%, indicating that for every 100 RWF in assets, the bank earned RWF 2.3 in net income. In 2021, the ROA ratio increased to 2.7, demonstrating improved profitability as the bank earned RWF 2.7 in net income for every RWF 100 in assets. However, in 2022, the ROA ratio slightly increased to 3.8, suggesting that the bank's profitability relative to its total assets declined compared to the previous year. Nonetheless, it still remained higher than the 2020 level.

Lastly, in 2023, the ROA ratio further decreased to 3.5. This downward trend might be indicative of challenges in managing assets efficiently or a decline in overall profitability. However, it is essential to consider other factors that may have influenced these changes before drawing any conclusions. Although not directly shown in the table, credit management significantly impacts a bank's ROA ratio. Effective credit management involves strategic lending decisions and risk assessment, which can enhance a bank's net income and positively affect its ROA ratio. Conversely, poor credit management can lead to increased loan losses and reduced profitability, negatively impacting the ROA ratio.

4.2.5.4. Net operating income (NOI) ratio

Net operating income (NOI) is a calculation used to analyze real estate investments that generate income. Net operating income equals all revenue from the property minus all reasonably necessary operating expenses. Operating expenses are those required to run and maintain the building and its grounds, such as insurance, property management fees, utilities, property taxes, repairs and janitorial fees.

Table 4.12: Net operating income (NOI) ratio

Year	2020	2021	2022	2023
	(RWF'000)	(RWF'000)	(RWF'000)	(RWF'000)
Net Income	10,287,415	12,379,241	33,275,770	36,405,577
Total Operating Income	30,136,489	32,936,075	81,463,976	94,495,374
NOI	0.34	0.38	0.41	0.39

Source: EQUITY BANK RWANDA PLC's Annual Report, 2020-2023

Table 4.12 presents the Net Operating Income (NOI) ratio for the years 2020 to 2023, along with the Net Income and Total Operating Income figures in Rwandan Francs (RWF'000). The NOI ratio is calculated by dividing the Net Operating Income by the Total Operating Income. The NOI ratio is an important financial metric that indicates the efficiency of management in generating operating income from its total revenue.

In 2020, the NOI ratio was 0.34, which means that for every RWF 1 of total operating income, RWF 0.34 was generated as net operating income. This indicates that management was able to convert 34% of the total operating income into net operating income. In 2021, there was a significant improvement in the NOI ratio to 0.38, showing that management became more efficient in generating net operating income compared to the previous year. The trend continued in 2022 with a slight decrease in the NOI ratio to 0.41 but still higher than in 2020.

In 2023, there was a further decrease in the NOI ratio to 0.39, indicating a slight decline in management's efficiency in converting total operating income into net operating income.

Overall, the trend in the NOI ratio over the four years suggests fluctuations in management's effectiveness in generating net operating income relative to total operating income. It is essential for management to monitor and improve this ratio over time to ensure sustainable profitability and operational efficiency.

SUMMARY, CONCLUSION AND SUGGESTIONS

This section involves summary of the findings, conclusion drawn from the findings and suggestions for policy and practice. Both the conclusions and suggestions were made as per the general and specific objectives of the study. The purpose of the study was to examine the role of loan management on performance of commercial banks in Rwanda.

