St. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

ASSESSMENT OF CREDIT RISK MANAGEMENT PRACTICES IN BERHAN BANK S.C.

BY FEKADU ASSEFA KEBEDE

JUNE 2023

ADDIS ABABA, ETHIOPIA

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APPROVAL BY BOARD OF EXAMINERS

______________________	__________
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Demis HaileGebreal (Ass/Professor)	__________
Advisor	Signature
Getie Andualem (PhD)	__________ 24/7/2023
External Examiner	Signature
Mohammed Mohammednur (Asst. prof.)	July 25-2023
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DECLARATION:

I hereby declare that this research is prepared with my own effort under the guidance of my advisor, Demis H/Gabriel (Ass/Professor).

Fekadu Assefa Kebede June 2023 ____________________

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LIST OF ACRONYMS

AB ______________________________ Awash Bank

BrB ______________________________ Berhan Bank

NBE ______________________________ National Bank of Ethiopia

NIB ______________________________ Nib International Bank

CRM ______________________________ Credit Risk Management

MIS ______________________________ Management Information System

NPL ______________________________ Non-Performing Loans

SPSS ______________________________ Statistical Package for Social Science

RAROC __________________________ Risk-Adjusted Return On Capital

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ABSTRACT

Financial institutions now place a greater emphasis on credit risk management, especially in light of how closely the financial services sector is linked to unstable business conditions. The discontent in the banking industry emphasizes the value of effective risk management procedures. By examining its rules or guidelines, credit risk management instruments, credit grant process elements, credit risk management activities carried out, risk management reporting system, and credit risk management process, this study seeks to evaluate Berhan Bank S.C.'s credit risk management practices. The researcher utilized selective (judgmental) sampling. Both qualitative and quantitative research techniques were used. In this study, both qualitative and quantitative data were employed. Both primary and secondary sources of data were used in the investigation. Most often, questionnaires are employed. In the instance of the secondary source of data, the bank's quarterly and yearly reports were scrutinized. The financial performance of the bank is covered in these reports. The study also used several theses, NBE directives, journal working papers, and other sources as reference materials. 74 employees who are involved in risk management and loan decisions provided information. The researcher employed analytical techniques like frequency, percentage mean, and standard deviation to characterize the data. The key findings were that portfolio management is an important credit risk management tactic and that the bank implemented credit risk management tools and procedures to reduce the amount of loan default, which is a significant contributor to bank failure. Following the investigation, it was determined that Berhan Bank S.C. According to the inquiry, there are management problems at Berhan Bank S.C. with monitoring and regulating, diversification, and non-performing loans (NPL). It was therefore suggested that the bank increase its use of all tools for credit risk management, portfolio management, diversification, credit administration, monitoring & controlling, and managing loan problems, as well as training clients on how to use loans and training staff members who directly deal with credit processes.

Key words: Risk management, Credit risk management

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the study

Risk must be properly managed by every organization that seeks to maximize its profits; including banks. Bankers specialize in risk management (Heffernan, 2009:101). Risk, therefore, cannot be separated from the banking industry. Risk is a phenomenon that accompanies business operations in the market system and competition, even though it is the uncertainty that might harm a corporation.

When a debtor/borrower fails to repay the principal amount of the loan to the lender, there is a credit risk. When payments "may either be made late or not at all, which can cause cash flow issues and impair a bank's liquidity," it occurs in the banking industry (Greuning & Bratanovic, 2009:161). Therefore, a bank's efforts to "manage," or to put it another way, minimize the risk exposure and occurrence; constitute the core of credit risk management. Lending operations are a crucial component of a commercial bank's goods and services.

The most evident risk in banking is credit risk, which may also be the most significant in terms of possible losses. Small but important customer defaults have the potential to cause very huge losses and, in the worst-case scenario, even the insolvency of a bank. This risk relates to the potential for loans to be unpaid or for investments to lose value or fail, which would cause a loss to the bank. Credit risk includes the possibility that payments would be late, which might potentially cause issues for the bank, in addition to the risk that borrowers won't be able to pay (Tibebu, 2011:1).

Any commercial bank can be thought of as having credit risk management at its core. It is essential to a financial institution's performance since it evaluates borrowers' creditworthiness. Recovery of the given loans and advances is severely hampered if there is any flaw in the credit risk assessment. Profitability is generally fraught with uncertainties. A bad loan can result from several different sources or a combination of variables, but the primary cause is the lack of an appropriate system for classifying loans. It can spot troublesome loans right away and take the required actions to reduce prospective defaults and ensuing losses. When banks operate poorly, poor credit risk management is the primary element to take into account and is frequently the cause of bankruptcy (Md. Moeid, 2014:1).

The assessment of risks, creation of management plans, and risk mitigation employing managerial resources comprise the structured approach of credit risk management. Transferring the risk to a third party, avoiding the risk, minimizing its negative effects, and accepting some or all of its repercussions are some of the ways (Girma M., 2011:12).

Poor credit risk management has consistently been cited by several authors as being the root of bank issues and failures among the many elements that might create bank troubles. This is mostly because banks derive their revenues from the interest on money they lend to customers; therefore poor credit risk management during the lending process will also harm the bank at the end of the process. Directors should be aware that, as accountants are already aware, one of the most significant dangers a company faces is non-payment, and that every reasonable action should be taken to reduce this risk (Roberts, 2010: 32). The breakdown has a domino effect that affects payment systems and, ultimately, the entire economy. Credit risk has negative effects, yet it is unavoidable because it is connected to the bank's essential business operations. Banks, like any other commercial institution, get their earnings from the granting of loans; therefore, a collapse is certain with the slightest error throughout the procedure. Inadequate and incorrect information that lenders receive from borrowers has traditionally been the main cause of this issue, even if other variables like poor risk management might also be implicated.

By keeping credit risk exposure within acceptable bounds, credit risk management aims to increase banks' risk-adjusted rates of return. Banks must manage both the overall portfolio's inherent credit risk and the risk associated with specific credits or transactions. Banks should take into account how credit risk and other risks are related. Any banking organization's long-term success depends on the efficient management of credit risk, which is a vital part of a comprehensive risk management strategy (Basel committee on banking supervision, 2004).

As a result, one of the key concerns facing banks is credit management, which affects a wide range of stakeholders and improves bank profitability. Therefore, the purpose of this study is to evaluate Berhan Bank SC's credit risk management procedures and policies.

1.2. Background of the company

Berhan Bank S.C. is one of the privately operated commercial banks in Ethiopia. According to the Ethiopian commercial code and proclamation code of the Licensing and Supervision of Banking Business No. 592/2008, the bank was registered and granted a license by the National Bank of Ethiopia on June 27, 2009, under License No. LBB/14/2009, with an initial paid-up capital of birr 76.5 million and an authorized capital of birr 300 million. As of June 30, 2022 (the end of the fiscal year), the bank has 326 branches throughout Ethiopia, 151 of which were in Addis Ababa and the remainder 175 in regional cities of the country. The bank's total capital as of June 30, 2022, was birr 4.5 billion, while its paid-up capital was birr 3.2 billion. Its total deposits totaled birr 26.0 billion, while loans and advances totaled birr 22.2 billion. The total gross profit for the year was birr 583 million. As of June 30, 2022, the Bank employed 6278 people in total, with 2241 (35.7%) women and 4037 (64.3%) men.

1.3. Statement of the problem

Banks consciously take risk as they perform their role of financial intermediation in the economy. Consequently, they assume various risks, which include credit risk, interest rate risk, liquidity risk, foreign exchange risk and operational risk. Managing these risks is essential for their survival and prosperity. Losses from a single loan or a material breakdown in controls can eliminate the gain on many other transactions (National Bank of Ethiopia, 2010).

Credit risk is one of the most vital risks for banks. Credit risk arises from non-performance by a borrower or may arise from either an inability or unwillingness to perform in the pre-commitment contracted manner. Credit risk adversely affects the bank’s profitability, solvency, book value of a bank, and in severe case it causes crises. Poor credit risk management also affects the quality of bank’s assets and increases loan losses and non-performing loan which may eventually lead to financial distress. Considering this, till to date, several studies have been made on the issue of credit risk. These include studies on challenges of operationalizing credit risk management policies (Kessey K.D. 2015), the practice of credit risk management (Afande, 2014), the evaluation of credit risk management policies and practices (DL Dam, 2010) and credit risk management practices in Bangladesh banks (Das & Das, 2007). Findings from the above mentioned researchers revealed that though many Banks have risk management policies and strategies but due to various reasons their implementation is not always effective.

Local studies in relation to credit risk in the context of private and government Banks in Ethiopia have come up with different findings. A unique study by Alebachew (2015), for example, indicated that factors such as poor credit policy, weak credit analysis, poor credit monitoring, inadequate risk management and lack of management information system have impacted the attainment of successful credit risk management in NIB International Bank. Other local studies (Kassahun, 2017; Belsti, 2016; Solomon, 2013; Abdi, 2010; Feyisa, 2009) explored the issue of credit risk in the context of different Banks.

Kasahun (2017) in his study on the credit risk management practice of Awash Bank revealed that the bank has no regular assessment of collateral coverage and borrowers' financial health which consequently creates an increment of the NPL of the bank. Belsti (2016) examined the policies implemented in Berhan Bank in order to manage credit risk. Yohannes (2016) on the case of Bank of Abyssinia in his findings he stated that lack of credit follow-up by branches and concerned head office departments, lack of information system to support the credit risk grading system, information asymmetry on credit policy, weak credit analysis and poor credit monitoring influence the attainment of successful credit management. Solomon (2013) in his study on credit risk management practices of NIB International Bank evaluated the polices and frameworks of the Bank towards credit risk management, and also evaluated the techniques implemented in managing credit risk. Abdi (2010) assessed the financial performance of Awash Bank by relating with credit risk. Feyisa (2009) investigated the trend of loan recovery performance of Awash bank.

In contrast to other research that looked into factors affecting loan recovery and evaluated causes of nonperforming loans, this study would rather focus on credit risk management practices. As a result, the research would concentrate on an active evaluation of Berhan Bank SC's previously unconsidered credit risk management approaches and practices.

1.4. Research questions

In the highly competitive climate of today, an organization's capacity to efficiently monitor and manage its credit risk, employing credit risk management technologies, might be the difference between success and failure. Since the Bank has no control over the variables - the amount of its use of credit risk management tools and measurement techniques - the study will describe the Bank's current state of affairs in this regard. As a result, the study aims to respond to the following queries.

1. Does Berhan Bank employ suitable policies and procedures for managing credit risk?
2. Does Berhan Bank manage its credit risk using the proper instruments and techniques?
3. Does Berhan Bank identify, measure, monitor and control credit risks?

1.5. Research objectives

1.5.1. General objective

The primary goal of this study is to assess Berhan Bank's approach to credit risk management.

1.5.2. Specific objectives

The study's specific goals are to:

1. To assess Berhan Bank's credit risk management policies and procedures,
2. To assess the instruments and techniques Berhan Bank employs to control credit risk,
3. To assess Berhan Bank's credit-granting and collection procedures.

1.6. Significance of the study

To accurately assess the current credit risk management procedures, this study looks at how credit risk management should be used in Berhan Bank SC. The advice may be taken into consideration by the Bank to strengthen its current credit risk management procedures, which will in turn serve to shield the Bank from potential harm.

The findings of this study may also be relevant in terms of policymakers' actual efforts to establish credit risk management in the banking sector. Presenting the current state of credit risk management application also closes some knowledge gaps related to the implementation of the credit risk management pillars. Additionally, it could provide information for future research on the subject, specifically on the application of key variables or components of standardized credit risk management tools.

1.7. Scope of the study

The objective of the research was focused on assessing the credit risk management practice used by Berhan Bank and it covered the period July 2019 – June 30, 2022. Thus, risk management department, credit analysis & appraisal department, loan portfolio management & credit follow-up department at the head office and top 30 branches (from Addis Ababa and outlying branches), which held for up to 86.85% of the Bank's credit portfolio, were key areas for the research.

Geographical scope:

It is well known that Berhan Bank has branches throughout the country, but due to a number of factors, including time and financial constraints, it is highly challenging to cover every branch in Ethiopia. However, there is no distinction between credit management at the head office level and branches. Therefore, this study covered the assessment of credit risk management practices at the head office level and the selected 30-branches.

Conceptual scope:

The main goal of the study was to assess Berhan Bank's credit risk management practices in relation to the factors of conformity to the Bank's credit policies and procedures in processing loan applications, the Bank's instruments and techniques used to control credit risks, the Bank's credit granting and collection procedures, and the Bank's credit quality in comparison to the requirements and credit policy of the National Bank of Ethiopia.

Methodological scope:

Primary data included structured questionnaire and whereas secondary data are review of the Bank's working policy and procedure, financial reports of the bank from the previous three years (July 01, 2019 - June 30, 2022), NBE directives and other related publications.

1.8. Organization of the study

This research paper is divided into five chapters.

1. Chapter one contains the introduction, the context of the study, the problem statement, the research questions, the research aims, and the importance and study scopes.
2. Chapter two presents a review of relevant kinds of literature, including data from books, journals, papers, and reports
3. Chapter three covers the research design, the population, sample size & sampling techniques, the types and sources of data, the data collection procedures, and the methods for data analysis
4. Chapter four reveals the data analysis and interpretation portion
5. Chapter five summarizes the research, draws conclusions from the findings, and makes recommendations.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Theoretical review

The primary force behind the financial activity is a risk. The financial system would be considerably more straightforward without risk. In the real world, the risk is present all the time (and simultaneously). For financial institutions to thrive in this environment of extreme uncertainty, risk management must be done effectively. Risk management dynamics will surely be crucial to the future of banking.

Credit risks manifest in banking institutions as a result of systemic uncertainty. Uncertainties continue to be a serious problem for the nation. However, the banks' main strategies still involve diligent surveillance and ongoing study. According to banks, the treasury and institutions that generate data are the primary sources of uncertainty (Uchendu, 2009:95). The market structure has a significant impact on the banking industry's competitiveness and the ability of businesses to access capital and credit investments. The banking system's structure and advancement are impacted by economic growth. Additionally, the extensive expertise in risk assessment and managerial strategy is acknowledged as a component of development. It also became very helpful in determining the impacts or impact of credit risk management in the banks and even in other financial sources due to the institutions and processes being highly regulated (González, 2009:8).

