ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

ASSESSMENT OF CREDIT RISK MANAGEMNT PRACTICES; THE CASE OF DEVELOPMENT BANK OF ETHIOPA, ADDIS ABABA

BY

TEWODROES MITIKU GASHU

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ADDIS ABABA, ETHIOPA

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DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under guidance of Mohammed Seid. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any higher learning institution for the purpose of earning any degree

____________________________ ____________________________

Name Signature

St. Mary's university, Addis Ababa **May, 2022**

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ACRONYMS/ABBREVATIONS

- CDSs…………………………………………… Credit default swaps
- CDOs of CDOs……………………………… Collateralized Debt Obligations
- CAR..……………………………………….. Capital adequacy ratio
- NPLR……………………………………….. Non-performing loans ratio
- DBE………………………………………… Development Bank of Ethiopia
- CRM…………….…………………………… Credit risk management
- APY………………………………………... Annual Percentage Yield
- NPLs……………………………………….. Nonperforming loans
- CIC………………………………............. Credit Information Center
- NBE……………………………………… National Bank Ethiopia

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Abstract

The purpose of this study was to assess the credit risk management policies and practice of Development Bank of Ethiopia. To undertake the study, a descriptive research design was used. The sample consisted of bank managers, credit analysts, supervisors and workers in Addis Ababa hade office. A structured questionnaire was used to collect data from respondents. Censes sampling technique was employed to select 60 respondents who have direct experience with credit. However, 2 respondents did not return the questionnaires and 58 questionnaires were collected. The data obtained from the 58 respondents were analyzed using descriptive statistics. Findings revealed that Development Bank has a documented policy, strategies and guidelines to manage credit risk. The Bank makes use of credit risk management techniques that include; thorough risk rating, asking for collateral and checking the credit history of the borrowers. Additionally, the bank uses different risk management tools or instruments like knowing borrowers by using 5C of credit which are Character, Capital, Capacity, market condition and Collateral. Most of the strategies employed by the Bank align with the principles of credit risk management. There are factors affecting credit risk management. One is natural and environmental factors, which are one of the important obstacles to the effectiveness of credit risk management. In order to manage the dynamic nature of credit risk, the Development Bank's management needs to periodically revise its credit policy and procedures, incorporating the feedback of clients and employees, in order to manage credit risk.

Key words: Credit, credit policy, credit risk, credit risk management, credit risk practice, loan, risk management in banks.

CHAPTER ONE
INTRODUCTION

This chapter shows the general idea of the whole thesis. It covers the background of the study, statement of the problem, research questions, and objectives of the study, significance of the study, the scope of the study, limitations, and organization of the study.

1.1 Background of Study

A financial institution is the support of the financial sector of the economy, they provide financing to different groups, and different sectors in the economy namely, the contractors, real estate builders, traders, house-holds, and manufacturers. These credits will be used to reinvest in businesses for which the owners expect to earn a return. At the same time, lenders or financial intermediaries supply credit to earn a return when these companies borrow. This process of extending credit has a multiplier effect on the global money supply, so this is why credit is a powerful driver of our backward economy. This transformation from the supply to demand side is not without risk (Yaw, 2015).

In addition Rana, (2013) banks is one of the financial institutions and Banks play an important function in the economy of any country. They are the main intermediaries between those with excess money and those individuals and businesses with viable projects that require money for their investment. Overall they have the functions of lending money, depositing others' money, transferring money locally or globally, and working as paying agents Hence, credit is the main source of generating income for the banking industry. If we look at the income statement or the asset composition of many commercial banks, the greater share comes from credit activities, likewise for a development bank.

However, this operation involves huge risks to both the lender and the borrower. This risk occurs when a trading partner fails to fulfill his or her contractual obligations on the due date or at any time thereafter, which is caused by the trading partner's inability or resulted from the bank's poor credit management practices. This indeed can greatly jeopardize the smooth functioning of any bank's business operation. Among the risk that face banks, credit risk is one of great concern to most bank authorities and banking regulators, including united bank s.c., because credit risk is a risk that can easily and most likely prompt bank failure (Rana, 2013).

Furthermore, Credit creation is the main income-generating activity for the banks. But this activity involves huge risks to both the lender and the borrower. The risk of a trading partner not fulfilling his or her obligation as per the contract on the due date or anytime thereafter can greatly risk the smooth functioning of a bank’s business (Conford A., 2000). According to Hettihewa, (2001) Credit management means the total process of lending starting from inquiring about potential borrowers up to recovering the amount granted. In the sense of banking sector, credit management is concerned with activities such as accepting an application, loan appraisal, loan approval, monitoring, and recovery of non-performing loans.

Based on this, banks have credit policies that guide them in the process of awarding credit. Credit-control policy is the general guideline governing the process of giving credit to bank customers. A firm's credit policy may be lenient or stringent. The factors considered in designing a lending policy should include; the existing credit policy, industry norms, general economic condition, and the prevailing economic climate (Mishkin, 1997).

The main use of Credit risk management is a structured approach to managing uncertainties through risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources. The strategies include transferring to another party, avoiding the risk, reducing the negative effects of the risk, and accepting some or all of the consequences of a particular risk (Greuning and Iqbal, 2007).

The essential objective of credit management can be pronounced as protected guarding of the client's risk and advancement of operational money flow. Nevertheless, effectiveness in performing each step of the credit process using different parameters has a significant effect on the performance of its management. The study assesses the credit risk management practice in DBE for the period 2015-2021 G.C.

1.2. Statement of the Problem

Banks use a variety of credit risk management policies, which are impacted by their ownership credit policies (credit scoring systems), regulatory environment, and managerial caliber. Banks may however have the best credit management policies but may not necessarily record high profits. In additional although there are industry standards on what is a good credit policy and what is not and further banks have different characteristics. The market may thus be seen to regard an individual banks' poor performance more lenient when the entire banking sector has been hit by an adverse shock such as a financial crisis. In a market where banks herd, banks may be forced to alter their credit policies in order to stay up with the competition (Mwirigi, 2006).

Providing loans to various participant of the economy is one of the main tasks of any commercial-bank. As providing short and medium term loans and also buying and selling negotiable instruments and securities issued by the government, private organization or any other person are two of the many purposes of the bank (NBE, 1994).

Credit risk management practices is an issue of concern in financial institutions today and there is need to develop improved processes and systems to deliver better visibility into future performance. There have been controversies among researchers on the effect of credit risk management techniques adopted by various institutions. According to Fikadu Zerga (2016), indicated that it is important for profitability of the bank. Bank's credit risk policy and strategy are not renewed on time, there's no procedure in place to detect criminally motivated borrowers, the bank's internal risk rating system isn't applied to the entire portfolio, and the existence of collateral is not checked on a regular basis. The bank should regularly review its credit risk management strategy and policy, implement procedures to identify borrowers linked to crime, and change its Management Information System to provide enough data for decision makers.

Biruk (2015). The study finding is to evaluate credit risk management tools and techniques used in banking and whether the current performance of the bank is supported by the appropriate loan risk. Anti-debt The bank concludes that the loan policy is anti-debt. They are exposed and the bank concludes that it has a good credit system and appropriate loan risk assessment tools and methods. Credit monitoring is a method of identifying, measuring, evaluating, monitoring, and controlling. However, the study also found that the bank had problems with not providing training in the absence of a credit risk model, resulting in customers' turning to the credit business risk level and the bank's priority lending sectors.

Tesfaye (2014) investigates credit risk factors in the Ethiopian commercial banks sector The main purpose of the study is to follow a comprehensive approach towards identification of credit risk influencers

Yalemzewd (2013), assessed the credit management practices of Bunna International Bank .and analyzed the processes of accessing credit, credit control, and credit collection strategy against non-performing loans by the bank.

According to Saunders and Allen (2002), a good selection strategy for risk monitoring is adopted by the credit unions. This implies good pricing of the products in line with the estimated risk, which greatly affects their profitability. On the other hand, Mwirigi (2006) stated that loan collection management and operational efficiency management are the most important things to consider in credit risk management (CRM) as they are the most important in enhancing performance. The principal concern of this study is to ascertain the effect of various credit risk management techniques and strategies that are adapted by banks on their performance.