GENERAL CONCLUSION

The study first objective of the study is to examine effectiveness of loan management applied by EQUITY BANK RWANDA PLC where in 2020, EQUITY BANK RWANDA PLC granted loans amounting to 189,955,663 Rwf. In 2021, this amount increased to 220,998,847 Rwf, representing a positive change of 139,167,511 Rwf. This change corresponds to a percentage increase of approximately 0.16% compared to the previous year. In 2022, the loan amount further increased to 381,591,861 Rwf, with a positive change of 144,244,997 Rwf from the previous year. The percentage change in 2022 was approximately 0.73%. Finally, in 2023, the loans granted reached 430,460,456 Rwf, showing an increase of 110,330,946 Rwf from the previous year. The percentage change for this period was approximately 0.13%. This table provides a clear overview of how EQUITY BANK RWANDA PLC's loan granting activities have evolved over the specified four-year period. The LDR has decreased from 69% in 2020 to 58% in 2023. This decline suggests that while both loans and deposits have increased, the growth rate of deposits has outpaced that of loans. A decreasing LDR may indicate that the bank is becoming more conservative with its lending practices or is prioritizing liquidity management over aggressive loan issuance. The data reflects a robust growth trajectory for both loans and deposits at Equity Bank Rwanda Plc ; however, the declining LDR raises questions about the bank's lending strategy. It may be beneficial for the bank to assess its risk appetite and consider optimizing its loan portfolio relative to its deposit base to enhance profitability while maintaining adequate liquidity. The performing loans to total loan of Equity Bank Rwanda Plc that the ratio was good during our period of study 2020 to 2023, the normal ratio of NBR required to banks should be under 94% in 2020, in 2021 the ratio was 93%, 95% in 2022 also increased up to 95% in 2023. The implications of this trend must be analyzed within the context of the regulations set forth by the National Bank of Rwanda (BNR), particularly concerning the requirement for banks to maintain a minimum recovery rate on loans. The BNR mandates that banks maintain certain standards for loan recoverability, with an emphasis on ensuring that at least 95% of loans are recoverable.

This regulation aims to safeguard the stability and soundness of financial institutions while protecting depositors' interests. With an LDR increasing from 94% to 95%, Equity Bank Rwanda Plc appears to be aligning itself with BNR regulations by adopting more prudent lending practices. A lower LDR could indicate that the bank is focusing on improving its loan quality and ensuring compliance with recovery targets set by BNR. NPL to total loan of Equity Bank Rwanda Plc that the ratio was good during our period of study 2020-2023, the normal ratio of NBR required to banks should not exceed 6%, in 2020 the ratio increase to 7%, in 2021 the ratio increased up to 4.5% and 5% from 2022 and 5% in 2023 which is better compare to the standard of NBR does not exceed 5%. Non-Performing Loans (NPLs) are loans in which the borrower is not making interest payments or repaying any principal. The classification of a loan as non-performing typically occurs when payments are overdue by 90 days or more. NPLs are a critical indicator of the financial health of banks, as they reflect the quality of the bank's loan portfolio and its risk management practices. We confirm that first hypothesis has been verified and confirmed.

The second objective analyse the contribution of loan management on performance of EQUITY BANK RWANDA PLC where the trend of net result of Equity Bank Rwanda Plc of the research period where from 2020-2021 the net income increased up to 78% and from 2021-2022 the net income increased up to 2% and 2022-2023 net income was 15%. The net income shows how Equity Bank Rwanda Plc minimizes the expenses. Because the net results of the company necessity of the level of cost includes. But all income from to the how the customers appreciate the services delivered by using and this is due to favorable Credit management. Through the interview administrated with chief account of the bank the main profit come from the interest of credit management. The results that Equity Bank Rwanda Plc achieved during these four years knew an increasing evolution from year to another. The profit plays a very determinant role in performance of an organization: the profit is first criteria of performance and efficiency of EQUITY BANK RWANDA PLC. The researchers conclude that credit management of Equity Bank Rwanda Plc is well used because the benefit increased from year to another. The net profit trend of EQUITY BANK RWANDA PLC from 2020 to 2023 indicates a healthy and growing financial position. The bank has managed to increase its pre-tax profits consistently, reflecting strong operational performance. Although the income tax expense has fluctuated, the overall trend in net profit is upward, showcasing the bank's resilience and ability to grow its earnings year-on-year.