2.1.1. The idea behind risk management

The act of planning, leading, regulating, monitoring, and testing to achieve desired results is the simplest definition of management. The act, attitude, or practice of managing; handling; supervising, or controlling is another option (Stephen P. 2012). On the other hand, risk is the potential for anything unpleasant or harmful to occur (Macmillan Dictionary, 2002). Businesses that fail in their endeavors are unavoidably exposed to risks of one kind or another, most of which are unpredictable but occasionally may be certain to happen. Given the dynamic environment in which they work, the volatility of the financial markets in which they engage, the diversity, and the competitive context in which they find themselves, banks are one of those organizations whose risk is extremely certain (Williams et al., 2006:69).

Although danger will occur regardless, most of the time it cannot be eliminated, reduced, or improved (Keith, 1992: 16). Therefore, the best option for businesses is to try to control the risk to lower the likelihood of occurrence or to lower the repercussions. These options can range from "doing nothing at all" to making an effort to neutralize the impact of each identified risk (William et al., 2006: 67). A bank, however, cannot find itself in a position to do nothing at all or to eliminate the risk due to the nature of banking operations. So, all it involves accepting it while looking for ways to control it. A bank does not wait to adopt risk management at a specific point in its activities; rather, it does so right away given the riskiness of those activities. This is the case because of how closely intertwined its activities are, which means that if they are not well managed, the effect or repercussions may be connected and potentially result in bankruptcy.

To achieve this purpose, decision-makers must first recognize the risk at hand, gauge its seriousness, evaluate it, and keep an eye on it before considering control methods. Risk management is the process of controlling risk. Risk Management is a course of action designed to minimize or contain the resultant impacts should an event occur and/or to lessen the risk of the event occurring" (Keith, 1992:14). This line of action, when combined, results in a risk management process that has several stages. Since it is a continuous process that is directly dependent on changes in the organization's internal and external environment, risk management is crucial and plays a significant role in all organizational activities. Its main goal is to assist other management activities in directly and efficiently achieving the organization's goals (Tchankova, 2002: 290).

2.1.2. Risk management perspective

Employees of banking institutions must comprehend the role that risk plays in their daily operations as well as the hazards that are both inherent and exposed. Improved knowledge of risk management is also required, particularly in financial intermediation operations since it is one of the key activities.

The ability to understand risk strategically and to manage and control risk organizationally, rather than technical advancement, is the single determinant of success. Second, to implement a risk-based management philosophy, employees' attitudes and mindsets need to be modified so that they know how important risk management is to success. This suggests that extensive training, a willingness to change, and well-defined structures and roles are all required.

2.1.3. Risk management process

1. **Risk Identification**: this phase is to identify the risks that are likely to have an impact on the organization, activity, or initiative's ability to achieve its objectives. This is done using the knowledge gathered from the context, particularly as categorized by the SWOT and PEST frameworks. The fact that risk can represent an unrealized opportunity or strength should be stressed. There are other additional methods for identifying risks, such as scenario analysis and risk mapping. Through risk mapping, an organization can determine the frequency and severity of hazards, helping it to avoid high-frequency and low-severity risks and concentrate more on low-frequency and high-severity threats.

2. **Risk analysis and evaluation**: to quantify the inherent or unprotected risk without controls in place, risk analysis takes into account the risk's source, consequences, and likelihood. It also includes identifying the controls, estimating their efficacy, and determining the level of risk that results from having controls in place. Depending on the risk, the goal of the analysis, and the information and data at hand, qualitative, semi-quantitative, and quantitative analytic methodologies are all suitable.

   Following analysis, the hazards can be compared to already established and accepted tolerable risk standards. This acceptable risk is typically documented together with the risk matrix when employing risk matrices. If the protected risk exceeds the tolerated risk, then the specific risks require either the inclusion of new control mechanisms or an increase in the efficiency of the current controls (ISO 31000 standard on risk management).

3. **Risk monitoring**: a reporting and review system is necessary for effective risk management to guarantee that risks are accurately detected, assessed, and dealt with. Risk monitoring can be used to confirm that risk management procedures are appropriate, and effective risk monitoring also aids bank management in spotting errors early on.

The final stage of business risk management is monitoring. They contend that several layers of control must be developed. Because the management board members do not have enough free time to apply thorough control, their control over the risk monitoring system will not be sufficient to ensure its proper operation. The management board will therefore establish a separate entity to carry out the role of internal oversight (Berg, H. P., 2010:4, Abikari et al., 2014:1, Rosman, R. 2009:16, Al-Tamimi and Al-Mazrooei, 2007:7).

2.1.4. Credit risk

Credit has been a concept since the dawn of humanity. Credit today refers to financial and financial-equivalent transactions. It also covers bartering and non-monetary interactions. We can define roughly a deal between two parties in which one (the creditor or lender) exchanges the promise of future payment by one (the borrower) for the provision of money or monetary equivalents of products, services, etc (the debtor or borrower). Typically, these transactions also involve paying interest to the lender (Joseph, 2006). In financial jargon, the word "credit" has an all-encompassing sense. As well as all forms of loans and advances (referred to as funded facilities), it also includes contingent things like guarantees, derivatives, and letters of credit. Credit exposure is also seen as a security investment (Bagchi, 2006:25). Credit risk is the possibility that a borrower won't make their promised payments, putting the bank at risk of financial loss. The Basel Committee states that "the simplest straightforward definition of credit risk is the possibility that a borrower or counterparty would fail to fulfill its commitment in line with the terms agreed upon".

Banks must manage both the overall portfolio's inherent credit risk and the risk associated with specific credits or transactions. The potential losses from the credit portfolio are used to measure credit risk. Expected losses and unanticipated losses are the two categories of potential losses in the credit industry. Expected losses are calculated by deriving all expected cash flows, particularly from the realization of collateral, from the borrower's expected probability of default, and the predicted exposure at default less the recovery rate. In income planning and as typical risk costs in the credit conditions, the anticipated losses should be taken into consideration. Losses that differ from the projected loss are referred to as unexpected losses. Only indirectly, through equity cost, are unanticipated losses taken into account throughout the income planning and credit condition-establishing process. They must be protected by the risk mitigation capital (Oesterreichische National Bank/Central Bank of Austria).

Banks should also be mindful that credit risk is not independent of other risks; rather, it is interwoven with them. The profitability of banks' businesses depends more than any other risk on precise measurement and effective management of credit risk, which is by far the most critical risk they face (Gieseche, 2004).

Banks grant loans to borrowers assuming that borrowers will pay the agreed interest and principal amount according to their contractual agreement. However, the borrower may fail to do so. This results in non-performing loans (NPL). Non-performing loans are those loans which are past their due dates; accordingly, they are classified into three categories as shown below (Williams, 1998).

1. **Sub-Standard** - non-performing loans or advances past due 90 days or more but less than 180 days shall at minimum be classified into sub-standard.
2. **Doubtful** – non-performing loans or advances past due 180 days or more but less than 360 days will be referred to as doubtful.
3. **Loss** - non-performing loans or advances past due 360 days or more will be classified as loss.

2.1.5. The usual reasons for credit risk

The complex process of determining credit risk necessitates a detailed examination of borrower-related data to calculate the likelihood of timely repayment. Any negative effects from such a judgment will cause serious harm to banks. Therefore, it is essential to investigate instances of credit risk vulnerability. Limited institutional capacity, inappropriate credit policies, fluctuating interest rates, poor management, inappropriate laws, ineffective control mechanisms, lax credit assessment, poor lending practices, government interference, and insufficient central bank supervision are the main causes of credit risk (Kithinji, 2010).

Broadly speaking, there are three sets of reasons, per (Bagchi, 2006).

1. **Credit concentration**: the degree of any groups' concentration can endanger the lender's well-being. Such a measure ought to be assessed in light of the institution's capital base (paid-up capital plus reserves), total tangible assets, and level of current risk. The worrying result is the likelihood of suffering significant losses all at once or all at once without having time to recover from the shock.

2. **Credit granting and/or monitoring process**: ineffective appraisal system and lack of supplemented by an appropriate and prompt post-disbursement supervision and follow-up system.
3. **Credit exposure in the market and liquidity-sensitive sectors**: associated with the absence of a compact analytical system to check for the customers' vulnerability to liquidity problems.

2.1.6. Forms of credit risk exposures in banks

Credit includes contingent obligations in addition to money spent through loans, advances, and investments. Credit risk should therefore encompass all aspects of an organization's activities. Whose eventual "loss factor" can be measured in monetary terms. As stated by (Bagchi, 2006). As examples of credit risk, consider the following:

1. Failure to pay back the loan's principal and/or interest
2. Liabilities that may come due in the future, such as letters of credit or guarantees that the client's bank has issued, and amounts that the client has not deposited. When it comes to treasury operations, the counterparties' failure to fulfill their commitments
3. Any failure to meet cross-border obligations resulting from the movement of a foreign currency or limitations on remittance out of the nation

2.1.7. Credit risk management in banks

Controlling the potential effects of credit risk is the process of credit risk management (Solomon, 2013). Following an organization's risk principles and risk policies, credit risk management offers a comprehensive framework and infrastructure for efficiently identifying, measuring, managing, and controlling credit risk at the portfolio and individual levels (Ibid). Credit risk management procedures compel banks to set up a transparent procedure for granting new credit as well as credit extensions. Additionally, these procedures are carefully followed by monitoring, and other necessary measures are done to limit or lessen the risk associated with connected lending (Basel, 1999).

The evaluation of loan applications requires a credit-granting process and control mechanisms, which in turn ensures the integrity of the bank's overall loan portfolio (Boyd, 1993). A fundamental component of efficient credit risk management is the establishment of a suitable credit risk environment, sound credit granting procedures, appropriate credit administration, measurement, monitoring, and control of credit risk, policies, and strategies that concisely describe the scope and allocation of bank credit facilities, as well as the method in which a credit portfolio is managed, that is, how loans are originated, assessed, supervised, and collected (Basel, 1999).

The Basel committee has identified the primary issues that lead to bank failure, including weak portfolio risk management, credit standards for borrowers and counterparties, and a failure to pay attention to changes in the economy or other circumstances. As a result, international regulatory bodies believed that the first requirement for guaranteeing the system's safety and stability was a clear and well-designed management structure.

By keeping credit risk exposure within reasonable bounds, credit risk management aims to increase a bank's risk-adjusted rate of return. Banks must manage both the overall portfolio's inherent credit risk and the risk associated with specific credits or transactions. Banks should take into account how credit risk and other risks are related. A thorough strategy to risk management must include the efficient management of credit risk as it is crucial to any financial organization's long-term success (Basel, 1999).

Banks and their supervisors should be able to learn from past mistakes because exposure to credit risk continues to be the main cause of issues in banks all over the world. Banks should be acutely aware of the necessity to identify, measure, monitor, and control credit risk as well as to make sure they have enough capital to protect themselves from these risks and that they are fairly reimbursed for any risks taken. The Basel Committee is encouraging bank supervisors worldwide with the release of this text to support sensible methods for controlling credit risk (Basel, 1999). The following are the main principles or criteria that should be followed in accordance with Basel requirements.

2.1.7.1. General principles of credit risk management

Principles for Evaluating Banks' Credit Risk Management:

1. **Creating a suitable credit risk environment:**
    a. The board of directors should be in charge of approving and routinely (at least annually) assessing the bank's significant credit risk policies and credit risk strategy. The plan should take into account the bank's risk appetite as well as the level of profitability it anticipates for taking on certain credit risks.
    b. Senior management should be in charge of putting the board of directors' authorized credit risk strategy into action as well as creating rules and processes for identifying, measuring, monitoring, and controlling credit risk. Credit risk should be covered by such rules and procedures in all of the Bank's operations, at both the individual credit and portfolio levels.
    c. All products and operations carry some level of credit risk, which banks should identify and manage. Before introducing or engaging in new credit products and activities, banks should make sure that the risks involved have been subject to sufficient risk management procedures and controls and have received the board of directors or its appropriate committee's prior approval.

2. **Utilizing a reliable credit-granting method:**
    a. Banks must operate under strict, outlined standards for giving credit. A clear indication of the Bank's target market and a full understanding of the borrower or counterparty, as well as the goal and structure of the credit and its source of repayment, should all be included in this list of requirements.
    b. To aggregate all types of exposures, both in the Banking and Trading book and on and off the balance sheet, in a comparable and meaningful way, banks should set

overall credit limits at the level of individual borrowers, counterparties, and groups of connected counterparties.

c. For the approval of new loans as well as the revision, renewal, and refinancing of existing credits, banks should have a well-defined procedure in place.
d. Credit extending must always be done on an arms-length basis. Credits to linked businesses and people must be authorized with special consideration, and closely watched, and additional measures must be taken to minimize or reduce the risks associated with lending relationships that are not at arm's length.

3. **Preserving a suitable credit administration, measuring, and monitoring mechanism:**
    a. A framework for the continuing management of a bank's multiple credit risk-bearing portfolios should be in place.
    b. Banks are required to have a mechanism in place for tracking the health of specific credits, including assessing the sufficiency of provisions and reserves.
    c. To manage credit risk, banks are encouraged to create and implement an internal risk rating system. The rating methodology should be in line with the scope, scale, and complexity of a bank's operations.
    d. The management of banks must be able to gauge the credit risk present in all on and off-balance sheet activities through the use of information systems and analytical methods. The management information system should offer sufficient details on the credit portfolio's composition, including the identification of potential risk concentrations.
    e. Banks must have a system in place for keeping track of the credit portfolio's overall composition and quality.
    f. When evaluating individual credits and their credit portfolios, banks should consider anticipated future changes in economic conditions. They should also evaluate their credit risk exposures in high-stress situations.