As mentioned above most of the researches are conducted on different private banks in which large amount of their loans are dispersed to private business but this paper is conducted on DBE. A Development Bank of Ethiopia (DBE) is a governmental institution that collects money from a limited number of customers and lone-able funds from government institutions like as the national bank. As a result, this bank buys medium term securities for a medium period of time and mortgage loan-able funds over a lengthy period of time; in this case there are issues with loan collection and credit risk management because most funds are used for

investment rather than commercial purposes, and there is no public service for any clients, and so the funds are exclusively used for agricultural, investment, and import-export purposes. As a result of this, the basic research topic is generated for the researcher in the next section.

1.3 Basic Research Question

The study tray to answer the following research question

- What techniques are used by the bank to manage its credit risk?
- What are the major challenges encountered while executing credit risk management of the bank?
- To what extent bank's credit management system is effective in cross checking its credit risk?
- How does the bank been implement the credit risk management policies?
- What is the strength of the bank on credit risk management?

1.4. Objective of the Study

General Objective

The general objective of the study is to analyze the credit risk management practices in Development Bank of Ethiopia and evaluate its performance.

The specific objectives of this study

- To identity strategies used by the bank in managing its credit risk.
- To identity the challenges that face credit risk management of bank.
- To assess the credit risk management effectiveness of the bank.
- To assess the collection policies and procedures.
- To assess the strength of the bank's credit risk management practice in DBE bank.

1.5. Significance of the Study

The study aims at investigating the credit risk management practices in the development bank of Ethiopia. Since credit is the backbone of the banking industry, the study's findings assist

policymakers, loan processing and credit appraisal departments, credit administration departments, and credit risk management departments in improving their credit risk management practices by forwarding relevant information from the study's findings. Furthermore, the study is important for other Ethiopian bank policymakers since it provides empirical data that can be used to improve or formulate policy environments for credit risk management practices. The findings are also used to inform future research in the field of credit risk management.

1.6. Scopes of Study

The scope this study focused on credit risk management in development bank of Ethiopia. Which is found in Addis Ababa, there for the research can be evaluate current strategies and weakness of credit risk management and it give information how to manage credit risk of the bank.

Conceptual Scope

The study was focus on the assessment of credit risk management practice at development bank of Ethiopia within the variable of Conformity of the Bank to its credit policies and procedures in processing loan applications, the Bank in related to creating credit and collecting its loan on their due date, loans and advance evaluation system of the bank.

Methodological Scope

Primary data included structured questionnaires, interview and whereas secondary data are review of working policy and procedure, reports for the financial reports from the previous seven years (June 30, 2015- June 30, 2021), NBE directives and other related publications.

1.7. Limitation of Study

The research is limited on the of credit risk management. Thus, other risk like interest rate risk, market risk, foreign exchange rate risk and other risk are not covered in this study. There is some information (data) of the bank that cannot be disclosed to anybody else. This limit the researcher not to get data as required.

- Some respondents to the interview or questionnaire would be careless enough to give inappropriate answers to the questions.

- Other than the expected limitations mentioned above, the researcher face some unexpected difficulties too.

1.8. Operational Definition of Terms

Non-performing loans: means problem loans as defined in the directive of the National bank of Ethiopia.

Credit portfolio: means total loan and advances /credit exposure extended.

Credit processing pool: where credit is processed and approved at a certain center.

Provision: A legal or constructive obligation that can be estimated and it is probable that an outflow of economic benefits will be required to settle the obligation.

Credit risk: It is the risk of financial loss to the Bank if a customer or counterparty to a financial instrument fails to meet its contractual obligations.

Management of credit risk: the process of following up the implementation of credit policies, and legal procedures, and compliance with regulatory and statutory requirements.

(Source: DBE credit policy manual, 2018/19)

1.9. Organization of the Paper

This study comprises five chapters. Chapter one provides information on the background of the study; general and specific objectives; research questions; significance; and definition of terms; scope of study; and statement of the problem. Chapter Two reviews literature by different authors and includes theoretical frameworks and empirical studies on issues related to the study. Chapter three deals with the methods of research, research design, target population, sampling and data collection methods. In chapter four, findings, analysis, and discussion are present. In Chapter five, the last chapter, is a discussion of the findings, with a summary, conclusion, and recommendation for the study.

CHAPTER TWO
LITERATURE REVIEW

Introduction Risk is the most important factor that influences economic decisions. If there had been no hazard, the economic device would have been much simpler. On the other hand, risk is all around us in real life. In order to survive in a world that is increasingly uncertain, financial institutions must effectively manage risk. The banking industry's fate will most likely be determined by risk control dynamics. Only banks with strong risk management structures will be able to compete in the long run. Credit risk management is an important aspect of overall risk management that is critical to a financial institution's long-term success.

2.2. Definitions of Credit Risk Management

Credit is derived from a Latin word – "credere" which means believe. Banks as economic establishments expand credit score to their clients in shape of loans, overdrafts and off-stability sheet sports (i.e. Letter of credit score and ensures) the essential goal of the financial institution control is to maximize shareholders wealth (Hirtel and Lopez, 1999). This displays that, Credit risk is the risk of loss due to a borrower's failure to pay off a mortgage or meet contractual responsibilities. The maximum not usual place reason that leads banks to financial ruin is credit danger. More than 80% of economic establishment's stability sheet is associated with credit banks need to take care while coping with credit (Koch & MacDonald, 2006).

Singh, (2013) defines Credit risk is a dynamic quarter that calls for a sure degree of lengthy-variety making plans to allocate finances throughout various fields whilst minimizing risk and optimizing go back on funding It's additionally a manner of making sure that clients can pay for the objects or offerings they have got acquired. It is made of methods and techniques hired via way of means of an business enterprise to assure that a great degree of credit and its a success control are maintained, in keeping with Nishiru and al, (2001). Explained credit control includes setting up formal, prison approaches and guidelines to make sure that credit is granted via way of means of the precise government that credit is given to the precise people, and that credit

score is granted for effective sports or agencies which might be economically and technically viable. The proper amount of credit score is issued, the credit score is recovered, and a control record is flowing freely with inside the business enterprise to reveal the credit score hobby.

In preferred to the above definition Credit risk control is split into 3 steps: credit evaluation, credit approval, and comply with-up. The first methods are pre-disbursement, whilst the third is post-disbursement.

Credit Analysis

Credit evaluation is the number one approach in lowering the credit risk management on a mortgage request. This consists of figuring out the economic electricity of the debtors, estimating the opportunity of default and lowering the danger of non compensation to an appropriate degree. In preferred, credit score critiques are primarily based totally at the mortgage officer's subjective evaluation (or judgmental evaluation method). Once a purchaser requests a mortgage, bank officials examine all to be had records to decide whether or not the mortgage meets the f bank's risk-go back targets. Credit evaluation is basically default risk evaluation, wherein a mortgage officer tries to assess a borrower's capacity and willingness to pay off. Similarly Compton (1985) diagnosed 3 awesome regions of industrial risk evaluation associated with the subsequent questions:

- What risks are inherent with inside the operations of the commercial enterprise?
- What have managers executed or did not do in mitigating the ones risk?
- How can a lender shape and manipulate its very own risk in providing finances?

The first query forces the credit risk analyst to generate a listing of things that suggest what ought to damage a borrower's capacity to pay off. The second acknowledges that compensation is basically a characteristic of choices made via way of means of a borrower. Is control privy to the crucial risk, and has it responded? As To mothy (1995) quoted, the closing query forces the analyst to specify how dangers may be managed so the financial institution can shape to an appropriate mortgage settlement.

A bank's credit analysts frequently use the 5 C's of credit score to awareness their evaluation on the important thing dimensions of an applicant's creditworthiness. Simply put, Bank credit

management is divided into the following categories: credit application, credit evaluation, credit disbursement, credit tracking, credit recovery, and credit application.

Credit application

A credit application is a request for an extension of a credit line. Credit applications are often performed through a digital device and can be done orally or in writing. All important documents relating to the borrower's credit score, including the annual percent yield (APY) and any connected fees, should be legally included in the software, whether completed individually or independently. If the software office work has records about the applicant, financial groupings can pursue prison action against a borrower who fails. A defaulter may be able to avoid prison punishments if the content material of the mortgage software form isn't always well-constructed.

Credit Assessment

Risk evaluation is step one in comparing a capacity borrower and tasks with the intention to behavior a danger evaluation workout and decide the danger involved. This is likewise executed to decide the viability of the proposed undertaking, in addition to the technical, financial, and economic viability of such initiatives (Matovu and Okumu, 1996).

The first difficulty to reply is that if the debtors have the capacity to pay off the mortgage, this is, to go back the credit score while it's miles due with the right hobby price. This includes gathering, comparing, and processing facts from the credit score software shape submitted via way of means of the applicant. This aids within side the assessment of the applicant's creditworthiness and the decision of problems among the borrower and the economic group (Matovu and Okumu, 1996).