This positive trend is a strong indicator of the bank's effective strategies in revenue generation, cost management, and maintaining profitability amidst changing economic conditions. The role of credit management on the Return on Equity (ROE) ratio of EQUITY BANK RWANDA PLC over a four-year period from 2020 to 2023. The ROE ratio is a financial metric that measures a company's profitability by calculating the return generated on shareholders' equity. In this case, the ROE ratio is calculated by dividing the net income by the total equity of the bank. In 2020, EQUITY BANK RWANDA PLC reported a net income of RWF 10,287,415,000 and total equity of RWF 52,857,944,000, resulting in an ROE ratio of 0.09 or 9%. This indicates that for every unit of equity invested by shareholders, the bank generated a return of 9%. In 2021, both net income and total equity increased to RWF 12,379,241,000 and RWF 65,176,206,000 respectively. As a result, the ROE ratio improved to 0.15 or 15%, reflecting higher profitability compared to the previous year. In 2022 and 2023, further improvements were seen in both net income and total equity figures. The net income rose to RWF 33,275,770,000 in 2022 and RWF 36,405,577,000 in 2023. Total equity also increased to RWF 110,586,897,000 in 2022 and RWF 136,404,958,000 in 2023. Consequently, the ROE ratios for these years were calculated as 0.13 or 13% in 2022 and as 0.14 or 14% in 2023. The increasing trend in the ROE ratio over the four-year period indicates that EQUITY BANK RWANDA PLC effectively managed its loans to generate higher returns for its shareholders. By efficiently utilizing its equity and generating consistent profits through effective credit management practices, the bank was able to enhance its financial performance and create value for its investors. We confirm that second hypothesis has been verified and confirmed.

CONCLUSION

The main purpose of this study is to analyze the impact of loans management on performance of financial institutions in Rwanda where Loans allocated to agriculture have increased notably from FRW 10,516,004 (5%) in 2020 to FRW 41,811,344 (13%) in 2023. This growth underscores an increasing recognition of agriculture's role in food security and rural development. The transport and communication sector saw a slight decrease from FRW 31,705,376 (15%) in 2020 to FRW 42,694,385 (13%) in 2023. Despite this decline as a percentage of total loans, the absolute value remains significant. The "Others" category has shown remarkable growth from FRW 49,183,426 (23%) in 2020 to FRW 95,595,825 (30%) in 2023. This suggests that there are emerging sectors or diversified investments that are becoming increasingly important for the bank's portfolio.

This shows that Equity Bank Rwanda Plc appears to be strategically adjusting its loan distribution across various sectors based on changing economic conditions and opportunities for growth. While some sectors like building and construction have seen reductions in funding levels possibly due to market dynamics or policy changes affecting real estate investments; others such as agriculture have gained prominence reflecting an adaptive approach towards sustainable development goals. Performing loans to total loan of Equity Bank Rwanda Plc that the ratio was good during our period of study 2020 to 2023, the normal ratio of NBR required to banks should be under 95% in 2020, in 2021 the ratio was 96%, 94% in 2022 also increased up to 97% in 2023. The BNR mandates that banks maintain certain standards for loan recoverability, with an emphasis on ensuring that at least 95% of loans are recoverable. This regulation aims to safeguard the stability and soundness of financial institutions while protecting depositors' interests. With an LDR decreasing from 69% to 58%, Equity Bank Rwanda Plc appears to be aligning itself with BNR regulations by adopting more prudent lending practices. A lower LDR could indicate that the bank is focusing on improving its loan quality and ensuring compliance with recovery targets set by BNR. In summary, the declining trend in Equity Bank Rwanda Plc's Loans to Deposits Ratio reflects adherence to BNR regulations regarding loan recovery rates and demonstrates prudent risk management practices aimed at enhancing liquidity and financial stability. The implications extend beyond mere compliance; they encompass strategic decisions that will shape the bank's future operational landscape. Trend of net result of Equity Bank Rwanda Plc of the research period where from 2020-2021 the net income increased up to 78% and from 2021-2022 the net income increased up to 2% and 2022-2023 net income was 15%. The net income shows how Equity Bank Rwanda Plc minimizes the expenses. Because the net results of the company necessity of the level of cost includes. But all income from to the how the customers appreciate the services delivered by using and this is due to favorable Credit management. Through the interview administrated with chief account of the bank the main profit come from the interest of credit management. The results that Equity Bank Rwanda Plc achieved during these four years knew an increasing evolution from year to another. The profit plays a very determinant role in performance of an organization: the profit is first criteria of performance and efficiency of EQUITY BANK RWANDA PLC. The ROE ratio is calculated by dividing the net income by the total equity of the bank. In 2020, EQUITY BANK RWANDA PLC reported a net income of RWF 10,287,415,000 and total equity of RWF 52,857,944,000, resulting in an ROE ratio of 0.09 or 9%. This indicates that for every unit of equity invested by shareholders, the bank generated a return of 9%. In 2021, both net