4. **Making sure credit risk controls are effective:**
    a. The results of such assessments should be directly disclosed to the board of directors and senior management. Banks must set up a framework for an independent, continuing examination of the Bank's credit risk management procedures.
    b. Banks are required to make sure the loan-granting function is appropriately managed and that credit exposures are kept within ranges that are consistent with prudential norms and internal restrictions. To make sure that exception to policies, procedures, and restrictions are reported promptly to the appropriate level of management for action, banks should create and implement internal controls and other processes.
    c. Banks must have a mechanism in place for handling problem credits, early remedial action on deteriorating credits, and other similar workout scenarios.

5. **Supervisors' role:**
    As part of a comprehensive risk management strategy, supervisors should mandate that banks have a system in place to measure, monitor, and control credit risk. Supervisors should perform an unbiased assessment of a bank's strategy, policies, practices, and procedures relating to credit granting and continuing portfolio management. Supervisors should take into account establishing prudential limitations to limit bank exposures to specific borrowers or related groups of borrowers.

2.1.7.2. Credit risk management policy

As with any other company or business, banks have official rules and principles that have been established by the board of directors regarding how to manage credits. These policies and principles must be rigorously carried out by management. This limits the course of action that managers or supervisors can take. They must do this by examining the established policies to determine whether they are acting appropriately at all times. According to Maness & Zietlow (2005: 139), a credit policy comprises four main parts: credit standards, credit terms, credit limitations, and collection processes.

1. Credit standards: this describes the minimally creditworthy client profile.
2. Credit terms: this is the credit period, which specifies how long the customer has to pay after receiving the invoice and the cash discount (if applicable).

3. Credit limit: if credit is granted, this is the maximum birr amount that a customer's cumulative credit purchases could reach.
4. Collection procedures: these are specific timelines and procedures for when and how the business will pursue past-due accounts.

2.1.7.3. Credit risk management practice

Financial institutions may be exposed to the same categories of risk, but just as banks have varied credit risk management policies and philosophies, so do their approaches to risk management. Depending on their previously established principles and ideologies, the techniques vary. To impact their earnings and/or prevent the costs of changes, some or all of the banks may choose to adopt hedging methods or insurance, although the details of how they will do this may vary.

The degree of risk tolerance is yet another area where there are differences. Every single bank has a unique amount of risk that it can choose to accept or reject based on how it is described in its risk management policy. In conclusion, the same principle might apply to businesses in the same sector, but the way it is put into practice varies. Practice and theory are incompatible. Due to the lack of data for most industries, it is frequently difficult to determine which companies manage risk better than others or whether they use dynamic risk management techniques. More importantly, it cannot be reliably determined whether a company's risk management procedures adhere to accepted theories (Tufano, 1996: 1097-1098).

2.1.7.4. Credit risk management strategy

A strategy is a plan (method) for accomplishing something or the ability to plan how to accomplish something, according to the Macmillan English Dictionary. Thus, a strategy is only a method of acting. This means that while banks have diverse credit risk policies, attitudes, and management methods, their approaches to achieving their objectives may vary. The bankers may have a concept for how to approach a certain activity, but each bank or firm will have a distinct implementation plan for achieving desired goals and/or making a difference.

A strategy position on how to handle credit risk that will set a bank apart from its rivals is always advisable given the competitive environment in which banks operate. A corporation can outperform its rivals only if it can establish a difference that it can retain by choosing to execute activities differently than rivals do. A strategy positioning involves executing distinct activities from rivals or performing identical activities in different ways (Porter, 1996: 62). When a bank does operational tasks that are being performed by other banks, it should endeavor to stand out from the competition by not only attempting to be more efficient but also by attempting to make a difference. This can be achieved by engaging in activities that are distinct from those of competitors or by carrying out the same activities in novel ways.

A bank that wants to stand out from the competition will employ a comprehensive credit risk management strategy like the others by addressing areas like; establishing an appropriate credit risk environment, operating under a sound credit granting process, maintaining an appropriate credit administration, measurement, and monitoring procedure, for instance. However, we'll go ahead and use these methods in conjunction with sensible procedures for determining the quality of assets, the adequacy of provisions and reserves, and the disclosure of credit risk (Basel, 1999: 4).

2.2. Credit risk management tools

According to Thirupathi Kanchu and M. Manoj Kumar (2013), the following list includes the instruments and tools used in credit risk management.

1. **Exposure ceiling**: the prudential limit is linked to Capital funds; say 15% for individual borrower entities, 40% for a group with an additional 10% for infrastructure projects undertaken by the group. The threshold limit is fixed at a level lower than Prudential exposure; Substantial exposure, which is the total of the exposures beyond the threshold limit should not exceed 600% to 800% of the Capital funds of the bank (i.e. six to eight times).
2. **Review/Renewal**: multi-tier credit approving authority, a constitution-wise delegation of powers, higher delegated powers for better-rated customers; the discriminatory schedule for review/renewal, hurdle rates and benchmarks for fresh exposures, and periodicity for renewal based on risk rating, etc. are formulated.

3. **Risk rating model**: set up a comprehensive risk scoring system on a six to nine-point scale. Clearly define rating thresholds and review the ratings periodically preferably at half-yearly intervals. Rating migration is to be mapped to estimate the expected loss.

4. **Risk-based scientific pricing**: link loan pricing to expected loss. High-risk category borrowers are to be priced high. Build historical data on default losses. Allocate capital to absorb the unexpected loss. Adopt the RAROC framework.

5. **Portfolio management**: the need for credit portfolio management emanates from the necessity to optimize the benefits associated with diversification and to reduce the potential adverse impact of concentration of exposures to a particular borrower, sector, or industry. Stipulate quantitative ceiling on aggregate exposure on specific rating categories, distribution of borrowers in various industries, and business groups and conduct rapid portfolio reviews.

6. **Loan review mechanism**: this should be done independently of credit operations. It is also referred to as a Credit Audit covering a review of the sanction process, compliance status, review of risk rating, pickup of warning signals, and recommendation of corrective action to improve credit quality. It should target all loans above a certain cut-off limit ensuring that at least 30% to 40% of the portfolio is subjected to LRM in a year to ensure that all major credit risks embedded in the balance sheet have been tracked.

2.3. Credit risk management in Ethiopian banks

The National Bank of Ethiopia on May 2010 examined how Ethiopian banks were implementing the credit risk management guidelines. So, the advice is described in detail below.

Based on observations made elsewhere in the globe, credit risk has historically been a major concern for banks. The biggest reason for the demise of numerous banks around the world has been the inability to collect loans given to consumers. Banks must manage both the overall portfolio's inherent credit risk and the risk associated with specific credits or transactions. Banks should also be mindful that credit risk is intimately related to other risks rather than existing in isolation from them. Effective credit risk management involves controlling institutional activities that generate credit risk exposures in a way that considerably lowers the possibility that these operations could adversely affect a bank's capital and earnings. Credit risk can exist in a bank's other assets and operations in addition to its loan portfolio. The same risk might be present in both on-balance sheet and off-balance sheet accounts for a bank.

2.3.1. Credit culture

An organization like a bank has its own culture, which serves as a reflection of how it conducts its operations. The bank's duties or standards will be violated by actions or behaviors that defy this culture. The rules, methods, philosophy, and management style implemented by a bank to serve as a guide for the lending manager or staff while they carry out their credit management role make up the institution's credit culture. This outlines the lending environment and identifies the lending conduct that the bank accepts.

Credit culture is described as "a mix of elements that form a lending environment that supports certain lending behavior" in research by Mckinley (1990, referenced in Boffey & Robson, 1995: 67). The dissemination of management's beliefs and priorities, the indoctrination of lenders during training, and the bank's lending philosophy and policy should all be part of it. Thus, a positive credit culture serves as a road map for successful bank credit management, performance, and perhaps failure. If choices were made based on the company's credit culture, the manager cannot be held personally liable even if a mistake in credit risk management results in losses. The entire management team or decision-makers will be held accountable, and changes can then be made.

2.3.2. Board of directors responsibility

A bank's credit risk strategy and policies must be reviewed and approved by the board of directors. Each bank should create a strategy that outlines the goals of its credit-granting operations and adopts the required rules and regulations to carry them out.

2.3.3. Senior managements' responsibility

In addition to creating policies and processes for identifying, measuring, monitoring, and controlling credit risk, senior management is in charge of putting the board of directors' authorized credit risk plan into action. Credit risk should be addressed in these policies and procedures at both the individual credit and portfolio levels in all of the bank's operations. Senior management must make sure that the bank's credit management operations are periodically evaluated independently, either internally or externally.

2.3.4. Credit policies, procedures and limits

1. **Credit policies:** identification of current and future hazards in the bank's credit products and credit-related activities is the cornerstone of efficient credit risk management. This necessitates the creation and implementation of explicitly stated rules that are formally established in writing that outline the bank's credit risk philosophy and the guidelines by which credit risk is to be controlled. By evaluating the risks associated with each credit activity, the bank is given a foundation upon which to base important judgments on the type and extent of the credit activity it is willing to take on.

   Designing and implementing written rules and processes for recognizing, measuring, monitoring, and controlling credit risk is a crucial component of safe and sound banking. Credit policies provide the groundwork for lending and direct the bank's credit-granting operations. The policies should be created and put into action taking into account both internal and external factors, including the bank's market position, trade area, staff capabilities, and technology. They should also specifically set goals for portfolio mix and exposure limits to specific counterparties, groups of connected counterparties, industries or economic sectors, geographic regions, and products. A bank can maintain good credit-granting standards, monitor, and manage credit risk, accurately assess new business possibilities, and recognize and manage problem credits with the help of effective rules and procedures. Credit policies must at the very least include:

   - A credit risk philosophy that determines how much credit risk the bank is ready to take on a general list of the types of credit that a bank is willing to offer or is prohibited from offering clear and appropriate degrees of delegation of approval, provision, and write-off powers, as well as limits on portfolio concentration that are sensible and sound.

- The identification and analysis of current and potential risks that are present in any activity or product serve as the cornerstone of a successful credit risk management strategy. As a result, it's critical that banks recognize the credit risk present in each of the products and services they provide. This is especially true for newly developed goods and business ventures for the bank, where risk may not be as clear and may require more research than more conventional credit-granting activities. The fundamentals of credit risk management will still hold even though such activities can call for customized procedures and controls. Before being made available by the bank, all new initiatives and services must be approved by the board.

2. **Credit analysis and approval process:** before beginning any new credit connection, a party's integrity, reputation, and legal ability to accept the responsibility must all be taken into account. Banks must be aware of whom they are extending credit. As a result, before beginning any new credit connection, a bank must become familiar with the borrower or counterparty and be certain that it is doing business with someone or something of good standing and creditworthiness. To avoid affiliation with anyone engaged in illegal activity, strong procedures must be in place.

   Establishing reliable, clear credit-granting standards is crucial to securely authorizing credit. Banks must acquire adequate information to enable a thorough assessment of the counterparty's risk profile to run an efficient credit-granting program. The following variables must be taken into account and documented when giving credit, depending on the type of credit exposure and the counterparty's credit relationship.

   1. Goals of the credit and possible sources of repayment
   2. The borrower's history of payback and present ability to repay, based on past financial trends and projected future cash flows under various situations
   3. Credit terms and conditions, including covenants intended to prevent future changes to the borrower's risk profile

4. Adequacy and enforceability of assurances or collateral in different situations
5. Current counterparty risk profile (including risk type and overall risk quantities), susceptibility to economic and market movements, particularly for significant exposures, and
6. Borrower's business knowledge and management skills.

Banks may occasionally take part in loan syndications or other loan consortia. In such circumstances, the lead underwriter's or external credit assessors' risk analysis shouldn't be relied upon excessively. Rather, before agreeing to the syndication, parties in the syndicate should conduct their risk analysis. The same procedures used for directly sourced loans should be used for this study.

A bank needs a well-defined procedure in place for granting new loans as well as extensions, renewals, and refinancing of existing loans to maintain a healthy credit portfolio. The appropriate level of management must approve requests following the bank's published policies. The approval procedure should be documented, and the person(s) or committee(s) responsible for making the credit decision should be identified.

Each credit proposal should be subject to careful analysis by a qualified credit analyst with expertise commensurate with the size and complexity of the transaction. An effective evaluation process establishes minimum requirements for the information on which the analysis is to be based as listed above. The information received will be the basis for any internal evaluation or rating assigned to the credit and its accuracy and adequacy is critical to management making appropriate judgments about the acceptability of the credit.

3. **Credit approval authority: b**anks must train a group of credit analysts who can analyze, approve, and manage credit with sound judgment. These analysts must have the necessary expertise, training, and background. The procedure for approving credit at a bank should specify who is responsible for choices made and who has the power to authorize new credit or modify existing credit. Credit may be approved by a committee, a joint authority, or an individual authority depending on its size and type.

2.3.5. Lending to connected parties

To identify connected counterparties as a single obligor, banks should have credit granting procedures in place that aggregate exposures to groups of counterparties (corporate or non-corporate) that exhibit financial interdependence through common ownership, common control, or other connecting links (for example, common management, familiar ties). The influence of the aforementioned elements (such as shared ownership and control) on the interdependence of the parties' financial positions must be carefully examined to identify related counterparties.

2.3.6. Credit limits and credit concentration

Credit limits: exposure limitations are required in all aspects of the bank's operations that include credit risk to ensure diversification. For each counterparty as well as for networks of related counterparties that combine various on and off-balance sheet exposures, banks should set credit limitations. These restrictions are usually based on internal risk ratings, which permit larger exposure restrictions for counterparties with better ratings. Bank-set restrictions are never permitted to exceed NBE-set regulatory restrictions. Limits should also be imposed for specific economic or industrial sectors, geographical areas, product categories, security classes, and groups of related borrowers.