Credit assessment the credit assessment is the primary degree in customizing an answer to fulfill the needs of the purchaser. To assure that there is a great capacity in phrases of finance, the assessment starts off evolved with a radical draw close of the purchaser's dreams and capacities. Credit assessment is the maximum giant safety for making sure the underlying first-rate of the credit score being issued, and its miles an crucial a part of credit score danger control (Cade, 1999). Credit first-rate refers to debtors' pledges to meet their capacity and choice to take benefit of the ability they had been furnished. It will don't forget the chance of default and the

anticipated recuperation price (Saunders & Cornett, 2003). As a end result, credit score assessment includes assessing the dangers related to financing in addition to predicting the chance of default and recuperation price.

According to Boakye, (2015) Effective credit evaluation is important for preserving credit first-rate via way of means of spotting and mitigating destiny credit score dangers. Credit evaluation is important for figuring out a borrower's credit score worthiness, figuring out the opportunity of default, and lowering the danger of non-compensation to an achievable degree. Credit danger evaluation, in keeping with the researcher, is basically a default danger examine wherein mortgage officials try to research a borrower's capacity and willingness to pay off. The maximum top-rated manner for lowering credit score danger in a mortgage request system is to do a credit score evaluation. This aids in figuring out the debtors' economic condition, estimating the chance of default, and reducing the risk of non-compensation to a achievable degree. In preferred, credit tests are primarily based totally at the subjective judgment of the mortgage officer (Hagos, 2010).

Credit Disbursement (payment)

The credit officer and the credit committee signal the mortgage software shape after an applicant has been very well assessed and showed to fulfill the credit score union's credit score standards. The bank is now legal to disburse finances to the applicant. The act of dispensing or paying cash to customers who've been accessed and certified for credit is called credit risk disbursement. After all the tests had been finished and permission has been obtained, disbursement ensures that cash is made on hand to the client. Before finances are distributed, the assessment system ensures that the safety and different wanted files are acquired certified.

Credit Monitoring

Credit is Monitoring and crucial element of the mortgage method. Financial establishments endure a giant quantity of duty for preserving asset first-rate and well timed compensation of hobby and major. Despite the truth that important protections are taken all through the mortgage assessment and approval method, a economic group ought to be more cautious. An economic group won't be capable of take ok corrective moves to halt and reduce horrific debt until early caution indicators are accrued. An economic group ought to enforce a robust and powerful credit

risk tracking gadget that video display units the borrower's account from several views with the intention to take rapid movement. According to Robinson (1962) and Anjichi (1994), a in a position credit risk tracking and comply with-up system might also additionally alleviate some of the pains, disappointments, and problems skilled via way of means of economic establishments. A desirable supervision aids within side the renovation of a great mortgage.

Credit Recovery /training session method

The series of a mortgage quantity from a defaulting purchaser is called mortgage recuperation. Financial establishments ought to be privy to loans which might be at threat of default (additionally called nonperforming loans, or NPLs or non-acting mortgage) Collections branch of the bank will start contacting the person mortgage defaulters. The economic establishments may additionally touch any guarantor of the mortgage if it's miles a secured mortgage, the group may match thru the laid down prison method to take over the asset.

2.3. General Principles of Sound Credit Risk Management in Banking

Reviewing the overall concepts of credit risk management can offer a clearer photograph on how banks perform their credit score danger control, regardless of the particular tactics that can fluctuate amongst banks. Some of the concepts of sound practices of financial institution credit score danger control as mentioned within side the Basel committee publications (http://www.ibm.com/us, 2008) cowl the subsequent four regions:

2.3.1 Establishing an Appropriate Credit Risk Environment

Setting up the ideal credit risk environment, in particular, requires a clear understanding of credit risk and the development of a comprehensive credit risk strategy as well as recommendations. To banks, the identity of present and capacity credit score danger inherent in the goods they provide and the sports they have interaction in is a foundation for an powerful credit score danger control, which calls for a cautious knowledge of each the credit score danger traits and their credit score-granting sports. Besides, the layout of goal credit score danger techniques and guidelines that manual all credit score-granting sports is likewise the cornerstone in financial institution credit score danger control method. It is said that a credit score danger approach need

to make clear the styles of credit score the financial institution is inclined to supply and its goal markets in addition to the specified traits of its credit score portfolio.

According to Saunders (2005), those techniques need to mirror the financial institution's tolerance for danger and the extent of profitability the financial institution expects to reap for incurring numerous credit score dangers. examine suggests that the credit score danger approach of a financial institution need to deliver reputation to the dreams of credit score first-rate, income and boom. Every financial institution, irrespective of length, is in commercial enterprise to be worthwhile and, consequently, ought to decide the suited danger-go back trade-off for its sports, factoring within side the fee of capital (Richard S, 2010). While credit score guidelines specific the financial institution's credit score danger control philosophy in addition to the parameters inside which credit score danger is to be managed, protecting subjects which include portfolio mix, fee phrases, regulations on asset classification, etc. (Hennie 2003).

According to Boating (2004), a cornerstone of secure and sound banking is the layout and implementation of written guidelines and approaches associated with figuring out, measuring, tracking and controlling credit score danger. Moreover, setting up the perfect credit score surroundings additionally shows the established order of a great credit score subculture in the financial institution, that is the implicit knowledge amongst employees approximately the lending surroundings and conduct which might be suited to the financial institution.

2.3.2. Operating below a Sound Credit Granting Process

The Basel Committee (2000; 2001) asserts that with the intention to preserve a legitimate credit portfolio, a financial institution ought to have a longtime formal transaction assessment and approval method for the granting of credit. Approvals need to be made according with the financial institution's written tips and granted via way of means of the precise degree of control. There need to be a clean audit path documenting that the approval method become complied with and figuring out the person(s) and/or committee(s) supplying enter in addition to making the credit score selection (Boating, 2004). A sound credit score granting method calls for the established order of properly-described credit granting standards in addition to credit publicity limits with the intention to check the creditworthiness of the obligors and to display screen out the desired ones.

When a purchaser applies for a mortgage, credit score specialists look at all to be had records to peer if the mortgage meets the financial institution's danger-go back targets. To reap this intention, all economic establishments ought to: The five Cs of credit score is generally hired via way of means of bankers and creditors within side the lending enterprise to evaluate borrowing reliability and credit score worthiness. Understanding the 5 Cs of Credit will offer bankers and creditors with a few perceptions into the way to have interaction with mortgage candidates within side the right way. In this regard banks have historically centered at the concepts of 5 Cs to estimate debtors' creditworthiness.

These 5 C's are: According to Lawrence (1997:776-777), identified 5 C's of credit score accordingly. They consist of; Character, Capacity, Capital, Collateral, and Conditions.

A. Character: - The applicant's document of assembly beyond responsibilities, economic, contractual, and moral. Past charge records in addition to any pending or resolved prison judgments towards the applicant might be used to assess its character.

B. Capacity: - The applicant's capacity to pay off the asked credit score. Financial declaration evaluation, with precise emphasis on liquidity and debt ratios, is usually used to evaluate the applicant's ability.

C. Capital: - The economic electricity of the applicant as pondered via way of means of its possession position. Analysis of the applicant's debt relative to fairness and its profitability ratios are often used to evaluate its capital.

D. Collateral: - The quantity of property the applicant has to be had to be used in securing the credit score. The large the quantity of to be had property has the more the danger that a company will get better its finances if the applicant defaults. A overview of the applicant's stability sheet, asset fee appraisals, and any prison claims filed towards the applicant's property may be used to assess its collateral.

E. Conditions: - The modern financial and commercial enterprise weather in addition to any specific situations affecting both celebrations to the credit transaction. Analysis of the overall financial and commercial enterprise situations, in addition to unique situations that can have an effect on the applicant or company is finished to evaluate situations.

2.3.3. Ensuring Adequate Controls over Credit Risk

Ganesan (2000) outline In order to make sure ok controls over credit, asserts that there ought to be credit score limits set for every officer whose obligations have something to do with credit score granting. Material transactions with associated events need to be concern to the approval of the board of administrators (except board individuals with conflicts of hobby), and in sure situations (e.g. a large mortgage to a main shareholder) suggested to the banking supervisory government. The way for making certain ok controls over credit score danger in banks laid within side the established order of various sorts of credit score opinions. Regular credit score opinions can affirm the accordance among granted credit and the credit score guidelines, and an unbiased judgment may be furnished at the asset qualities.