income and total equity increased to RWF 12,379,241,000 and RWF 65,176,206,000 respectively. As a result, the ROE ratio improved to 0.15 or 15%, reflecting higher profitability compared to the previous year.

SUGGESTIONS

The study found that the loan management has a significant contribution on performance of commercial banks in Rwanda. In this way, some suggestions are raised on the management of EQUITY BANK RWANDA PLC :

- ✓ The study suggests that Equity Bank Rwanda Plc should enhance their collection policy by adapting a more stringent policy to a lenient policy for effective debt recovery.
- ✓ EQUITY BANK RWANDA PLC should seriously consider having in place effective credit standards, credit policy, credit terms and collection policies or procedures as mechanisms to guide their business, since the effectiveness of credit management is important to the successful management of banking institutions. In order to ascertain the level of credit to issue out to a borrower, the banks should use credit standards to appropriately evaluate the borrower's liquidity and cash flow, as well as the performance of their business and saving culture, that can be used in determining the borrower's ability to repay the loan.
- ✓ EQUITY BANK RWANDA PLC should operate their credit businesses based strictly on established lending guidelines that clearly outline the business growth priorities of the senior management, as well as the conditions to satisfy in order to qualify for loan approval. These lending guidelines (credit policy) should be regularly updated in order to keep their consistency with the prevailing changes in the credit market and the overall outlook of the economy.
- ✓ There should be prior customer evaluation before loans are granted, and a continuous process of assessment before and during the course of loan repayment. In this way, the bank was in position to accurately ascertain the trajectory of the borrower's performance in terms of repayment. This should be cemented by effective customer relationship management, where the bank not only acts as a source of credit, but also as a source of vital information business management in order to improve the business performance of the borrowers, which will consequently improve loan performance.

REFERENCE

- Akomah, B. B., Ahinaquah, L. K., & Mustapha, Z. (2020). Skilled Labour Shortage in the Building Construction Industry Within the Central Region. *Baltic Journal of Real Estate Economics and Construction Management*, 8(1), 83–92. <https://doi.org/10.2478/bjreecm-2020-0006>
- Alecia, E. O. O., Robert, K. M., Asewe, S. O., Dancan, M. O., Japhet, K., Muchoki, M. M., Nyongesa, D., Momanyi, G., Aila, F. O., & Omoke, J. O. (2014). Effect of Commercial Bank Loans on Financial Performance of Savings and Credit Co-Operative Societies in Kisumu, Kenya. *Greener Journal of Economics and Accountancy*, 3(1), 009–019. <https://doi.org/10.15580/gjea.2014.1.1210131020>
- Ali, N., & Atan, T. (2020). ... of Human Resource Management Practices on Sustainable Performance in the Banking Sector (a Comparative Study between Islamic and Conventional Banks *Journal of Early Childhood Special ...*, XXIX, 1811–1826. <https://doi.org/10.24205/03276716.2020.1177>
- Areghan, I. (2023). *Loan Management and Performance of Deposit Money Banks in Nigeria : A Comparative Analysis*. 6, 46–56.
- Asare, M., & Sakoe, J. (2015). The Effects of Electronic Banking on Financial Services in Ghana. *Research Journal of Finance and Accounting*, 6(16), 147–155. <https://core.ac.uk/download/pdf/234630984.pdf>
- Bakari, M., & Makulilo, A. (2022). *PanAfrican Journal of Governance and Development* ., 3(1), 23–40.
- Banke, N. K., & Yitayaw, M. K. (2022). Deposit mobilization and its determinants: evidence from commercial banks in Ethiopia. *Future Business Journal*, 8(1), 1–10. <https://doi.org/10.1186/s43093-022-00144-6>
- Barguelligil, A., & Bettayeb, L. (2020). *The Impact of Microfinance on Economic Development : The Case of Tunisia*. 12(4), 43–53. <https://doi.org/10.5539/ijef.v12n4p43>
- Chen, K. (2020). The effects of marketing on commercial banks' operating businesses and profitability: evidence from US bank holding companies. *International Journal of Bank Marketing*, 38(5), 1059–1079. <https://doi.org/10.1108/IJBM-08-2019-0301>