Credit concentration: an excessive amount of concentration makes a bank subject to violations of statutory and regulatory constraints as well as unfavorable changes in the area where the credit is concentrated. The reduction of concentration risk through credit portfolio diversification is a key component of sound and responsible risk management. When evaluating possible credits, banks must be aware of the need to keep sufficient capital to withstand unforeseen losses and develop provisions for identified and anticipated losses following the National Bank of Ethiopia regulations on provisions. Credit decisions should take these factors into account, as should the whole portfolio risk management procedure.

Credit concentration can occur when a bank's portfolio contains a high level of direct or indirect credits to:

1. A single counterparty
2. A group of related counterparties

3. An industry
4. A geographical region and
5. A type of credit facility (i.e. overdrafts)

2.3.7. Credit risk mitigation

Banks have a variety of methods at their disposal to help reduce credit risk. The most often used terms are guarantees and collateral. Individual credit transactions should be engaged primarily on the strength of the borrower's repayment capacity, despite the use of various mitigating strategies. Banks should be aware that the same conditions that have reduced the credit's capacity to be recovered may very likely harm the value of the collateral.

2.3.8. Measurement, monitoring and control

Failure to create proper procedures to adequately monitor and control the credit function within set guidelines has resulted in credit problems for numerous banks throughout the world. Another significant contributor to credit issues has been the compromise of credit standards and practices. As a result, each bank must create and put into place detailed policies and informational systems to effectively monitor and manage the risks associated with its credit portfolio.

2.3.9. Credit administration policies

The management of credit is essential to a bank's continued safety and soundness. The bank is in charge of ensuring that credit is appropriately maintained after it has been provided. This includes maintaining an up-to-date credit file, gathering recent financial data, sending renewal letters, and creating other papers including loan agreements. Credit administration duties may be divided across various divisions in larger banks, but they may be given to specific people in smaller banks.

2.3.10. Credit files

A bank's credit files should have all the data required to determine the present financial standing of counterparties as well as enough data to follow the choices made and credit histories of borrowers.

2.3.11. Credit monitoring procedures

To monitor each counterparty's health throughout the bank's numerous portfolios, banks must design and implement detailed policies and information systems. To ensure that they are the subject of more regular monitoring, taking remedial action and appropriate classification or provisioning. These processes should specify the criteria for recognizing and reporting potential credit problems and other transactions.

Monitoring the quality of the credit should be the responsibility of certain people, who should also make sure that the people in charge of giving the credit its internal risk ratings receive any pertinent information. Individuals should also be in charge of continuously reviewing any underlying collateral and guarantees. This monitoring will help the bank have enough reserves for credit losses and make the required modifications to contractual agreements.

As part of the overall credit extended to a particular customer, banks should provide a suitable framework for controlling their exposure to off-balance sheet products and subject them to the same credit evaluation, limit, and monitoring procedures. The following three main categories should be used by banks to group their off-balance sheet exposures.

1. Full risk (credit substitutes) - e.g. standby letters of credit or money guarantees
2. Medium risk (not direct credit substitutes) - e.g. bid bonds
3. Low risk - e.g. cash against document (CAD).

2.3.12. Internal credit risk rating

The application of an internal risk rating system is a crucial instrument for keeping the quality of specific credits as well as the entire portfolio. The degree of credit risk in a bank's various credit exposures can be distinguished using a well-designed internal risk rating system. This will permit more precise identification of the general credit portfolio characteristics, problematic debts, and the sufficiency of loan loss reserves. Internal capital allocation, credit pricing, and transaction and relationship profitability can all be decided using detailed and complex internal risk rating systems.

2.3.12.1. The five Cs of credit

When an individual or a business applies for a loan (called "credit" in the banking world), there are a number of things that a lender will consider before deciding whether or not to approve the request. The lender will typically follow what is called the **Five Cs of Credit**: Character, Capacity, Capital, Collateral and Conditions. Examining each of these things helps the lender determine the level of risk associated with providing the borrower with the requested funds.

1. **Character**: Character, the first C, more specifically refers to credit history, which is a borrower's reputation or track record for repaying debts. This information appears on the borrower's credit reports, in the case of our country which is generated by the National Bank of Ethiopia. Credit reports contain detailed information about how much an applicant has borrowed in the past and whether they have repaid loans on time. There are also other worldwide credit bureaus that generate credit reports related to borrowers; like Equifax, Experian, and TransUnion. Information from these reports helps lenders to evaluate the borrower's credit risk.

   Many lenders have a minimum credit score requirement before an applicant is approved for a new loan. Minimum credit score requirements generally vary from lender to lender and from one loan product to the next. The general rule is the higher a borrower's credit score, the higher the likelihood of being approved.

2. **Capacity**: Capacity measures the borrower's ability to repay a loan by comparing income against recurring debts and assessing the borrower's debt-to-income (DTI) ratio. Lenders calculate DTI by adding a borrower's total monthly debt payments and dividing that by the borrower's gross monthly income. The lower an applicant's DTI, the better the chance of qualifying for a new loan. The business should have sufficient cash flow to support its business expenses and debts comfortably while also providing principals' salaries sufficient to support personal expenses and debts. Examining the payment history of current loans and expenses is an indicator of the borrower's reliability to make loan payments.

3. **Capital**: Capital refers to the customer's financial position and progress, asset quality, liquidity, and debt structure. The analyses of these factors involve historical and current balance sheets. Lenders will evaluate if a customer's financial position has improved or deteriorated over time and use the structure of the applicant's balance sheet to determine an operation's ability to withstand danger, or take advantage of growth opportunities.

4. **Collateral**: Collaterals are additional forms of security or guarantee that are provided by the borrower to the bank. They represent those assets the borrower has pledged to the bank that can be sold if he/she defaults and collection efforts have become unsuccessful. Though cash flows from the business operation are deemed to be the main source of loan repayment, where sufficient cash flows fail to materialize, the bank can mitigate loss if it has secured a secondary source of repayment (collateral). Giving a lender collateral means that you pledge an asset you own, such as your home, to the lender with an agreement that it will be the main repayment source in case you cannot repay the loan**.**

5. **Conditions**: Conditions relate to the purpose of the loan as well as other items the lender has control over (i.e. loan amount, use of funds, terms of repayment). Lenders may, in certain circumstances, add additional requirements or restrictions to the loan. These are usually based on the individual's current situation as well as what is predicted to happen in the future. The company's capability includes concepts like sufficient, adequacy, and perseverance. This refers to the assets that the business, as a client, has and their value, which demonstrates their ability to pay back their debts.

The five Cs (Character, Capacity, Capital, Collateral, and Conditions) should be used by the bank to screen out unqualified applicants for loans. When loan officers receive information (both quantitative and qualitative) about a customer, they conduct their analysis not in isolation of each element but rather in relationships among the categories, with the customer's character serving as the focal point. This is because the customer's character reveals to the loan officers whether or not they can be trusted to repay the loan. This is because even if a customer has a strong capacity, sufficient capital, good collaterals and favorable economic & environmental influences on its financial state & performance, a terrible character will prevent the bank from approving the loan.

On the other side, if the customer in question has good character (as evidenced by their business strategy, cash flow, history, management, etc.), this will further reassure them of their ability to repay the debt. This will therefore assist the bank in deciding whether to approve the loan or set the credit limit. This is so because a customer's history of loan transactions reveals how they were handled. The bank will always remember the decisions made in the past given the structure they employed for their analysis to determine whether they made the right decision or not, regardless of what situation may emerge in the future after the decision has been made.

2.4. Bank performance

Performance in banking refers to a bank's capacity to offer consumers high-quality banking services. The core performance indicators used in the banking industry will be used to measure the performance of the bank utilizing various measurement variables like;

1. Profitability - is the effectiveness of banks at producing income, which will be measured by profitability ratios that concentrate on bank profit. Return on Asset and Return on Equity are included in the ratio.
2. Bank Liquidity - the capability to pay its debts when they become due. Bank lending funds/loans with largely short-term liabilities, but it also finances investments in very non-liquid assets.
3. Bank Solvency - is the bank's ability to fulfill all financial obligations over the long term. A profitable company has a positive net worth. The debt-to-asset ratio and the debt-to-equity ratio are examples of solvency indicators.
4. Loan Portfolio - the total amount of loans that a bank or finance company has on hand at any particular time; loans that are owed to a lender/loan buyer. A loan portfolio's value is determined by the total amount of principal and interest due as well as the average creditworthiness of the loans (Caouette, Altman, Narayanan, and Nimmo, 2008).

2.5. Relationship of credit risk management and bank performance

Credit risk is the most significant of all hazards in terms of the extent of potential losses, according to various academics and publications. Credit risk management has been the main focus of bank risk management since it has always been at the heart of banking operations. Better risk management by banks will give them the advantage to boost their performance/return and when there is better risk management, it indicates that banks execute their operations at reduced relative risks and with fewer conflicts of interest between parties (Anthony M. Santomero, 1997).

A bank's main assets are the securities it owns and the loans it makes to people, companies, and other organizations. In contrast, its main liabilities are its deposits and the money it borrows either from other banks or by selling commercial paper in the money market. Additionally, return on assets (ROA) and return on equity (ROE) can be used to determine the profitability of any business segment.

Better risk management strategies have advantages that improve bank performance. Better bank performance enhances its reputation and image in the eyes of the public and the market. Additionally, the banks have greater options to add productive assets, which increase bank profitability, liquidity, and solvency (Tandelilin, Kaaro, Mahadwartha, Supriyatna, 2007). The long-term success of any financial organization depends on effective credit risk management, which should be a key part of the bank's overall risk management strategy. It becomes increasingly important to guarantee banks' long-term profitability.

Meanwhile, when we see the last five consecutive years (2017 – 2021) of credit risk level of commercial banks in Ethiopia, the non-performing loans against total gross loans reaches in between 3.41 and 5.41 percent; this tells us that the level of credit risk in Ethiopia is increasing. The figure below speaks more about this.

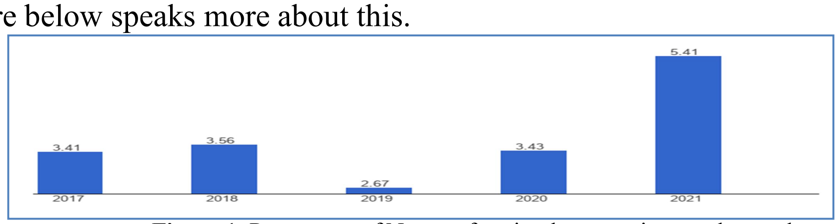

Figure 1. Percentage of Non-performing loans against total gross loans in Ethiopia Commercial Banks; **Source**: The GlobalEconomy.com

When we come to the case of Berhan Bank, the credit risk management policy, procedures and practices have never been adequately touched by previous researchers and now the researcher believes that there will be a huge credit risk management gap in the bank. Because for instance in the year 2020/21 the total profit of the bank was birr 337.6 million; it was below by 52.3% from last year's (2019/20) profit due to additional provisions/expenses held for the high amount of non-performing loans and guarantees. The same as this, Berhan Bank’s NPL ratio compared to other banks that are established in similar/close years was high and also increased from the previous years. The mentioned below table gives us a bit of information on how the NPL ratio was in Berhan Bank and its peer banks during the last consecutive three years.

Berhan Bank's and its peer banks NPL ratio			
Bank Name	**2022/21**	**2021/20**	**2020/19**
Addis Int[1]. Bank SC	3.2%	3.3%	2.9%
Abay Bank SC	-	-	-
Berhan Bank SC	8.5%	8.8%	2.2%
Bunna Bank SC	4.1%	2.4%	4.6%
Enat Bank SC	3.1%	2.7%	2.8%
Debub Global Bank	1.5%	1.7%	0.52%
Lion Bank SC	16.23%	> 5%	< 5%

Table 1: NPL ratio of banks in the past three consecutive years, source: their website

Again as we have seen below in the table, the non-performing loan (NPL) of Berhan bank indicates that as of June 2019, from the total loans and advances disbursed amount of Birr 9.2 billion, 347.8 million birr, or 3.79%, was under the category of NPL. Though the NPL ratio of the bank is below the required level of NBE (i.e., 5%), as presented in the table below, there was an improvement in NPL in the year 2020 as compared with the year 2019. However, in the past two consecutive years (2022/21 and 2021/20), the NPL ratio of Berhan Bank has alarmingly increased to 8.5% and 8.8%, respectively. This may imply that the bank has credit policies and guidelines, but these policies and guidelines may not be implemented as expected because of the dynamic nature of credit and credit risks. So, just as said above concerning to Berhan bank, there are no sufficient number of studies have conducted on credit risk management techniques and practices. Hence, to fill this knowledge gap this research is conducted.

Description	Fiscal Year			
	2022/21	**2021/20**	**2020/19**	**2019/18**
Principal balance – Performing Loan	18,039,861,064	15,764,535,340	11,795,780,412	9,178,752,574
Principal balance – Non Performing Loan	1,533,388,190	1,387,279,110	259,507,169	347,818,146
Percentage	**8.5%**	**8.8%**	**2.2%**	**3.79%**

Table 2: Berhan Bank NPL in the past four consecutive years, source: https://berhanbanksc.com

2.6. Empirical review

Due to the substantial threat that credit risk poses to banks, numerous scholars have looked at the impact of credit risk on banks from a variety of angles.

Kargi (2011) examined how credit risk affected the financial success of Nigerian banks. Financial ratios were taken from the annual reports and accounts of sampled banks from 2004 to 2008 and examined using descriptive, correlation, and regression techniques as indicators of bank performance and credit risk. The findings revealed that credit risk management has a significant impact on the profitability of Nigerian banks. It concluded that banks' profitability is inversely influenced by the levels of loans and advances, non-performing loans, and deposits thereby exposing them to great risk of illiquidity and distress. Epure and Lafuente (2012) examined bank performance in the presence of risk for the Costa-Rican banking industry during 1998-2007. The results showed that performance improvements follow regulatory changes and that risk explains differences in banks and non-performing loans negatively affect efficiency and return on assets while the capital adequacy ratio has a positive impact on the net interest margin.

Felix and Claudine (2008) investigated the relationship between bank performance and credit risk management. It could be inferred from their findings that return on equity (ROE) and return on assets (ROA) both measuring profitability were inversely related to the ratio of non-performing loans to a total loan of financial institutions thereby leading to a decline in profitability.