Huppi and Feder (1990) outline Monitoring mortgage centers furnished to customers is a important duty in assuring the fulfillment of the undertaking from which payback can be made found that powerful tracking results in a excessive price of mortgage recuperation via way of means of figuring out capacity risk (which include mortgage diversions) and reminding defaulters in their responsibilities to the lending group.

2.4. How to Manage Credit Risk

According to Laurent Clerc (2004), individuals tested numerous risks control tactics via way of means of that specialize in aspects: the formation of a risk subculture and the avoidance of risk thru the buildup of regulatory capital in keeping with every credit group's degree of risk publicity.

The maximum revolutionary characteristic is the capacity for banks to apply their very own evaluation structures below the supervision of supervisory bodies. Because calibrating those fashions insure rising international locations is complex via way of means of the dearth of facts dependability and availability, the Basel Committee has encouraged a less complicated standardized method tailor-made to those economies.

The rise of credit derivatives marketplaces is taken into account when developing strategies to better seize danger and comprehend the most revolutionary approaches on a prudential level. The following conclusions were reached after the results of the survey were presented under the

auspices of the ESCB Banking Supervision Committee: Credit derivatives markets have seen a significant increase in liquidity, and credit risk has been transferred to insurance businesses, contrary to expectations. As a result, Europe's obsession appears to be entirely concentrated on the banking sector. The majority of transactions are made with the maximum standardized products, which include credit score default swaps (CDSs). Over the beyond commercial enterprise cycle, credit score danger switch operations do now no longer seem to have had a giant affect on European banks' provisioning needs. However, there are some factors which might be nevertheless out within side the air. They are worried with the actual portions moved in addition to the sophistication of a number of the gadgets hired, which include the CDOs of CDOs (Collateralized Debt Obligations), which appear especially obscure.

2.5. Bank Risk Management Systems

Participants additionally mentioned the Basel Committee's selection in October 2003 to modify capital The banking quarter has lengthy visible danger control as a depend of controlling 4 of the aforementioned hazards, which account for the majority, if now no longer all, in their danger publicity: credit score, hobby price, overseas trade, and liquidity danger. While they're privy to counterparty and prison dangers, they do now no longer recall them to be as crucial. When associate danger is excessive, it's miles assessed the use of traditional credit score danger methods, which can be often done in the credit score branch. Similarly, maximum bankers might recall prison dangers to be a end result in their credit score judgments or, extra probable, a loss of powerful method in economic contracts. As a end result, searching into financial institution danger control structures is basically searching at how they take care of those 4 dangers. Each danger is standardized, measured, constrained, and controlled the use of the technique referred to above, which is customized to the danger at hand. To show how that is accomplished, recall the subsequent: necessities to account for sudden losses. This exam of company-degree danger control begins off evolved with a study danger control controls in every area. The extra hard challenge of aggregating those dangers and including additional, extra amorphous dangers which include prison, regulatory, or reputational danger can be deferred till the cease (Santomero, 1997).

2.6. Credit Risk Monitoring and Control

Credit danger managers have the task of making sure that credit score danger is well quantified, monitored, and managed. Credit danger managers ought to consequently make sure that upcoming activities or versions that would jeopardize the integrity of the mortgage portfolio and the financial institution's capacity to counteract them are well diagnosed. Banks ought to have an powerful framework for overview and reporting in region to make sure that credit score dangers are well diagnosed and evaluated, and that controls are in region to limit the danger.

Credit control includes preserving normal touch with debtors, cultivating an surroundings of believe with debtors in order that banks may be taken into consideration answer providers, cultivating an organizational subculture that helps debtors at some point of hard instances and assists them in any manner feasible to conquer challenges, meticulous tracking of the nation of the borrower's commercial enterprise thru their financial institution debts, and periodic re-exam of the borrower's credit score reviews, in addition to calling and traveling debtors, preserving updated credit score documents for debtors, and checking debtors' beyond credit score rankings on a normal foundation. Credit danger tracking is an crucial device that allows industrial banks detects lapses and potential defaulters early on, in addition to verifies if danger control strategies are powerful with the intention to lower non-acting mortgage publicity (Al-Tamimi, 2007).

Credit risk control is the method of constantly tracking person credit, along with off-stability sheet exposures to obligors, in addition to the financial institution's complete credit score portfolio. Banks ought to set up a gadget that lets in them to reveal the credit score portfolio's first-rate on a each day foundation and take corrective movement as quickly as any deterioration happens. A financial institution would possibly use this sort of gadget to decide if loans are being serviced in keeping with facility situations; the adequacy of reserves, the general danger profile is inside control's danger tolerances, and regulatory compliance. Setting up an green and powerful credit score tracking gadget might permit senior control to maintain tune of the general first-rate of the whole credit score portfolio in addition to its trends (Aebi et al. 2012).

As a result, management might fine-tune or evaluate its credit strategy/policy prior to suffering a major setback. The financial institution's credit policy coverage should include specific procedural guidelines for credit policy risk tracking. It should at the very least define the roles

and responsibilities of those in charge of credit score risk tracking, as well as the evaluation approaches and strategies (for individual loans and the overall portfolio), the frequency of tracking, the periodic examination of collaterals and mortgage covenants, the frequency of website online visits, and the identity of any mortgage deterioration (SBP, 2012).

2.7. Bank credit Risk and Risk Management

The most significant control challenge for banks has been credit risk. The first-rate of credit risk control, whether desirable or fearful, places a lot of pressure on banks, which see economic risks in the exchange of benefits as the essence of their business. The credit risk is as follows: the borrower or commercial enterprise counterparties are unable to meet their contractual obligations due to deterioration and various factors from the entrepreneurs (including entanglement among firms); as a result, there is a risk of settlement violation and cash shortage. Credit score risk can be categorized into three categories based on various devices and behaviors (SBP, 2012).

- ✓ Lending danger, additionally called, company danger. This sort of risk is duo to the violation of settlement while debtors or bond issuers do now no longer pay off their Tsai et al. Springer Plus (2016) or their credit get deteriorated, inflicting the cash loss. Lending danger or company danger are frequently correlated to debtors and bond issuers' debt credit score conditions, and correlated to the danger sensitiveness diploma of the economic products.
- ✓ The second credit risk is counterparty danger; it can be in addition divided into dangers: agreement danger and pre agreement danger. Settlement risk is the danger that counterparties do now no longer satisfy their agreement obligations with inside the due agreement time and reason the lack of the equality major to the financial institution. Pre-agreement risk is the risk that counterparties violate the settlement earlier than the very last agreement day and reason the risk of agreement violation to the bank. The bank credit risk management organization and features might also additionally seem in distinct paperwork. However, the bank need to make sure the respectable positions and associated government paintings independently and attributably, now no longer simply focusing at the superficial independency, to attain the intention of credit score danger control and

supervision, which include (Aebi et al. 2012; Jiang and Lo 2014; Nuno and Manuela 2014; Swami 2014):

A. Business features need to be unbiased from credit score granting/verification features to keep away from the hobby conflict.

B. Credit verification features need to be unbiased from credit score granting features to ensure the credit score end result record goal and simply.

C. Accounting features need to be unbiased from credit score granting/verification features and commercial enterprise features to keep away from fraud and malpractice.

D. The unit liable for designing, setting up, or executing the credit risk management dimension gadget need to be unbiased from the credit score granting features to maintain this unit freed from different interruptions.

E. The workplace employee in fee of verifying the credit score danger dimension gadget need to be distinct from the workplace employee liable for designing or selecting the credit score danger dimension gadget to decrease the opportunity of creating mistakes from the credit score danger dimension gadget.

F. The authority need to obey the policies to limitation the fascinated events within side the financial institution.

G. Re-test the credit granting employees of interest with inside the bank, which include the credit granting of the overall supervisor and the excessive-ranked officer.

H. Regularly (as a minimum in keeping with year) test the techniques and associated guidelines of the bank credit control to affirm that the excessive-ranked managers perform the policies correctly and to ensure the credit granting according with the ones techniques and associated guidelines. This is then to make the excessive-ranked managers in the long run liable for setting up and preserving the precise and powerful credit score danger control mechanism.

I. Make normal inspection at the financial institution control records and mirror on an appropriate credit risk management techniques to assure the suitability and sufficiency of the financial institution capital.