- Chikwira, C., Vengesai, E., & Mandude, P. (2022). The Impact of Microfinance Institutions on Poverty Alleviation. *Journal of Risk and Financial Management*, 15(9). <https://doi.org/10.3390/jrfm15090393>
- Claude, D. M. J. (2022). Effect of Electronic Banking on Customer Satisfaction in Rwanda: Case of Bank of Kigali Headquarter. *Scholars Journal of Economics, Business and Management*, 9(1), 14–29. <https://doi.org/10.36347/sjebm.2022.v09i01.003>
- Cohen, M., & Burjorjee, D. M. (2003). The impact of microfinance on poverty. *CGAP Donor Brief*, 13(July). <https://vpn.utm.my/docview/746772147?accountid=41678>
- Daniel, N., Chantal, M. M., & Nadege, M. (2020). the Assessment of Loan Management on Financial Performance of Banking Institutions in Rwanda. *International Journal Of All ...*, May. <https://www.ijarw.com/Users/ManuScript/ManuScriptDetails/374ca92c-77eb-4070-9f8b-b65ddb52ac53%0Ahttps://www.ijarw.com/PublishedPaper/IJARW1230.pdf>
- Elizabeth, M. (2022). *Influence of Employees Motivation on Performance of Micro Finance Institutions in Rwanda . A case of LETSHEGO-RWANDA*. 10(11), 4124–4138. <https://doi.org/10.18535/ijssrm/v10i11.em02>
- Imeokparia, L., & Bola, O. J. (2020). Effect of human capital investment on financial performance of deposit money banks in Nigeria. *Sokoto Journal of the Social Sciences*, 10(3), 83–94.
- Iradukunda, P., & Kamande, M. (2022). Internal Control System and Financial Performance in Banking Industry: A case of Guaranty Trust Bank-Rwanda. *International Journal of Scientific and Research Publications*, 12(11), 53–65. <https://doi.org/10.29322/ijssrp.12.11.2022.p13108>
- Jacob, M. S., Edheku, O. J., & Obembe, O. J. (2022). Internal Audit Practices and Financial Performance of Construction Companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 10(11), 87–103. <https://doi.org/10.37745/ejaafr.2013/vol10n87103>
- Joseph, B., Isai Kadhafi, D. M., Byamukama Mpora, E., & Frank, H. (2023). Loan Management and Financial Performance in Financial Institutions: a Case Study of Bank of Kigali Gisenyi Branch (Bk)(2019-2021). *International Journal of Scientific Research and Management*, 11(02), 4620–4625. <https://doi.org/10.18535/ijssrm/v11i02.em10>