Ahmad and Ariff (2007) examined the key determinants of the credit risk of commercial banks in emerging economy banking systems compared with the developed economies. The study found that regulation is important for banking systems that offer multi-products and services; management quality is critical in the cases of loan-dominant banks in emerging economies. An increase in loan loss provision is also considered to be a significant determinant of potential credit risk. The study further highlighted that credit risk in emerging economy banks is higher than that in developed economies.

Ahmed, Takeda, and Shawn (1998) in their study found that loan loss provision has a significant positive influence on non-performing loans. Therefore, an increase in loan loss provision indicates an increase in credit risk and deterioration in the quality of loans consequently affecting bank performance adversely.

David H., (1997) Bank Risk Management Theory. The paper is conducted to discuss why risk management is needed. It outlines some of the theoretical foundations of contemporary bank risk management, with an emphasis on market and credit risk. The paper merely focuses on the theory it doesn't get into the practical aspects of the title.

According to the Basel Committee (1999) on the management of credit risk, the following was observed. Many credit problems reveal basic weaknesses in the credit granting and monitoring processes. While shortcomings in underwriting and management of market-related credit exposures represent important sources of losses at banks, many credit problems would have been avoided or mitigated by strong internal credit processes. They noted too that many banks find carrying out a thorough credit assessment (or basic due diligence) a substantial challenge. For traditional bank lending, competitive pressures and the growth of loan syndication techniques create time constraints that interfere with basic due diligence. Globalization of credit markets increases the need for financial information based on sound accounting standards and timely macroeconomic and flow of funds data. When this information is not available or reliable, banks may dispense with financial and economic analysis and support credit decisions with simple indicators of credit quality, especially if they perceive a need to gain a competitive foothold in a rapidly growing foreign market. Finally, banks may need new types of information, such as risk measurements, and more frequent financial information, to assess relatively newer counterparties, such as institutional investors and highly leveraged institutions.

It was also noted from Basel's research that some credit problems arise from subjective decision-making by senior management of the bank. This includes extending credits to companies they own or with which they are affiliated, to personal friends, to persons with a reputation for financial acumen or to meet a personal agenda, such as cultivating special relationships with celebrities (Nikhade et al., 2004). Many banks that experienced asset quality problems in the 1990s lacked an effective credit review process (and indeed, many banks had no credit review function). Credit review at larger banks usually is a department made up of analysts, independent of the lending officers, who make an independent assessment of the quality of a credit or a credit relationship based on documentation such as financial statements, credit analysis provided by the account officer, and collateral appraisals. At smaller banks, this function may be more limited and performed by internal or external auditors (WOCCU, 2011). The purpose of credit review is to provide appropriate checks and balances to ensure that credits are made following bank policy and to provide an independent judgment of asset quality, uninfluenced by relationships with the borrower.

Effective credit review not only helps to detect poorly underwritten credits, but it also helps prevent weak credits from being granted, since credit officers are likely to be more diligent if they know their work will be subject to review. A common and very important problem among troubled banks in the early 1990s was their failure to monitor borrowers or collateral values. Many banks neglected to obtain periodic financial information from borrowers or real estate appraisals to evaluate the quality of loans on their books and the adequacy of collateral. As a result, many banks failed to recognize early signs that asset quality was deteriorating and missed opportunities to work with borrowers to stem their financial deterioration and to protect the banks' position. This lack of monitoring led to a costly process by senior management to determine the dimension and severity of the problem loans and resulted in large losses (Belsti A., 2016).

In some cases, the failure to perform adequate due diligence and financial analysis and to monitor the borrower can result in a breakdown of controls to detect credit-related challenges. For example, banks experiencing fraud-related losses have neglected to inspect collateral, such as goods in a warehouse or on a showroom floor, have not authenticated or valued financial assets presented as collateral, or have not required audited financial statements and carefully analyzed them. An effective credit review department and independent collateral appraisals are important protective measures, especially to ensure that credit officers and other insiders are not colluding with borrowers (Njoku, 1997). In addition to shortcomings in due diligence and credit analysis, bank credit problems reflect other recurring problems in credit-granting decisions. Some banks analyze credits and decide on appropriate non-price credit terms, but do not use risk-sensitive pricing. Banks that lack a sound pricing methodology and the discipline to follow consistently such a methodology will tend to attract a disproportionate share of under-priced risks. These banks will be increasingly disadvantaged relative to banks that have superior pricing skills.

According to the same report by Basel, many banks have experienced credit losses because of the failure to use sufficient caution with certain leveraged credit arrangements. As noted above, credit extended to highly leveraged borrowers is likely to have large losses in default. Similarly, leveraged structures such as some buyout or debt restructuring strategies, or structures involving customer written options, generally introduce concentrated credit risks into the bank's credit portfolio and should only be used with financially strong customers. Often, however, such structures are most appealing to weaker borrowers because the financing enables a substantial upside gain if all goes well, while the borrowers' losses are limited to their net worth.

The team also noted that many banks' credit activities involve lending against real collateral. In lending against real assets, many banks have failed to make an adequate assessment of the correlation between the financial condition of the borrower and the price changes and liquidity of the market for the collateral assets. Much asset-based business lending (i.e. commercial finance, equipment leasing, and factoring) and commercial real estate lending appear to involve a relatively high correlation between borrower creditworthiness and asset values. Since the borrower's income, the principal source of repayment is generally tied to the assets in question, deterioration in the borrower's income stream, if due to industry or regional economic problems, is likely to be accompanied by declines in asset values for the collateral.

Some asset-based consumer lending (i.e. home equity loans, auto financing) exhibits a similar, if weaker, the relationship between the financial health of consumers and the markets for consumer assets. A related problem is that many banks do not take sufficient account of business cycle effects in lending. As income prospects and asset values rise in the ascending portion of the product business cycle, credit analysis may incorporate overly optimistic assumptions. Sometimes the cycle is less related to general business conditions than the product cycle in a relatively new, rapidly growing sector, such as health care and telecommunications. Effective stress testing which takes account of business cycle effects is one approach to incorporating into credit decisions a fuller understanding of a borrower's credit risk. They concluded that many underwriting problems reflect the absence of thoughtful consideration of downside scenarios. In addition to the business cycle, borrowers may be vulnerable to changes in risk factors such as specific commodity prices, shifts in the competitive landscape, and the uncertainty of success in business strategy or management direction. However many lenders fail to „stress test" or analyze the credit using sufficiently adverse assumptions and thus fail to detect vulnerabilities.

National Bank of Ethiopia conducted the first survey on risk management practices of Ethiopian commercial banks by taking a sample of nine members of the bank's board of directors in 2009. It was especially aimed to identify the status of risk management practices of Commercial banks and to improve its strength further through providing fruitful recommendations on weaknesses. Inadequate risk management training, inefficient allocation of Risk management budget, lack of up-to-date and relevant economic and business data for decision making, lack of documented risk management strategy and program, lack of reviewing risk management documents regularly, and poor internal communication and lack of comprehensive risk limits system were identified as a weakness of Risk management system and practice of some Ethiopian Commercial banks while having qualified Risk management staffs, the existence of policy and procedure of Risk management, having committed Board of Directors, awareness of risk in banking operation, a contingency plan for Operational and Credit risk were the major strength of the banks. Generally, the dominance of all those weaknesses over the strength witnesses the existence of a poor risk management system and practice in the Ethiopian Commercial banking industry.

The study by the National Bank of Ethiopia (2009) identified and ranked three important types of risks which credit risk was ranked first and then followed by operational and liquidity risk. Richard E. et al., (2008) researched the credit risk management system of Tanzanian commercial banks and found that a checklist with the help of 5Cs (Character, Capacity, Condition, Credit history, and Collaterals) was used to assess borrowers' creditworthiness. The researcher also found that the quantitative Credit scoring model was not used as a result of poor record keeping and a lack of effective database systems in different sectors within the country. The researcher further noted the difficulty of using the modern Credit risk management model due to the lack of information and other financial infrastructure in underdeveloped countries.

Wondimagegnehu (2012) conducted a study to identify the determinants of nonperforming loans in the case of Ethiopian banks. The study covered the period between 2005 to 2010. The researcher identified deposit loans and total asset variables as affecting the NPL of Ethiopian banks. Accordingly, the researcher found that there was no statistically significant relationship between all independent variables and NPL.

Solomon (2013) a study conducted on the assessment of credit risk management practice of Nib International Bank S.C. The study focuses on the entire review of credit risk management techniques & practices. The study used stratified random sampling to select the number of participants. The result of the study shows that collateral used a number one technique of credit risk management and risk pricing by the bank.

The findings and analysis reveal that credit risk management has an effect on profitability in all banks. Among the two credit risk management indicators, Non-Performing Loan Ratio (NPLR) has a more significant effect than Capital Adequacy Ratio (CAR) on profitability. The analysis at each bank level shows that the impact of credit risk management on profitability is not the same.

2.7. Conceptual framework

A conceptual framework is a graphic representation of the major elements of the study, such as the fundamental ideas or variables, as well as the assumed connections between them. The variables involved, as can be seen from the conceptual framework below, are interdependent on one another and have an impact on a bank's profitability and NPL ratio either directly or indirectly.

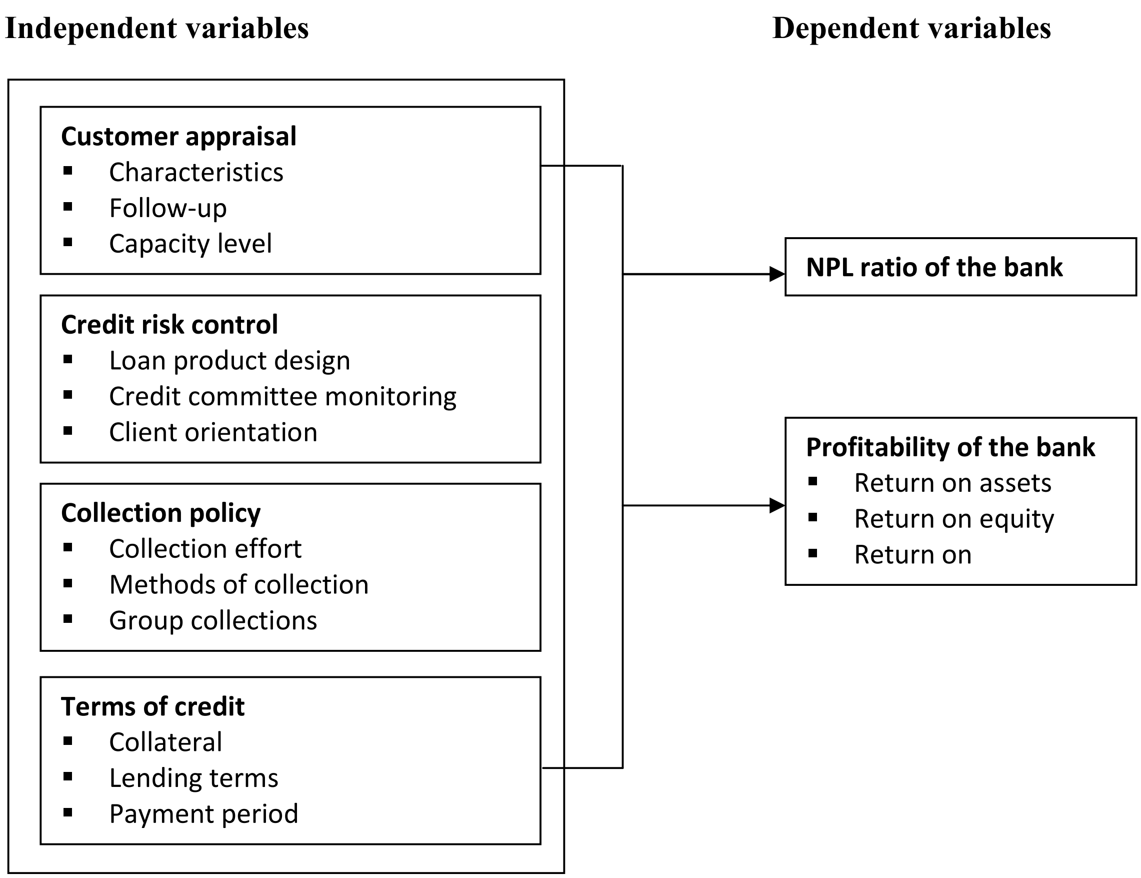

Figure 2: Conceptual framework of credit risk management

CHAPTER THREE

3. RESEARCH METHODOLOGY

In this section the researcher wants to demonstrate the research methodology which was used in the research work; it consists of research design, population, sample size & sampling techniques, types of data and instruments of data collection, the procedure of data collection, and methods of data analysis.

3.1. Research design

To meet the objective of the study and answer the research questions, the descriptive research design was used. The attempt of the study was to describe the present state of affairs of Berhan Bank as it exists without having any control over the variables, that is, the extent of the application of the credit risk management tools and measurement techniques of the bank.

3.2. Population, sample size and sampling techniques

As of June 30, 2022 (end of last fiscal year), the bank had 326 branches throughout Ethiopia of which 151 were in Addis Ababa and 175 branches were in regional cities/towns. Thus, the population and the sample size (total 74 respondents) from the selected groups; Head Office and Branches, was presented below in the table and the researcher was used a purposive/selective sampling technique for the research which means that considering the branch which has high proportion of non-performing loans against the total gross loan of the bank.

When we see last year's (June 30, 2022) annual report of Berhan Bank the total balance of loans and advances was birr 22.2 billion and its annual non-performing percentage was 8.5% from this NPL percentage the researcher selected top 30-branches which have total 86.85% contribution for the non-performing loan balance (bear in mind you that at the end of the fiscal year the bank had 326-branches and during the year 2021/2022 150-branches had loans and advances in their branch loan books). So, the population, sample, and sample size are tabularized below.