2.8. The Loan System

According to Puri and Poli, (2013) such judgments can be made extra effortlessly with the assist of a great credit risk management system. A borrower ought to have a pre-present functionality to pay off the mortgage, which include a salary or profits from a self-hired company, with the intention to get a credit line with inside the retail quarter. A borrower, on the alternative hand, isn't always important to have a pre-present capacity to pay off a time period mortgage asked from a bank. As a end result, the assessment of incremental coins flows assists the lender in figuring out the borrower's capacity to pay off the mortgage in a well timed manner (Poli and Puri, 2013) Bank lending is floor at the declaration that the debtor has the willingness and functionality to requite the mortgage in any respect levels of their commercial enterprise transactions with the financial institution. However, the ability to pay again relies upon on destiny profits streams and the disposition to pay off must be primarily based totally at the Pre-existent dedication that has been absolutely tested via way of means of the borrower.

Furthermore, while a borrower takes a mortgage from a bank to reinforce their commercial enterprise, there are three situations that ought to be met: The willingness or aim of the borrower to go back the mortgage in keeping with the phrases of the arrangement. The cause for the borrower's request or look for a mortgage, the activities which have the ability to form the destiny. In practice, figuring out a present borrower's willingness to pay off a facility given is as a substitute simple. Only an out of control occasion, which include a hearth place or giant infrastructure damage, might also additionally disrupt this nation of affairs. This criterion is important for finishing a radical client assessment and laying the basis for making properly-knowledgeable lending picks.

2.9. Credit Management Policy

It is defined as senior control's perception and methods that manual the business enterprise's credit department and examine credit advantages towards installed approaches. This coverage serves as a manual for all employees delegated with the challenge of supplying credit, in addition to a baseline towards which overall performance can be judged towards installed necessities (Franklin, Jim 2010).

Finally, Credit policy/guidelines ought to be communicated all through the commercial enterprise, applied thru appropriate methods, monitored, and often amended to account for converting inner and outside conditions with the intention to be powerful. Credit guidelines need to be applied on a consolidated bank degree in addition to at the extent of person individuals, if wanted. Furthermore, the guidelines need to take care of the important position of reviewing. The aggressive method is accounted for with inside the specification of the call for characteristic in addition to with inside the fee related to taking over new receivables, in keeping with the evaluation of sure coverage elements (Franklin, 2010).

2.10. Credit Procedures

Franklin, (2010) outline desirable targets of credit management approach, advised the endorsement and usage of credit techniques. As credit strategies are precise path wherein top management put in force expectancies at the credit department to reap the credit score management guidelines. The credit structures combine tips on what records to be applied for credit examination and research system, offer records concerning system, account supervision and instances desiring management's notice. Such credit meeting contains the usage of reminders, adoption of coverage, the software of prison approaches, the factoring of borrowers and very last write-offs are referred to below.

2.11. Indicators for credit Risk Management

2.11.1 Capital adequacy ratio (CAR)

According to Aithal, Varsha, and Roshan (2019) CAR is the ratio of bank's capital to its danger and is calculated as overall capital divided via way of means of financial institution's overall danger-weighted property. CAR protects depositors and promotes the stableness and performance of economic structures round the arena via way of means of reducing the danger of banks turning into insolvent. When a bank's winding-up method, depositors' finances are given a better precedence than capital in order that the depositors can best lose their financial savings if a financial institution's loss outsize the capital. The better CAR ratio way that depositors' properties are higher included via way of means of the bank. There are sorts of capital had to be measured while calculating CAR. Tier one capital can take in that could take in losses without a

financial institution being required to quit trading. Tier capital can take in losses with inside the occasion of a winding-up and gives decrease degree of safety to depositors. It is used to take in losses while a financial institution loses all its tier one capital. Actually, in practice, due to the fact there may be very restricted facts in phrases overall capital and danger-weighted property, we use the ratio of overall fairness capital divided via way of means of overall property to alternative the unique calculation formula.

2.11.2. Non-acting loans ratio (NPLR)

According to Ghasemi, (2010) nation that Non-acting mortgage is the sum of loans that borrowers can't make scheduled charge for a duration of as a minimum ninety days for industrial banking loans and one hundred eighty days for client loans. NPLR is the ratio of the quantity of nonperforming loans in a bank's mortgage portfolio to the whole quantity of top notch loans the bank olds. The NPL ratio measures the effectiveness of a bank in receiving payments on its loans and the first-rate of bank loans. The first-rate of bank loans is crucial in bank soundness due to the fact making loans is certainly considered one among bank’s center agencies. A bank’s intention is to maximize its earnings. While with the intention to enhance the overall performance, the financial institution ought to boom the danger. Among all of the dangers, credit score danger is the maximum giant aspect for industrial banks. The credit risk management might also additionally have wonderful effect at the profitability of industrial banks, so our studies desire to discover this relationship.

2.12. Credit Information

According to article 36 of the Licensing and Supervision of Banking Business Proclamation No. 84/1994 It is any other device this is utilized by bank in credit evaluation. Adequate and well timed records that allows a pleasant evaluation of the creditworthiness of debtors making use of for a bank mortgage is vital for making prudent lending choices. Prudent lending choices made on the idea of ok records at the creditworthiness of debtors are one of the major elements in making sure the economic soundness of banks. But there was critical issue in Ethiopia of having correct and well timed records on potential debtors that enables the making of such prudent lending choices. One of the way for assuaging this issue of having correct and well timed records on potential debtors is the established order of a Credit Information Center (CIC) in which

applicable records on debtors is thought to be pooled and made to be had to lending banks. Binging this to ours of a context, the National Bank Ethiopia (NBE) has issued those directives to set up this sort of Credit Information Center (CIC).

2.13. Non-Performing Loan and Lone Follow up

According to Radha, (1980) Loans and advances represent the number one supply of profits via way of means of banks. As any commercial enterprise established order a financial institution additionally seeks to maximize its earnings. Since loans and advances are extra worthwhile than some other property, a financial institution is inclined to lend as a good deal of its finances as feasible. But banks ought to be cautious approximately the protection of such advances.

Naturally, bankers goal to strike a stability among growing earnings thru lending whilst additionally dealing with the danger of mortgage default, which might lessen income and so capital. As a end result, a financial institution ought to workout warning while making loans due to the fact the danger of default is better. Non-acting loans are described as loans or advances whose credit score first-rate has deteriorated to the factor that complete series of precept and/or hobby in keeping with the contractual compensation situations of the mortgage or advances in difficulty is not feasible (NBE, 2008). It in addition states that loans or advances with pre-decided compensation schemes are nonperforming if precept and/or hobby are due and unpaid for ninety (ninety) days or extra past the due date or adulthood date (NBE, 2008). In addition to non-acting loans, overdrafts, and credit card debt, there are different styles of non-acting debt. Loans or advances that don't have pre-installed re charge application will be non-acting while:

- The loan stays unpaid for 90 (ninety) days or longer after the due date or maturity date has passed.
- For 90 (ninety) days or more, the debt exceeds the borrower's permitted limit;
- Interest is due and unpaid for 90 (ninety) days or more; or for overdrafts, it is due and unpaid for 90 (ninety) days or more.
- If the account has been inactive for 90 (ninety) days or more, it will be deleted.
- Deposits are inadequate to meet the interest capitalized for 90 (ninety) days or more, whichever comes first.

- The account does not display a debit amount of 20% of the permitted limit or less at least once in the 360 days leading up to the loan review date.

2.13.1. Loan follow-up:

Lending choices are primarily based totally on thorough credit risk evaluation/appraisal and debtors' tests. However, preceding overall performance and honesty aren't any assuring of destiny fulfillment. Because the borrower won't fulfill the phrases and situations of the mortgage, a mortgage authorized on the idea of affordable evaluation may match badly.

- Ensuring compliance with phrases and situations Monitoring cease use of authorized finances Monitoring overall performance to test persevered viability of operations
- Detecting deviations from the phrases of the selection making periodic opinions of the fitness of the loans and advances primarily based totally on a whole lot of crucial overall performance standards, which include profitability, and unit control, and making sure that the property created are correctly used for effective functions and properly maintained.
- Ensuring recuperation of the installments of the principal and interest in case of time period mortgage as in keeping with the scheduled re charge application.

Identify early caution signs, if any exist, and take corrective movement to keep away from possibly default. There are 3 primary styles of mortgage comply with-up strategies. Physical, economic, and prison comply with-up are the 3 styles of lone flow-up. The sections that comply with undergo everyone in detail.