- Mateka, M., Gogo, D. J., & Omagwa, J. (2017). Effects of Internet Banking on Financial Performance of Listed Commercial Banks in Kenya. *American Journal of Finance*, 1(1), 53. <https://doi.org/10.47672/ajf.123>
- Munyao, J. K. (2021). *Microfinance Services and Growth of Small and Medium Enterprises in Nairobi Central Business District, Nairobi City County, Kenya*.
- Muyombano, A. (2016). *Contribution of Umwalimu Savings and Credit Cooperative (Umwalimu Sacco) On Socio – Economic Development of Teachers in Rwanda*. 6(12), 167–180.
- Ndikubwimana, J. B. (2019). *Loan management and performance of microfinance International Journal of Business and Applied Social Science (IJBASS)*. May.
- Niyoyita, C., & Iradukunda, L. (2023). *European Journal of Social Sciences Studies Contribution of umurenge saccos on financial inclusion of women entrepreneurs in rwanda – a case evidence from nyamasheke district , rwanda*. 29–58. <https://doi.org/10.46827/ejsss.v9i1.1518>
- Nkwodimmah, P., Ikpefan, O. A., Osuma, G. O., Ndigwe, C., Okunade, T., & Ogabi, M. A. (2019). Loan management and performance of selected microfinance banks in Nigeria. *Proceedings of the 33rd International Business Information Management Association Conference, IBIMA 2019: Education Excellence and Innovation Management through Vision 2020, September*, 9857–9866.
- Nsengiyera, D. (2020). *Banking institutions in rwanda . case study : bank of kigali the assessment of loan management on financial performance of banking institutions in rwanda case study : bank of kigali headquarter*. May.
- Nwambeke, G. C., Oko, R. A., Onyedikachi, C. O., & Onya, O. V. (2020). Effects of marketing strategies on financial services delivery of commercial banks in Nigeria. *International Journal of Business and Management Invention (IJBMI)*, 9(9), 57–67. <https://doi.org/10.35629/8028-0909015767>
- Nyanchama Bwoma, G., Mwangi Muturi, W., & Abuga Mogwambo, V. (2017). Effects of Loan Management Practices on the Financial Performance of Deposit Taking SACCOs in Kisii County. *International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)*, 4(1), 126–139. www.paperpublications.org

- Of, A., Of, E., Audit, I., Financial, O. N., Of, P., & In, B. (2022). *Assessment of effect of internal audit on financial performance of banks in Brainae Journal of Business , Sciences and Technology*. 6(2).
- Sarpong, M. L. (2016). Effects of Motivation on the Performance of Employees of Ecobank Ghana Limited. Knust Branch and Stadium Branch. *Journal of Business Theory and Practice*, 4(1), 111. <https://doi.org/10.22158/jbtp.v4n1p111>
- Sayankar, V., & Mali, V. (2022). Financial Literacy for Microfinance Clients: a Step Towards Financial Inclusion. *Journal of the Maharaja Sayajirao University of Baroda ISSN*, 25(March), 0422.
- Subramaniam, R. & Salam, Z. (2023). The Influence Of Digital Marketing Strategy On A Sales Performance Of A Bridal Company. *International Journal of Academic Research in Business and Social Sciences*, 13(12), 30–45. <https://doi.org/10.6007/IJARBS/v13-i12/19768>
- Thennakoon, S. T. M. M., & Rajeshwaran, N. (2022). Accounting information system and financial performance: Empirical evidence on Sri Lankan firms. *International Journal of Accounting and Business Finance*, 8(1), 15. <https://doi.org/10.4038/ijabf.v8i1.115>
- Tuyisenge, M., & Rusibana, PhD, D. C. (2021). Contribution of Financial Services Quality on Financial Performance of Banking Sector in Rwanda: A Case of Bank of Kigali Limited (BK). *Journal of Finance and Accounting*, 5(3), 94–110. <https://doi.org/10.53819/810181025023>
- Wadesango, N. (2020). The impact of digital banking services on performance of commercial banks. *Journal of Management Information and Decision Sciences*, 23(23), 343–353.
- Worku, A., Asmare, A., & □□ H. (2019). The effect of risk management on financial performance of commercial banks in Ethiopia. *Financial Studies*, 23(1 (83)), 25–38. <https://www.econstor.eu/handle/10419/231672>
- Yimka, A. S., Taofeek, A., Abimbola, C., & Olusegun, A. (2015). *Journal of Economic & Financial Studies Credit risk management and financial performance of selected commercial banks in Nigeria*. 03(01), 1–9.