Selected groups	Representative sample
Risk Management Department (HO)	2
Credit Management Department (HO)	10
Loan Portfolio Management Department (HO)	2
Branch Managers & Branch Loan Officers	60
Total	74

3.3. Types of data and data collection instruments

The pertinent data needed to answer the research questions is the main focus of the design through structured questionnaires, interviews, review of relevant documents, annual reports, National Bank of Ethiopia directives, and other related publications; so, both primary and secondary data were used for the research. The research was conducted at Berhan Bank Head Office and selected branches; participants of the research were the bank's credit department director & division manager, risk management department director & division manager, loan portfolio management department director & division manager, credit analysts, branch managers and branch loan officers.

The type of data used for the study includes qualitative and quantitative data (mixed). Primary and secondary sources of data were used for the study. The main primary source of data was obtained from respondents by using structured questionnaires; the type of the questionnaire was open and close-ended. The open-ended question offered respondents the opportunity to freely express themselves on the issues under consideration while the close-ended questions restrict the respondents on the options provided.

Regarding the secondary sources of data, annual and quarterly/semi-annually reports of the bank were analyzed; because those reports contain the financial performance of the bank. Besides, as reference material the National Bank of Ethiopia credit directives, journals working papers as well as different theses were used in the study.

3.4. Data collection procedures

To collect the required data from respondents structured questionnaire was used; the primary data was collected from selected personnel from credit and risk management area of the bank by using questionnaires and the secondary data was collected from various documents; in addition the researcher gathered the opinions of various personnel working at credit area at branch level and head office department.

3.5. Data analysis methods

The data collected from various respondents and documents was summarized and presented by means of tables. This offered a pictorial presentation to enhance the understanding of the data. The data presentation was also analyzed using descriptive tools such as frequency, percentage mean and standard deviation. The findings would be presented in tables; the data collected from the close-ended questions were analyzed by using Statistical Package for Social Sciences (SPSS) latest version 25 while the open-ended questions were presented in a narrative way.

CHAPTER FOUR

4. RESULT AND DISCUSSION

This study, as described in the aforementioned chapter, aimed at assessing the credit risk management practice of Berhan Bank S.C. The data were collected from the Risk Management Division Managers, Credit Management Credit Analysts, Loan Portfolio Management Credit Follow-Up Officers, Branch Managers, and Branch Loan Officers of the bank. To collect relevant information/data for the purpose of the study, questionnaires and other data collection instruments were employed. Therefore, the data collected from the target population of the study through these instruments were presented and discussed in this chapter. In doing so, the data collected through the questionnaire was presented in tables.

4.1. Overview of the research

In conducting this research, the researcher used both primary and secondary sources. The primary source is conducted through the use of a questionnaire. A total of 74 questionnaires were distributed to those individuals who are working at Berhan Bank S.C. in connection with credit (loan processing, follow-up and approval). Out of the total of 74 questionnaires distributed to the target population, all of them have been fully completed and returned to the researcher.

Questionnaire was prepared in English. Accordingly, the respondents gave their responses about the extent of the assessment of credit risk management at Berhan Bank S.C. Therefore, the data found from the respondents was analyzed and discussed in line with the research questions as follows:

4.2. Reliability, Validity and Normality tests

4.2.1. Reliability test

In this study, the internal consistency of the questionnaire-based research instrument is evaluated using Cronbach's alpha. Cronbach's alpha, a coefficient of reliability used to assess a test's or scale's internal consistency, yields a result between 0 and 1. The internal consistency of the items increases as the result gets closer to 1, indicating that all of the items measure the same variable. However, if the coefficient alpha result is 0.5 or lower, the internal consistency of the items will be poor or unacceptable. For this study instrument, the coefficient alpha was determined to be

0.949 (table 3 below). The items appear to have a good degree of internal consistency, as indicated by the alpha coefficient of 0.949, a reliability factor.

Table 3: Scale reliability (Cronbach's alpha) for credit risk management dimension

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.949	0.949	42

Source: SPSS output Questionnaire result 2023

Individual reliability test (Cronbach's alpha)

- Credit risk management tools/techniques

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.672	0.684	6

Source: SPSS output Questionnaire result 2023

- The five Cs of credit

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.832	0.837	5

Source: SPSS output Questionnaire result 2023

- Credit processing/appraisal

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.742	0.753	4

Source: SPSS output Questionnaire result 2023

- Credit administration

Cronbach's Alpha	Cronbach's Alpha Based on Standardized	No. of Items

	Items	
0.649	0.649	2

Source: SPSS output Questionnaire result 2023

- Monitoring and control of credit

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.865	0.866	6

Source: SPSS output Questionnaire result 2023

- Managing problem credits/recovery

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.749	0.743	4

Source: SPSS output Questionnaire result 2023

- Existing credit policy of the bank

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.847	0.852	6

Source: SPSS output Questionnaire result 2023

- Factors influence effectiveness of credit risk management

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.895	0.987	9

Source: SPSS output Questionnaire result 2023

Each credit risk management constraint has an individual cronbach's alpha result that is higher than the required level, as shown above in the above table.

4.2.2. Validity test

Validity refers to how accurately a method measures what it is intended to measure. If research has high validity that means it produces results that correspond to real properties, characteristics, and variations in the physical or social world.

High **reliability** is one indicator that a measurement is valid. If a method is not reliable, it probably isn't valid. So, our reliability test (cronbach's alpha) showed that 0.941 which means the measurement is valid.

4.2.3. Normality test

If the **Sig.** value of the Shapiro-Wilk Test is greater than 0.05, the data is normal. If it is below 0.05, the data significantly deviate from a normal distribution.

Table 4: Tests of Normality

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CP	.112	74	.022	.952	74	.006
CA	.238	74	.000	.907	74	.000
MCC	.094	74	.168	.984	74	.484
MPC	.102	74	.054	.963	74	.029
ECP	.073	74	.200*	.980	74	.288
FECRM	.138	74	.001	.968	74	.055

Source: SPSS output Questionnaire result 2023

As we have seen above from the table, there are six independent variables, CP (Credit Processing), CA (Credit Administration), MCC (Monitoring and Control of Credits), MPC (Managing Problems of Credits), ECP (Existing Credit Policy), and FECRM (Factors on Effectiveness of Credit Risk Management). From these variables, MCC, MPC, and ECP, their dependent variables are normally distributed by Kolmogorov-Smirnov; because their sig values are above 0.05. The remaining independent variables, CP, CA, and FECRM, are not normally distributed because their sig values are below 0.05. When we see the normality test by Shapiro-Wilk MCC, ECP and FECRM are normally distributed, but CP, CA, and MPC are not normally distributed because their sig values are below 0.05. However, we are not saying that the data is wrong but sometimes due to large sample size the test may show not normally distributed data.

4.3. General information of respondents

Table 5: Characteristics of the respondents

Variable	Variable Categories	Frequency	Percentage
Gender	Male	56	75.7
	Female	18	24.3
	Total	**74**	**100**
Age	20 - 29	2	2.7
	30 - 39	42	56.8
	40 - 49	27	36.5
	Above 49	3	4.1
	Total	**74**	**100**
Marital Status	Single	8	10.8
	Married	65	87.8
	Divorced	1	1.4
	Total	**74**	**100**
Education	Bachelor Degree	38	51.4
	Master Degree	35	47.3
	Doctoral Degree	1	1.4
	Total	**74**	**100**
Work Experience	0 – 5	1	1.4
	6 – 10	35	47.3
	11 – 20	33	44.6
	Above 20	5	6.8
	Total	**74**	**100**
Job Title	Department Director	-	-
	Division Manager	2	2.7
	Branch Manager	50	67.6
	Credit Analyst	10	13.5
	Loan Officer	12	16.2
	Total	**74**	**100**

Source: SPSS output Questionnaire result 2023

As we can see in the table above, of the total 74 respondents, 56 (75.7%) were male and 18 (24.3%) were female. Thus, we can say that in the studied area (credit risk management), the majority of respondents were male. Again, we can see from the table above that 56.8% of the respondents were found in the 30–39 year age group, and 4.1% of the respondents were found under the age group of above 49 years; this means that the 42 respondents were adults.

When we see the marital status of the 74 respondents, 87.8% of the respondents were married, 10.8% were single, and 1.4% (one person only) of the respondents was divorced. The marital status of the respondents tells us that the respondents were mature. The above table again shows that 100% of the respondents own a degree or higher, which means that 51.4% of respondents have a bachelor's degree, 47.3% have a master's degree and 1.4% (one person only) had a doctoral degree. The result of the education status of the respondents indicates that the bank is staffed by educated people.

From the table above, we can see that out of 74 respondents, 68 respondents' work experience is found in the range of 6–20 years of work experience, and the remaining 5 respondents have above 20 years of work experience, and 1 respondent only has the least experience, which is below 5 years; this implies that most of the respondents were experienced in the banking sector. The last characteristic of the respondents is their job title, and when we see the result given by SPSS, it shows that all respondents have a direct relationship with the research title (Credit Risk Management). Because 50 respondents were branch managers, 10 respondents were credit analysts, 12 were branch loan officers, and 2 respondents were from the credit risk management department, generally, the above-mentioned characteristics of the respondents are appropriate and necessary for the researcher to reach the correct conclusion.

4.4. Result analysis

Existence of credit risk management policy, manuals and strategies

Table 6: Existence of Credit Risk Management Policy, Manuals and Strategies

Existence of policy, manuals and strategies	**Yes**		**No**	
	Freq.	**Percent**	**Freq.**	**Percent**
Berhan Bank has a well-documented credit risk management policy	56	75.7	18	24.3
Berhan bank has credit manual that documents and explains the strategies for managing credit	72	97.3	2	2.7
Berhan Bank has strategies for granting credits at the branch and corporate division levels while assessing borrowers	53	71.6	21	28.4

Source: SPSS output Questionnaire result 2023

As shown in the table above, 75.7% respondents responded that Berhan Bank has a well-documented credit risk management policy that explains the products offered and all activities that have to be performed to manage credit risk. However, the remaining 24.3% respondents responded that the bank has credit risk management policy but that is not well documented. Similarly, 72 respondents (97.3%) responded that Berhan Bank has credit manuals that explains the strategies for managing credit risk but 2 respondents only has doubt the existence of credit manuals in the bank. The third open ended question said that "Does Berhan Bank has strategies for granting credits at branch and corporate division levels?"; 53 respondents (71.6%) responded that yes the bank has strategies which focuses on who, how and what should be done at the branch and corporate division levels while assessing borrowers and the remaining 21 respondents (28.4%) responded that the Bank has no strategy for granting credits. The existence of credit policy and manual implies that all relevant personnel are accountable for complying with the established policies and procedures. This also assists the Bank to easily approve new credits as well as make amendment, renewal and re-financing of existing credits.

Tools and instruments used for credit risk management

Table 7: The tools/instruments used for credit risk management

Description	Not used		Less applied		Neutral		Applied		Highly applied		Total		Descriptive	
	f	%	f	%	f	%	f	%	f	%	f	%	Mean	SD
Credit approval authority	1	1.4	3	4.1	8	10.8	35	47.3	27	36.5	74	100	4.14	0.865
Risk ratings/Scoring	5	6.8	12	16.2	13	17.6	37	50.0	7	9.5	74	100	3.39	1.083
Portfolio Management	-	-	5	6.8	8	10.8	43	58.1	18	24.3	74	100	4.00	0.794
Loan Review policy	-	-	3	4.1	20	27.0	34	45.9	17	23.0	74	100	3.88	0.810
Collateral	-	-	4	5.4	3	4.1	25	33.8	42	56.8	74	100	4.42	0.811
Diversification	1	1.4	11	14.9	23	31.1	32	43.2	7	9.5	74	100	3.45	0.909

Source: SPSS output Questionnaire result 2023

Note: 'f' stands for frequency and '%' stands for valid percentage value

From the table above, 35 out of 74 respondents and 27 out of 74 respondents responded that the bank applied (47.3%) and highly applied (36.5%) credit approval authority as one of its credit risk management techniques, respectively. When we see again respondents responses on risk rating and scoring, a total of 30 respondents' (40.6%) responses have shown us that the bank is not using risk rating and scoring as a credit risk management technique, but 37 respondents (50%) and 7 respondents (9.5%) responded that the bank applied and highly applied risk rating and scoring as one of its credit risk management techniques, respectively.

When we come to the other credit risk management techniques, portfolio management, 43 respondents (58.1%) and 18 respondents (24.3%) responded that the bank applied and highly applied the mentioned credit risk management technique, respectively. Loan review policy is the one that is requested by the researcher, whether or not the bank applies it as a credit risk management technique, and 34 respondents (45.9%) and 17 respondents (23.0%) responded that the bank applied and highly applied loan review policy as one of its credit risk management techniques, respectively.

In addition to the above-mentioned credit risk management techniques in the table, collateral and diversification are the other techniques in relation to credit risk management, and 25 respondents (33.8%) responded that collateral is applied as a technique in Berhan Bank, and 42 respondents (56.8%) responded that collateral is highly applied in Berhan Bank as a credit risk management technique. Meanwhile, out of 74 respondents, 32 respondents and 7 respondents responded that the bank applied (43.2%) and highly applied (9.5%) diversification as one of the credit risk management techniques, respectively.

Hence, in the above table, the results show that all the mentioned credit risk management tools and instruments are properly applied in the bank. Because the output mean results for all tools and instruments are greater than the expected mean result (3.00), this implies that Berhan Bank considers all the mentioned credit risk management tools in its day-to-day activities. However, the researcher concluded that collateral and credit approval authority were highly applied as techniques of credit risk management relative to other techniques. Others like risk rating, diversification, loan review policy and portfolio management, were not given emphasis as techniques of credit risk management.