A. **Physical Follow -up**: - Physical follow-up allows make sure the commercial enterprise's life and operation, in addition to the repute of collateral properties, the accuracy of declared economic facts, the first-rate of goods, the conformity of economic facts with different records (which include taxes, check in books), the supply of uncooked materials, the exertions situation, advertising problems observed, undue turnover of key working employees, and modifications in control shape.
B. **Financial Follow-up** : - Financial tracking is important to make sure that the assumptions used to make lending picks are nevertheless valid, each in phrases of the borrower's

operations and the surroundings, and that the mortgage is getting used for the supposed cause.

C. **Legal Follow-up:** - The goals of prison comply with up is to assure that the Bank's legal response remains active at all time. It includes getting and preserving accurate files, registration, and ok coverage follow up. Specific problems regarding prison comply with up consist of figuring out whether or not contracts are well accomplished via way of means of suitable men and women and files are whole in all aspects, acquiring revival letters in a well timed way (revival letters talk to renewal letters for registration of safety contracts which have handed the statutory duration as laid out via way of means of law), making sure mortgage/loan contracts are up to date well timed, and analyzing regulatory directives, legal guidelines, and third party celebration claims, to call some.

2.14. Credit Collection Technique and Provision

In each financial scenario, powerful credit collection methods are taught to for economic groups. Knowing the way to get customers to pay their top notch responsibilities to economic establishments which include banks on time can assist banks decorate their coins flow. As a end result, a whole lot of series tactics are used. In maximum instances, mortgage customers are required to pay in coins, make a deposit, or maintain their month-to-month bills on time as agreed. The series undertaking grows extra non-public and more difficult while the mortgage account is going overdue or late. The following are the essential strategies (Shao and Yeager, 2007).

- **Telephone Calls: -** If the loan client passes the due date, a telephone call may be made to the customer to request immediate repayment and up to date his or her account.
- **Personal visits:** - If the telephone call made is not resulted positive response vesting his business and discussing the issue with the customer can be a very effective collection procedure.
- **Reminder Letters: -** If the efforts made so far is unsuccessful and not resulted positive response a polite letter is to be served re minding the customer of its obligation followed by warning letters for the action to be taken in future and its consequence.

- **Using Collection Agencies:** - Firms can turn uncollectible accounts over to a collection agency or an attorney for collection. The fees for this service are typically quite high; the firm may receive less than fifty percent on accounts collected in this way.
- **Legal Action:** - legal action is the most stringent step in the collection process. It is an alternative to the use of a collection agency not only is direct legal action expensive, but is may force the debtor into bankruptcy, thereby reducing the possibility of future business without guarantying the ultimate receipt of overdue amount.

When thinking about credit risk, it is important for a lender to recall size; due to the fact risk management would possibly observe to a single mortgage (micro) or a whole portfolio of loans (macro). As an end result, credit risk managers need to check on a common foundation to peer if an identifiable danger in a single mortgage is having an unfavorable impact at the portfolio as a whole. Effective risk management on this way lets in a lender to both increase a portfolio or limitation the dimensions of its mortgage book with the intention to save you overexposing it and unwittingly growing default charges.

2.15. Importance of Credit Policies

Horne, (1995) nation that, credit guidelines aren't completely the duty of the Credit and Risk Department the credit coverage ought to be understood via way of means of all employees who engage with customers in any shape, and it ought to be accompanied consistently. Credit guidelines ought to be communicated all through the commercial enterprise, carried out thru appropriate methods, monitored, and amended on a normal foundation to account for converting inner and outside conditions with the intention to be powerful. They need to be used on a consolidated bank degree in addition to at the extent of person affiliates, if wanted.

Furthermore, the guidelines need to take care of the important position of reviewing. The bank's complete stability sheet is usually stimulated via way of means of bank and the company's lending practices. Economic situations, on the alternative hand, are in particular out of doors the economic supervisor's manipulate.

One company's credit and collection guidelines aren't unbiased of these of different corporations. If product and capital markets are fairly aggressive, what different corporations do will affect a company's credit and series practices this method is attached to services or products fee and

ought to be taken into consideration as a part of the wider aggressive method. The aggressive method is accounted for with inside the specification of the call for characteristic in addition to with inside the possibility fee related to taking over new receivables, in keeping with the evaluation of sure coverage elements

2.16. Credit Risk Control Techniques

According to Lindergren, (1987) Credit danger control strategies are techniques utilized by banks to keep away from or lessen the bad outcomes of credit score danger. For banks to boom profitability and make sure life, they want a strong credit score danger control gadget. The vital ideas with inside the credit score danger control method are as follows: setting up a clean shape, allocating duty, prioritizing and disciplining approaches, absolutely speaking obligations, and assigning responsibility. These are a number of the approaches for hedging credit score danger, but they're now no longer exhaustive. Credit Derivatives: - This offers banks a approach that does not want them to alternate their lending portfolio. Credit derivatives deliver banks a brand new move of rate profits whilst additionally permitting them to decrease their regulatory capital necessities. Credit default swaps are the maximum famous kind of credit score derivative, wherein a vendor has the same opinion to switch the credit score danger of a mortgage to a safety buyer. Credit encourages banks to lend extra money to riskier clients at decrease charges than they might otherwise. Lenders' capacity to shift credit score danger to different establishments whilst preserving relationships with debtors has multiplied as a end result of latest improvements in credit score derivatives markets (Marsh, 2008).

Compliance to Basel Accord: - The Bas el Accord is a fixed of global concepts and policies that manual banks' operations to make sure their soundness and stability. The Accord become first applied in Switzerland in 1988. Compliance with the Accord includes the capacity to hit upon, generate, tune, and record on danger-associated facts in an included manner, with whole audibility and transparency, permitting banks to decorate their danger control operations. The New Basel Capital Accord makes it clear that banks ought to use strong inner credit score danger control strategies to decide their capital sufficiency (Chen and Pan, 2012).

Adoption of a legitimate inner lending coverage: - The lending coverage directs banks of their mortgage disbursement to customers. The handiest and most inexpensive technique of credit

score danger control is strict adherence to the lending coverage. The present credit score coverage, enterprise standards, preferred financial situations of the us of a, and the modern financial weather need to all be taken under consideration while growing a lending coverage (Kithinji,2010).

2.17. Empirical Review

Credit Risk Management is a severe danger to a bank's performance and long-term viability. As a result, a number of academics have looked into the credit risk management practices of banks all over the world in various ways. As a result, in this section of the study, a critical analysis of empirical some of these literatures are offered.

Credit management has been given greater attention owing to credit risk management in the case study of nib international bank, according to Fikadu Zerga (2016). The researcher is only interested in banks since they are financial entities that provide loans and deposits to society.

The related literature was reviewed to identify the gap that this study tried to fill. Population selected for the study was employees of the institution and the manager also participated to ensure the quality of the data. The primary and secondary data were collected to achieve the stated objective. The method used was descriptive research. Purposive sampling strategies were employed to concentrate on a small number of informants with in-depth knowledge of the subject. As a result, the sample size was 143 people, including all city Branch Managers and loan officers, credit analysts, follow-up officers, Customer Relationship Managers, and bank controllers. Questionnaires and interviews were utilized to acquire primary data, while yearly reports and information from the books of account were used to gather secondary data pertinent to the research. Furthermore, the data was analyzed using descriptive statistics.

According to the findings, the bank's credit risk policy and strategy are not renewed on a timely basis, the bank has no procedure in place to detect criminally motivated borrowers, the bank's internal risk rating system is not applied to the total portfolio, and the existence of collateral is not checked on a regular basis. According to the conclusions, the bank should examine its credit risk management strategy and policy on a regular basis, adopt policies to identify borrowers linked to crime, and alter its Management Information System to provide enough information for decision makers.

Finally, the researcher recommended some points which the institution is expected to take a corrective action profitably, firstly, the institution must hire as killed man power that is relevant for the work. Moreover, the institution must also use a computerized technology system to avoid misstatement of financial statements and also fraud. This also leads to efficiently and effectively manage current assets. Lastly, the institution must take collateral when it provide a loan to borrowers and enable them to pay their liability on time. The institution must collect the loan on the due date.

Tibebu (2011), his study aims at assessing the credit risk management and profitability of commercial banks in Ethiopia with the primary objectives of examining the credit risk management and profitability of commercial banks in Ethiopia In this study both primary and secondary sources of data were used and the researcher used open and close ended questionnaires to collect data from the employees of the branch.

Literature review more concerning the system of credit risk management and profitability its benefit and efficiency of the bank. It argues that credit risk management has significant impact on profitability of banks of our country.

Biruk (2015), it will be a major topic of discussion among financial institutions, because of apprehensions about the borrower's business. The goal of this research is to assess. What are the instruments and approaches used in banking to manage credit risk? The bank's present success is bolstered by proper lending risk, Policy, practice, and strategy in management. The research is descriptive in nature. To fulfill the study's goal, the Department of Research used a numerical study method, collecting both primary (questionnaire) and secondary data. There were 106 samples included in the study, all of which were deemed reliable and accurate by the study's headquarters and district headquarters. Descriptive statistics were used to analyze the data.

SPSS software was used to create a technical and frequency chart. The bank determines that the lending policy is anti-debt based on the study's findings. The bank comes to the conclusion that the lending policy is anti-debt. They are exposed, and the bank decides that it has a good credit system and the tools and processes necessary to assess loan risk. Risk management, credit The Monitoring is a technique for locating, measuring, analyzing, monitoring, and regulating anything. study also discovered that the bank had issues with not offering training, which

predicts the absence of a credit risk model, leading to consumers turning to credit Business risk level and the Bank's priority lending sectors.

Tesfaye (2012) study factors influencing the level of credit risk in the Ethiopian commercial banks. The study find out that quantity of risk and quality of risk management related variables has got much influence on the credit risk level of banks. Nevertheless, risk direction related measures, which are mostly external focus, have limited influence on credit risk. More specifically the variation in the effect of stock and flow measures entails banks to further enhance mostly two of Basel principles: operating under a sound credit granting process and maintaining an appropriate credit, administration, measurement and monitoring process.

Yang Wang, (2013) find out that the key principles in credit risk management are establishment of a clear structure, allocation of responsibility and accountability, processes have to be prioritized and d0isciplined, responsibilities should be clearly communicated and accountability assigned on his research title Credit Risk Management in Rural Commercial Banks in China.

Al Musharafa (2013), used data from primary and secondary sources, as well as qualitative and quantitative data analysis methodologies, to analyze the credit assessment activities of some Bangladeshi commercial banks Despite certain banks' need to enhance their general lending policy, the study's findings demonstrate that loan and advance growth is sustainable, with improved sector allocation of loans, better risk management, and increased income from loan and advances.

Afroz (2013), attempted to specify and evaluate the necessity of credit portfolio management for Bangladesh Kirishi Bank in his paper, as well as characterize the bank's current credit management strategy and offer suggestions. The study used descriptive data analysis methodologies and primary and secondary data sources. The research discovered that the bank's function framework is unclear; agro business financing is risky for the bank, very few activities on L/C and other purchase type financing have been conducted, and the bank's poverty alleviation credit program is successful but only accounts for a small portion of the total portfolio (only 3 % - 4 %). Tetteh (2012) examined Ghana Commercial Bank Ltd's credit risk management strategies from 2000 to 2010.

The goal of the study was to see how much the bank's use of various credit risk management approaches had reduced the amount of non-performing loans. The researcher used a case study technique, conducting face-to-face interviews with senior credit officers at the Ghana Commercial Bank to gather information on credit risk management strategies. In addition, the researcher used data from the books of accounts to collect information on non-performing loans.

According to the findings of the study, Ghana Commercial Bank has a clear, documented credit risk management policy, with the board of directors overseeing its implementation. Ghana Commercial Bank realigns credit within various sectors bundled into a credit portfolio based on environmental factors such as political regimes, macroeconomic strategies of political regimes, new and existing credit, and so on. In Ghana's banking business, laws and legislation, social concerns of operating markets and technical improvements are all important.

In the preceding sections it has reviewed the conceptual, theoretical and empirical frame works of credit risk management. The literature review shows that past studies concentrate on credit management policy and procedure, importance of credit policy, credit collection technique, nonperforming loan, lone request, and customer lone for the purpose of running their own business profitability. Despite the fact that credit risk management necessitates ongoing study based on circumstances, there is a dearth of relevant research that examines the function of credit risk management in improving financial performance. As a result, this study will fill a knowledge vacuum by evaluating DBE's credit risk management policy and strategies.

CHAPTER THREE

RSEARCH METHODOLOGY

The methodology of research is a conceptual field work on which the whole conduct of research is based. Research is the systematic and scientific method of finding solutions to a problem and a planned and systematic process of collecting, presenting, analyzing, and interpreting data for the purpose of arriving at a dependable solution to a human problem. The methodology for users describes the various methods and techniques employed by the research in the course of collecting and analyzing data with the view of obtaining solutions to the problems.

The research methodology includes the collection of data both from primary and secondary sources. The sources include the questionnaire, the review of written reference materials, brochures, and policies and procedures. The collected quantitative data is analyzed using simple descriptive statistics like percentages and tables. The qualitative data gathered from the interviews the interpretation and discussion would be made together. Finally, based on the outcome of the analysis, there was a summary, conclusion, and recommendation**.**

3.1. Research Design

According to Saunders and Philip (2012), research design is a general plan of how you would go about answering your research questions. It would contain clear objectives derived from your research questions, specify the sources from which you intend to collect data, and how you propose to collect and analyze them. It is composed of a series of prior decisions that, taken together, provide a master plan for executing a research project. The descriptive research design was used to assess the current state of credit risk management practices at the Development Bank of Ethiopia (DBE). Furthermore, the study used a descriptive research approach, which is applicable because an applied descriptive design focuses on real-world questions. It also answers practical questions by providing a relatively immediate solution related to credit risk management, and findings generally lead to management's action rather than additional research.

3.2. Target Population, Sample Size and Sampling Procedures

3.2.1. Target Population

The population was defined as the total number of individuals that evaluated credit risk management practice in Development Bank of Ethiopia. The population of this study was limited to employees of DBE head office in the credit department who work directly with credit risk management in the organization. It comprises all staff and management personnel who used credit risk management in DBE Addis Ababa headquarter. They are four credit department of permanent management and non-management workers in the DBE Addis Ababa headquarter. Following that, the researcher carefully picked workers from the credit department based on their position. The department has a total of 60 employees working in credit management department, which makes up the population. The Population Distribution was calculated using the number of employees in the bank credit risk department.

3.2.2. Sample size and Sampling Procedures

A sample here refers to the operation of the universe or population which reasonably reflects the opinions, attitudes, or behaviors of the entire group. Sampling, also known as sample size, was the process of selecting a proportion of the population that was thought to be adequate to represent all of the existing characteristics within the target population for the purpose of generating the finding from the sample itself. The sample was obtained using the all-population Therefore, the sample size of the population was 60 (sixty) and the researcher was issued the same number of questionnaires to the staff of all employees in the development bank of Ethiopia. The Census sampling techniques allow for generalization to take place.

3.3. Method and Instrument of Data Collection

The research used both primary and secondary data (like internet, newspaper, brushers, bank website). The primary data was mainly collected through an interview and questionnaires. The

relevant authorities were interviewed personally in order to have their thoughts on the problems and solutions. The secondary data were obtained from various sources such as Annual Reports of the selected development bank of Ethiopia (DBE), relevant articles, books and magazines etc. Primary data is obtained with intention that help in meeting ultimate objective of the study and secondary data is collected with the aim of addressing the issues that cannot be obtained otherwise. The panel data of a seven year period from 2015 to 2021 from the bank were used to know credit risk management.

3.3.1. Primary Data

It constitutes a very important instrument of data collection. And it contained close ended questions as well as questions which open ended in nature. The questions that are close ended offer the respondents the opportunity to choose from answers provided whereas the open-ended questions allow the respondents to give their answers. This technique helps to maintain the focus of the work on its primary objectives. The questionnaires for the purpose of this study are distributed at head office. The open-ended questions allowed free responses from the respondents without providing or suggesting any structure for the responses.

(a) Interview

Management and non-management concerned to the use of credit risk management that was directly involved and it was a mechanism through which oral information were collected from an individual. It was a verbal interaction between the person seeking information (interviewer) and the person supplying the information (Interviewee). Therefore three members are interviewed that are three management members and two financial analysts not included in the distributed questioner's part.

(b) Questionnaire

A questionnaire was a "formalized set of questions for eliciting information". This is the main instrument of measurement was used for the collection of primary data. It contains series of written questions on the assessment of credit risk management of the bank, so that the questionnaires are both used structured and unstructured format. Which means open and close end questionnaires used by the researcher.

3.3.2. Secondary Data

Secondary data collected from unpublished material of DBE he credit policies and procedures manual, credit management manual and published audited credit financial statement of the recent and consecutive seven year (2015-2021) of DBE. Also books journals, thesis and related materials used.