Factors considered in the credit granting process (5-Cs)

Table 8: Factors considered in the credit granting process (5-Cs)

Description	Very unimportant		Unimportant		Moderate		Important		Very important		Total		Descriptive	
	f	%	f	%	f	%	f	%	f	%	f	%	Mean	SD
Character	1	1.4	1	1.4	1	1.4	16	21.6	55	74.3	74	100	4.66	0.708
Capacity	2	2.7	-	-	2	2.7	13	17.6	57	77.0	74	100	4.69	0.661
Capital	1	1.4	-	-	10	13.5	27	36.5	36	48.6	74	100	4.32	0.760
Collateral	1	1.4	1	1.4	5	6.8	18	24.3	49	66.2	74	100	4.53	0.798
Condition	1	1.4	2	2.7	6	8.1	29	39.2	36	48.6	74	100	4.31	0.843

Source: SPSS output Questionnaire result 2023

Note: ‘f’ stands for frequency and ‘%’ stands for valid percentage value

The above table shows that the responses of respondents related to factors considered important in credit granting process; specifically, borrower’s character, capacity, capital, collateral and condition are stressed. Meanwhile, the mean results indicate that all the mentioned factors are rated as important and are considered in the credit granting process. Because the mean results for all factors are greater than the expected mean (3.00). This means that the Bank considers all the above factors or the five Cs in order to appraise and approve loan. Knowing the purpose of the loan and the primary source of repayment, borrower’s repayment history and current capacity to repay helps the Bank to have information on how the borrowers intend to repay the loan and the probability of successful repayment of the loan which further assist for proper loan approval.

To go about a good analysis of potential customers, the five Cs of credit have been introduced as a guide for bankers on what criteria to use. This includes the gathering of both quantitative and qualitative information to assist the bankers in their screening process of bad and potential creditors. This information is obtained using the five Cs of credit as the standard tools. As a result, capacity is a major factor in the loan granting process when compared to other loan granting factors. Emphasizing all 5 Cs (character, capacity, capital, collateral, and condition) helps the effectiveness of the bank instead of depending on one factor (i.e., capacity).

Credit processing/appraisal

Table 9: Credit Processing/Appraisal

Description	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Total		Descriptive	
	f	%	f	%	f	%	f	%	f	%	f	%	Mean	SD
Checks borrowers' history	1	1.4	2	2.7	7	9.5	30	40.5	34	45.9	74	100	4.27	0.849
Assessed customer ability	-	-	4	5.4	14	18.9	29	39.2	27	36.5	74	100	4.07	0.881
Established accountability for decision making	1	1.4	4	5.4	13	17.6	33	44.6	23	31.1	74	100	3.77	1.001
Process overridden by senior management	1	1.4	9	12.2	14	18.9	32	43.2	18	24.3	74	100	3.53	1.023

Source: SPSS output Questionnaire result 2023

Note: 'f' stands for frequency and '%' stands for valid percentage value

It is known that all banks should establish credit policies and guidelines to foster the loan delivery system. Credit appraisal is the method of evaluating credit before and after a loan has been granted to a customer. As shown in the table above, when respondents were asked whether the bank checks the borrower's history before granting loans, 34 respondents (45.9%) strongly agreed, 30 respondents (40.5%) agreed, 7 respondents (9.5%) were neutral, 2 respondents disagreed, and 1 respondent strongly disagreed. Thus, of the total 74 respondents, 64 (86.4%) strongly agree and agree that the bank checks the borrower's history before granting loans. On the same table, respondents were asked whether the bank properly assessed the customer's ability to meet obligations; 56 respondents (75.7%) responded as strongly agreeing and agreeing; in addition, respondents were asked whether the credit granting approval process established accountability for decisions taken, again, 56 respondents (75.7%) responded as agreeing and strongly agreeing; finally, the researcher wants to know the level of agreement there are times credit granting and monitoring processes are overridden by senior management of the bank, and 50 out of 74 respondents responded as strongly agreeing and agreeing, which means that credit granting and monitoring processes will be overridden by senior management. So, we can conclude that the bank checks the borrower's history, properly assesses the customer's ability to meet obligations, and has established accountability for decision-making, but sometimes senior management overrides the credit-granting processes, which is wrong and should be corrected.

Credit administration

Table 10: Credit Administration

Description	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Total		Descriptive	
	f	%	f	%	f	%	f	%	f	%	f	%	Mean	SD
Performed interdependently	2	2.7	12	16.2	16	21.6	33	44.6	11	14.9	74	100	3.53	1.023
Well-structured tracking system	3	4.1	7	9.5	11	14.9	33	44.6	20	27.0	74	100	3.81	1.069

Source: SPSS output Questionnaire result 2023

Note: 'f' stands for frequency and '%' stands for valid percentage value

Regarding the process of credit administration, in the table above, the result shows that a total of 44 respondents (59.5%) responded that credit administration is performed interdependently by individuals who are involved in the business origination of credit, but the remaining 30 respondents (40.5%) responded as neutral or disagree. In addition, 53 respondents (71.6%) responded that the bank has a well-structured tracking system for credit and collateral files; however, the remaining 21 respondents (28.4%) responded as neutral and disagreed regarding a well-structured tracking system for credit administration. So, based on the responses of the respondents, we can conclude that there are credit administration processes in the bank that are not clear or well-known by all the respondents.

Credit administration is a critical element in maintaining the safety and soundness of a bank. Once a credit is granted, it is the responsibility of the bank to ensure that the credit is properly maintained. This includes keeping the credit file up-to-date, obtaining current financial information, sending out renewal notices, and preparing various documents such as loan agreements. Therefore, it could be generalized that the processes of credit administration and business origination were not separated.

Monitoring and control of credit

Table 11: Monitoring and Control of Credit

Description	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Total		Descriptive	
	f	%	f	%	f	%	f	%	f	%	f	%	Mean	SD
Regular collateral assessment	1	1.4	10	13.5	8	10.8	34	45.9	21	28.4	74	100	3.86	1.025
Monitoring borrower's business flow	2	2.7	20	27.0	15	20.3	24	32.4	13	17.6	74	100	3.35	1.140
Regular review of borrower's reports	2	2.7	20	27.0	19	25.7	20	27.0	13	17.6	74	100	3.30	1.131
Stress testing on the overall credit portfolio	3	4.1	14	18.9	29	39.2	21	28.4	7	9.5	74	100	3.20	0.993
Updating borrower's credit files	2	2.7	12	16.2	20	27.0	26	35.1	14	18.9	74	100	3.51	1.063
Training for borrowers regarding loan usage	26	35.1	18	24.3	22	29.7	4	5.4	4	5.4	74	100	2.22	1.150

Source: SPSS output Questionnaire result 2023

Note: 'f' stands for frequency and '%' stands for valid percentage value

Many banks around the world have experienced credit issues as a result of inadequate procedures not being implemented to effectively monitor and control the credit function within set limits. Another significant contributor to credit issues has been the compromise of credit standards and practices. As a result, each bank must create and put into place detailed policies and informational systems in order to effectively monitor and manage the risks associated with its credit portfolio. In the table above, a total of 19 respondents (25.7%) indicated neutral or disagreed, while the remaining 55 respondents (74.3%) strongly agreed and agreed that collateral coverage was routinely examined in relation to the borrower's financial condition. As a result, we may conclude that the majority of respondents concur that collateral coverage was periodically evaluated in relation to the borrower's financial situation.

In the meantime, when we look at the respondents' responses to the remaining mechanisms for monitoring and controlling credits, 37 respondents (50%) said they were neutral or disagreed with the bank monitoring the borrower's business flow, 41 respondents (55.4%) said the same thing about the regular review of borrower reports, and 46 respondents (62.2%) said they were neutral or disagreed with the regular undertaking of stress tests. We therefore draw the conclusion that the bank has weaknesses in the supervision and management of credits.

Managing problems of credits/recovery

Table 12: Managing problem credits/recovery

Description	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Total		Descriptive	
	f	%	f	%	f	%	f	%	f	%	f	%	Mean	SD
The bank segregates the workout activity from credit originated	1	1.4	7	9.5	20	27.0	30	40.5	16	21.6	74	100	3.72	0.958
The bank has credit risk policy how credit problems managed	4	5.4	8	10.8	16	21.6	31	41.9	15	20.3	74	100	3.61	1.096
The bank has criteria for credit classification	3	4.1	8	10.8	18	24.3	29	39.2	16	21.6	74	100	3.64	1.067
Adequate measures to recover NPLs	4	5.4	13	17.6	12	16.2	31	41.9	14	18.9	74	100	3.51	1.150

Source: SPSS output Questionnaire result 2023

Note: ‘f’ stands for frequency and ‘%’ stands for valid percentage value

In the table above, 46 respondents (62.2%) responded that they agreed that the bank segregates the workout activity from the area that originated the credit, and the remaining 28 respondents (37.8%) responded that they were neutral or disagreed; again, 46 respondents (62.2%) responded that they agreed that the bank has a credit risk policy that clearly sets out how problem credits are to be managed, and the remaining 28 respondents (37.8%) responded that they were neutral or disagreed. When we see the responses of respondents on the "The bank has appropriate criteria for credit classification, provisioning, and write-off" parameter, 45 respondents (60.8%) responded that they agreed on the parameter, but the remaining 19 respondents (39.8%) were neutral or disagreed. Generally, from the respondents’ responses, we conclude that the bank has the appropriate criteria to solve credit problems.

Existing credit policy of the bank

Table 13: Existing credit policy of the bank

Description	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Total		Descriptive	
	f	%	f	%	f	%	f	%	f	%	f	%	Mean	SD
Existing credit policy incorporates credit risk philosophy	-	-	7	9.5	26	35.1	30	40.5	11	14.9	74	100	3.61	0.857
Existing credit policy indicates general areas of credit	-	-	8	10.8	20	27.0	37	50.0	9	12.2	74	100	3.64	0.837
Existing credit policy clearly defines levels of delegation	1	1.4	10	13.5	14	18.9	29	39.2	20	27.0	74	100	3.77	1.041
Existing credit policy incorporates prudent credit portfolio concentration	1	1.4	5	6.8	27	36.5	27	36.5	14	18.9	74	100	3.65	0.913
Existing credit policy place exposure limits on single & groups counter parties	1	1.4	8	10.8	26	35.1	26	35.1	13	17.6	74	100	3.57	0.952
Existing credit policy states diversification	2	2.7	9	12.2	22	29.7	26	35.1	15	20.3	74	100	3.58	1.034

Source: SPSS output Questionnaire result 2023

Note: 'f' stands for frequency and '%' stands for valid percentage value

As shown in the table above, all the items about the existing credit policy of the bank have a mean value greater than the expected mean value 3.00. This implies that the bank has a credit policy that incorporates a credit risk philosophy that governs the extent to which the bank is willing to assume credit risk. The existing credit policy of the bank also explicitly indicates the general areas of credit in which the bank is prepared to engage or is restricted from engaging. The bank policy defines appropriate levels of delegation of approval and provisional or write-off authorities. Similarly, the bank policy incorporates sound and practical credit portfolio concentration limits, and the policy places exposure limits on single counterparties and groups of associated counterparties. The credit policy also states diversification of key industries or economic sectors, geographical regions, and new or existing products.

Factors that influence effectiveness of credit risk management

Table 14: Factors that influence effectiveness of credit risk management system

Description	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Total		Descriptive	
	f	%	f	%	f	%	f	%	f	%	f	%	Mean	SD
Appropriate credit environment	1	1.4	7	9.5	13	17.6	36	48.6	17	23.0	74	100	3.82	0.942
Existing credit policy incorporates credit risks	-	-	7	9.5	20	27.0	37	50.0	10	13.5	74	100	3.68	0.829
Appropriate credit administration	3	4.1	5	6.8	16	21.6	35	47.3	15	20.3	74	100	3.73	0.997
Top management supports	4	5.4	8	10.8	13	17.6	36	48.6	13	17.6	74	100	3.62	1.069
Credit approval guidelines	3	4.1	7	9.5	13	17.6	33	44.6	18	24.3	74	100	3.76	1.057
Credit risk management guidelines communicated	2	2.7	21	28.4	22	29.7	18	24.3	11	14.9	74	100	3.20	1.098
Collection of information from borrowers	2	2.7	11	14.9	18	24.3	30	40.5	13	17.6	74	100	3.55	1.036
Highly qualified staff	5	6.8	19	25.7	25	33.8	19	25.7	6	8.1	74	100	3.03	1.060
Supportive technologies	6	8.1	12	16.2	28	37.8	18	24.3	10	13.5	74	100	3.19	1.119

Source: SPSS output Questionnaire result 2023

Note: 'f' stands for frequency and '%' stands for valid percentage value

The above table shows that top management support is required to ensure that there are proper and clear guidelines in managing credits; all credit risk management guidelines should also be properly communicated throughout the bank, and everybody involved in credit risk management should understand them; the collection of reliable information from prospective borrowers is critical in accomplishing effective screening; qualified staff are critical to ensuring that the depth of knowledge and judgment needed is always available; and supportive technologies and equipment are useful in credit analysis, monitoring, and control, as they make it easy to keep track of the trend of credits within the portfolio.

To sum-up the above table, 72% respondents (agree & strongly agree) responded that there is appropriate credit environment in the bank, 64% respondents responded that the existing credit policy of the bank incorporates credit risks, 68% respondents responded that there is appropriate credit administration in the bank, 66% respondents responded that the top management support is good, 69% respondents responded that there is credit approval guidelines in the bank, 39% respondents only responded that credit risk management guidelines communicated to all concerned employees of the bank however the remaining 61% respondents responded that the bank didn't aware them about the credit risk management guidelines, 58% respondents responded that the bank collects various information from borrowers, 34% respondents only responded that the bank has highly qualified staff related to credit but the remaining 66% respondents has doubt, 38% respondents only responded that the bank has supportive technology effectively to manage credit risks but the remaining 62% respondents didn't agree and they responded that the bank has no supportive technology to manage credit risks.

4.5. Summary of descriptive statistics for all independent variables

Table 15: Summary of descriptive statistics

Descriptive Statistics			
	N	Mean	Std. Deviation
CP (Credit Processing)	74	4.0236	.68518
CA (Credit Administration)	74	3.6689	.90006
MCC (Monitoring and Control of Credits)	74	3.2410	.83863
MPC (Managing Problems of Credits)	74	3.6182	.80795
ECP (Existing Credit Policy)	74	3.6351	.70908
FECRM (Factors on Effectiveness of CRM)	74	3.5090	.75673
Valid N (listwise)	74		

Source: SPSS output Questionnaire result 2023

The above table shows that the mean results indicated in the table for all independent variables are greater than the expected mean value (3.00). This means that the Bank considers all the credit risk management tools properly but when it comes to implementation there are such misunderstandings and poor credit processing and poor credit management.

CHAPTER FIVE

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with summary, conclusions and recommendations, respectively. Hence, the major findings of the study were analyzed and discussed in Chapter four giving a way to draw a conclusion. Finally, possible recommendations for the major problems found in the study are forwarded on the basis of the findings of the study.

5.1. Summary

Credit risk management has a great role because banks have a limited capacity to absorb loan losses, and these losses can be covered only by using income generated by other profitable loans or bank capital. The aim of this study was to assess the credit risk management practice of Berhan Bank S.C. Thus, the study used both primary and secondary data sources. Therefore, the study met the research objectives. Thus, the findings were illustrated below:

1. The majorities of the bank's workers hold first degree and above and have experience, which allows the bank to speed up service delivery, compete in a growing, fiercely competitive market, and achieve its mission. Qualified and experienced personnel improve competency.
2. Credit risk is the most prevalent and regularly occurring risk at Berhan Bank S.C. However, the firm is also impacted by operational, market, and liquidity concerns.
3. According to the study's findings, banks utilized a variety of credit risk management methods and techniques to control credit risk but they all shared the same primary goal of reducing loan default rates, which is a major factor in bank failure.
4. According to the surveys, respondents thought that top management's dedication and assistance were the most crucial. The 49-respondents thought that the executive management team, board of directors, or committee should properly establish and timely update the existing credit risk management policy.
5. Fifty one respondents responded that they were aware of the bank's documented credit risk management procedures; the rules assist the bank in achieving its credit risk management goals and objectives. However, they said that because the financial world is constantly changing, organizational structures should be reviewed and changed on a yearly basis or whenever it is thought to have changed in order to keep up with changing financial environments.

6. The poll demonstrates that credit risk management should be integrated into excellent business practices and should involve proper training for both bank workers and loan customers. The majority of respondents agreed that the bank should offer training once a year to concerned personnel and its notable loan customers since the goal of training is to develop knowledge, skill, and attitudes.
7. The findings suggested that improving communication between the management team and employees is a useful strategy for lowering credit risk.

5.2. Conclusion

The banking sector is here to stay, and its operations cannot be undercut given the significant contribution it makes to the economies of all nations by collecting savings from the "haves" and making them accessible to the "have nots," resulting in profitable investments. The banks confront a variety of risks when conducting their business, with credit risk being recognized as the most significant because it can, with poor management, cause the bank to collapse completely.

(Boffey & Robson, 1995, p. 6) pointed this out in the theoretical section by stating that CRM plays a significant role since banks have a limited ability to absorb loan losses and that these losses can only be repaid by income from other lucrative loans or bank capital. Following my research, I still came to the conclusion that it really does have a significant role to play because it lowers the risk associated with decisions, helps banks maintain a secure system to prevent a decline in customer confidence that could affect the financial markets, matches risk to profitability and interest rates since credits are granted based on these factors, ensures that customers will always have access to money in the event that they need it, and lowers losses because it helps to match risk to interest rates and profitability.

Three specific research objectives were created based on the main purpose. To accomplish this major goal, the study employed a descriptive analysis to look into the respondents' demographics and evaluate Berhan Bank S.C.'s approach to credit risk management. More specifically, both close-ended and open-ended questions were used in the study. The examination of Berhan Bank S.C.'s credit risk management practices is a key focus of the study. Any commercial bank can be thought of as having credit risk management at its core. It is essential to a financial institution's performance since it evaluates borrowers' creditworthiness.

The study's general conclusions indicate that Berhan Bank S.C. has a formal credit risk management policy and that it takes into account the five Cs of credit before approving and extending credit to its clients. The bank used a number of credit risk management tools and approaches, all of which had the same fundamental purpose of minimizing the amount of loan default, which is a significant contributor to bank failure. The bank's principal instrument for managing credit risk was portfolio management. Additionally, non-performing loans (NPL), credit diversification, monitoring, and regulating are ongoing management problems for Berhan Bank S.C.

5.3. Recommendations

Based on the results, the researcher would advise the bank to form a credit risk management team, which should be in charge of the following activities to minimize credit risk:

- Before making a loan, the bank should research the borrower's credit history and accurately determine if the client can fulfill their obligations through the use of a credit scoring or appraisal system.
- In addition to portfolio management, the bank should place a strong emphasis on all credit risk management strategies and tools/instruments.
- The bank should set up processes for managing credit risk, such as routine credit calls, routine plant visits, and the development of management information systems (MIS), credit risk ratings, and annual reviews of accounts.
- The bank should focus on harmonizing its strategic vision, policy objectives, and business processes, as well as increasing projected development, to increase the quality of loans and improve overall credit risk management.
- Giving staff training in credit risk management to improve their skills and evaluating the suitability of credit training programs for all concerned employees directly involved in credit and risk positions and also the bank should give training for its prominent loan customers with regard to how they use the loan.

- When it comes to credit administration, the credit administration process and business origination should be kept apart.
- The bank should focus on creating and maintaining a clear communication, fast, and sharp communication between management team and stakeholders ways of effective communication to credit risk of the Bank.
- When issuing credit, the bank must consider if the applicant has sufficient capital (funds) to run their business effectively.
- Credit experts and senior analysts ought to be required to follow their credit management procedures, policy directives, and ensure that their clients are familiar with them.
- Improve the poor implementation of credit risk management policies or guidelines and continue to implement credit policies and standards that adhere to legal requirements and the overall goals of the business. Work with the regulatory body or entities to adjust to changes in credit risk management policies.
- The bank must actively engage in the activities of the credit reporting bureau (NBE) by giving the center pertinent data on customer borrowing. As a result, the risk of default will be lower and the bank will be able to exchange information on the stubborn borrowers. Additionally, consumers with a poor credit history might be turned away, which would raise the bank's lending quality.
- The bank should tighten its system for managing credit issues because poor credit risk management is the primary element in cases of banks' poor performance and frequently the cause of bankruptcy and the bank should conduct stress test on the whole credit portfolio.

5.4. Limitations of the study

It is well acknowledged that every study has some inherent limitations. As a result, this study had some restrictions in place. The researcher had to deal with a lot of issues that could actually compromise the effectiveness of the study. Among others were the following:

- The employees' unwillingness to complete the questionnaire
- The respondents' tardiness in returning the questionnaire on time
- The internet connection being poor in the researcher residential areas and also due to the instability of the country still the internet connection is down
- Poor electricity supply from the provider, electric break at any time happened.

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St. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES, MBA PROGRAM

QUESTIONNAIRE

Dear respondents,

The purpose of this questionnaire is to collect data for a study aimed at assessing the credit risk management practices of Berhan Bank S.C. which will be used as an input for a thesis in a partial fulfillment of Master of Business Administration (MBA). The outcome of the study is expected to be useful to suggest possible solutions for problems identified related to the theme of the study; so, your genuine answer is very important to the outcome of the research. The information collected through this questionnaire will only be used for academic purpose. Confidentiality of the responses of the participants' will be maintained and the participants' privacy would never be disclosed by any means at any stage of the study.

Thus, you are kindly requested to genuinely reply to all the questions below. Please use an (X) mark to respond to the questions and write the answer for blank item questions on the space provided. Thank you in advance for your kind cooperation. For further information my e-mail addresses are: fekadu.assefa@Berhanbanksc.com, fe1977kadu@gmail.com

Instruction:

This questionnaire has two sections; section-I contains personal profile (Demographic characteristics of respondents) and section-II comprises of questions/items related to Berhan Bank's credit risk policies and credit risk management practices.

Section 1: Please provide some background information about you by putting (X) mark in the most appropriate box in each of the following questions.

1. Gender:
   A. Male ☐
   B. Female ☐
2. Which age group are you in?
   20 20 – 29 Years ☐
   21 30 – 39 Years ☐
   22 40 – 49 Years ☐
   23 Above 49 Years ☐
3. Marital status:
   A. Single ☐
   B. Married ☐
   C. Divorced ☐

4. What is your highest level of educational qualification?
   A. Bachelor Degree ☐
   B. Master Degree ☐
   C. Doctoral Degree ☐
   D. Other (please specify) ____
5. What is your overall work experience in the Bank?
   A. 0 – 5 Years ☐
   B. 6 – 10 Years ☐
   C. 11 – 20 Years ☐
   D. above 20 Years ☐
6. What is your current position in Berhan Bank?
   A. Department Director ☐
   B. Division-Manager ☐
   C. Branch-Manager ☐
   D. Credit Analyst ☐
   E. Loan Officer ☐

Section II. Questions Related to Credit Policy and Credit Risk Management Practices:

Direction: The following questions are designed to assess/investigate the credit risk management policies and practices of Berhan Bank. Please read each items/questions carefully and decide which answer/option is appropriate for you.

1. Does Berhan Bank has a well-documented credit risk management policy explaining the products offered and all activities that must be performed to manage the credit?
   A. Yes ☐
   B. No ☐
2. Does Berhan Bank has a credit manual that documents and explains the strategies for managing credit and are they formulated in compliance with the bank credit policy?
   A. Yes ☐
   B. No ☐
3. Does Berhan Bank has strategies for granting credits that focus on who, how and what should be done at the branch and head office levels while assessing borrowers?
   A. Yes ☐
   B. No ☐
4. Briefly explain the lending process of Berhan Bank (Steps involved, undertaken by who and how)
   ____
   ____
   ____
   ____

5. The following questions are related to tools/instruments for credit risk management.
   5.1. Which technique/instrument do you use for credit risk management in Berhan bank? (please rate them where; 1=not used, 2=less applied, 3=neutral, 4=applied, 5=highly applied)

SNo.	Items	1	2	3	4	5
1	Credit Approval Authority					
2	Risk Ratings/Scoring					
3	Portfolio Management					
4	Loan Review Policy					
5	Collateral					
6	Diversification					
7	Others					

   5.2. How important do you consider the following factors (the five Cs) in your credit granting process? (please rate them in order of their importance, where; 1=very unimportant, 2=unimportant, 3=moderate, 4=important, 5=very important)

SNo.	Items	1	2	3	4	5
1	Character/customers financial history, but also their personal integrity					
2	Capacity/how capable is the customer in repaying the debt					
3	Capital/how much adequate funds the customer has to make the business operate efficiently					
4	Collateral/assets provided by customer as security for the loan					
5	Condition/Overall environment that customer is operating in					
6	Others (please specify)					

6. The following questions are related to credit risk management process; please provide your level of agreement using the following rates (where; 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree).

SNo.	Items	1	2	3	4	5
	Credit processing/appraisal					
1	The bank checks borrowers' history before granting loans					
2	The bank properly assessed the customer ability to meet obligations					
3	Credit-granting approval process established accountability for decision taken					
4	There are times credit granting and monitoring process is overridden by directors, senior management influential staffs					
	Credit administration					
1	The process of credit administration is performed interdependently of individuals involved in the business origination of credit					
2	The bank has well-structured documentation tracking system for credit and collateral files					
	Monitoring and control of credit					
1	Collateral coverage is regularly assessed and related to the borrowers financial health					
2	Monitoring the flow of borrower's business through the bank's account					
3	Regular review of borrowers reports as well as an onsite visit					
4	The bank regularly undertakes stress testing on the overall credit portfolio					
5	Updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted					
6	Customers are often given sufficient training on loans usage					
	Managing problem credits/recovery					
1	The bank segregates the workout activity from the area that originated the credit					
2	The bank has credit risk policy that clearly set out how problem credits are to be managed					
3	The bank has appropriate criteria for credit classification, provisioning and write-off					
4	Adequate measures are put in place to recover non-performing loans					

7. The following questions are related to credit policy of Berhan Bank; please provide your level of agreement using the following rates (where; 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree).

SNo.	Items	1	2	3	4	5
1	Berhan Bank's existing credit policy incorporates credit risk philosophy governing the extent to which the bank is willing to assume credit risk					
2	The existing credit policy of the bank explicitly indicate general areas of credit in which the bank is prepared to engage or is restricted from engaging					
3	The credit policy of the bank clearly defined appropriate levels of delegation of approval, and provision or write-off authorities					
4	The Bank's credit policy incorporates sound and prudent credit portfolio concentration limits					
5	The credit policy place exposure limits on single counter parties and groups of associated counter parties					
6	The credit policy states diversification of key industries or economic sectors, geographical regions and new or existing products					

8. The following questions are related to factors that influence effectiveness of credit risk management system with respect to Berhan Bank; please provide your level of agreement using the following rates (where; 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree).

SNo.	Items	1	2	3	4	5
1	Appropriate credit environment is established through policy and strategies (guidelines) that clearly outline the scope and allocation of bank credit facilities					
2	Existing credit policy is made to incorporate credit risks inherent in all products and activities on which the Bank is engaged in					
3	An appropriate credit administration that involves monitoring process as well as adequate control over credit is maintained					
4	Top management supports to ensure that there are proper and clear guidelines in managing credit					
5	Credit approval made in accordance with the Bank's written guideline and granted by the appropriate level of management					
6	All credit risk management guidelines are properly communicated throughout the bank					

7	Reliable information is collected from prospective borrowers in accomplishing effective screening					
8	The bank has highly qualified staff with required depth of knowledge					
9	Supportive technologies and equipment are utilized in credit analysis, monitoring and control to make the task easy and to keep track on trend of credits within the portfolio					

9. Finally, what do you recommend to implement properly credit risk management in Berhan Bank or if you have any additional comment in relation to the bank's credit risk management system?

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Thank you for answering this questionnaire.

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a university advisor. Demis H/Gabriel (Ass/Professor).

<u>Demis HaileGebreal</u> __________________

Advisor Signature

St. Mary's University, Addis Ababa June 2023