The researcher used both interview and questioner especially employees working in department of credit management and it was collect through different method of data collection. In this study, both primary and secondary source of data was collected. On the other hand, the researcher used bank brusher's bank website and other source where the secondary data collected.

3.4. Data Analysis Method

After all data have been collected it can be classified, all information by using primary and secondary document data's related to banks. So, the collected data presented by using statement of data presentation and description methods in the form of tables, and texts. The data analysis does from both qualitative and quantitative stand point for the purpose of achieving the objectives of the study. Data analysis techniques apply in this study each analyzed data interpreted compared to the accepted principles and standards.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1. Response Rate

This chapter presents analyzed results and interpreted discussions of the data obtained from the primary source as well as secondary sources. The primary data was obtained from the questioners and interviews which are designed to collect the necessary data to answer the research questions. The questionnaire was distributed to 60 employees of the Bank from credit department office at Head Office in Addis Ababa. However, 2 respondents did not return the questionnaire and questionnaire. Thus, 58 questionnaires were finally used which is about 97% of the total distributed questionnaires. Secondary data was obtained from annual reports in order to show the credit policy and procedures to know the extent of implementation. Hence all data collected from primary data as well as secondary data was analyzed.

4.2. Demographic characteristics of Respondents

The first section of the questionnaire comprised of questions about demographic information of the respondents. It covered sex, age, educational level and specialization, work experience and current position in the Bank. The Following tables show the demographic characteristics of the respondents.

In general, this means that the bank has human resources that can work energetically and competitively while also understanding the bank's mission and goals. The financial industry is sensitive and risky by nature, necessitating the use of experienced and professional human resources who can be responsible, trustworthy, and loyal responsible for financial management that is prudent.

Table 1: Demographic Characteristics of the Respondents

Gender of respondents	Frequency	Valid Percent
Male	46	79.31
Female	12	20.69
Total	**58**	**100**
Age of Respondents	**Frequency**	**Valid Percent**
18-25 years	12	20.69
26-35 years	36	62.07
36-40 years	8	13.79
More than 40 years	2	3.45
Total	**58**	**100**
Current position Respondent	**Frequency**	**Valid Percent**
Analysts (Appraisal Officer)	4	6.89
Credit Follow up officer	5	8.63
Loan officer	25	43.10
Credit relationship manager	14	24.14
Any other (Please specify)	10	17.24
Total	**58**	**100**
Educational Status of Respondents	**Frequency**	**Valid Percent**
Diploma	-	-
BSC/BA	21	36.21
MSc/MA	37	63.79
PhD	-	-
Other	-	-
Total	**58**	**100**
Martians stases	**Frequency**	**Valid Percent**
Marred	40	68.97
Single	15	25.86
Divorced	3	5.17
Total	**58**	**100**

Source: Questionnaire Results, 2022

As it can be clearly seen from table 1, majority of the respondents that is (79.31%) are male

while (20.69%) are female workers. Generally this reveals that the majority of worker in credit department of the bank were male. It can be conclude that the participation of females was low in working in credit department from the bank as compared to males which further indicates from this analysis; one could conclude that males are a majority respondents or participants for this study. Furthermore, About (62.07%) of respondents were categorized under the age group of 26-35 and (20.69 %) were under the age group 18-25 (3.48%) of respondents are found with the age group of above 40 years. Generally, it indicates that the respondents were grouped in a productive age.

In addition to this, table 1 indicates the specialization of employees; (67.24%) Respondents specialized in loan and credit officer related professions. So, this implies that the bank has more related professionals who are assumed to be relevant for the work.

Regarding the respondent educational qualification as indicated on above table- 1(63.79%) of respondents are post graduate degree holder and the rest (36.21%) of the respondents are undergraduate degree holder. the research tries to identifies the respondent by their educational level in order to know the qualification of the respondent to analyze weather their response are pertinent.

As presented in the above table, a greater proportion of the respondents are married (68.97%).The remaining (25.86%) are single. Only a very small number (5.17%) of the respondents are divorced. Being married lessens employees' mobility and may imply greater probability of stability. In line with this a significant proportion of the respondents being single may affect stability of the staff. Single employees often aspire better payments and most often shift their jobs as compared the married ones.

Table 2:- Working in Bank and in the Area Risk Management

Work experience of Respondents	**Frequency**	**Valid Percent**
Less than 1 year	6	10.35
1-2 years	4	6.89
3-5 years	11	18.97
More than 5 years	37	63.79
Total	**58**	**100**
Risk management area	**Frequency**	**Valid Percent**
Less than 1 year	-	-
1-2 years	6	10.34
3-5 years	36	62.07
More than 5 years	16	27.59
Total	**58**	**100**

Source: Questionnaire Results, 2022

As presented on the above table- 2 majority of the respondent (63.79%) have been working for more than 5 years and (18.97%) of them have been working for the organization for 3-5 years. In general, almost more than half of the respondents have been working for more than 5 years in DBE, which indicate their long period of experience and to contribute to both the reliability and validity of the information they offer.

In addition to the above table 2 shows the percentage of the years of experience the respondents had working within risk management area. The researcher asked this question because researcher wanted to know how experienced the respondents were in terms of banking in risk area. In the results, researcher notices that (62.07%) have experience working with in the bank 3-5 years. Whereas, the respondents who have working experience in banking sector more than five years was (27.59%), 1-2 years was (10.34%) and less than one year was null. This demonstrates that more experienced respondents are more knowledgeable about credit risk management.

4.3. Strategy used to Control Credit Risk Management in DBE

Table 3:- Technique/ Instrument of Credit Risk Management

Which technique/ instrument, do you use for Credit Risk Management in your Bank?	Frequency	Valid Percent
Credit Approval Authority	9	13.23
Prudential limits	6	8.82
Risk Rating	30	44.82
Risk Pricing or Risk Adjustment on Capital	6	8.82
Portfolio Management	26	38.23
Loan Review Policy	17	25
Total	**68**	**100**

Source: Questionnaire Results, 2022

According to survey collected and shown on the above table; - 3 all techniques are used in the bank as to manage credit risk. Thus, Risk Rating 44.82% in the first place and 38.23%, 25%, 13.23%, 8.82%, and 8.82%, Portfolio Management, Loan Review Policy, Credit Approval Authority, Prudential limits and Risk Pricing or Risk Adjustment on Capital respectively according to their usage in the bank. In this question, the respondents could choose more than one answer. A Prudential limits and risk pricing are used as least level in credit risk management practice of the bank. In order to create effective credit risk management techniques the bank is expected to use all component of credit risk management techniques.

As per there are techniques to manage their credit risk those are risk avoidance through proper planning, proper procurement of insurance further, related with response obtained from interview analysis, one of the reductions of credit risk is 'Portfolio risk Management', which means that the bank does not distribute the lone in one sector. For example, if the lone is distributed in the agricultural sector, this sector is divided into crop, mining, and flower, and can be distributed. This shows that when one sector loses, the bank can replace it with another.

As showed in table 3, large majority of the sample the bank has favored 'risk rating

management' for managing credit risk. Based on this there are techniques that related with credit risk management those are

Diversion of loan is positively associated to successful loan repayment. On the other hand, Naol Shiferaw (2017) stated diversion of loan is negatively affect loan repayment and statistically significant association between loan diversion and loan repayment.

4.3.1. Techniques used to manage credit risk

According to the interview, the bank must apply a variety of approaches in order to manage their loan and reduce risk.

In simple terms, DBE can protect credit risks, which are determined by a borrower's capacity to repay the amount borrowed. Before issuing a consumer loan, a bank or alternative lender will examine the individual's credit risk based on the five C's: credit history, ability to repay, capital, and lastly the entire loan's conditions and collateral. It depends on whether you are considering the credit risk of a bond, a personal loan, or a business loan. For the personal loan, there are the traditional "5 C's of Credit, "capital, Character, Condition Capacity, and collateral''. Character is usually assessed using credit history of the individual. Capacity is assessed by income and expenses. Collateral is assessed by the assets which may be pledged against the loan. For home mortgages or auto loans, the collateral is the house or vehicle. For unsecured personal loans like credit cards, there is no collateral.

Table 4:- The Importance of Reducing Credit Risk

Which credit risk management mechanism do you think is the most important to reduced credit risk in your bank?	**Frequency**	**Valid Percent**
Screening and monitoring	23	37.70
Credit rationing	7	11.47
Collateral Requirements	22	36.06
Long term Customer Relationship	8	13.11
I don't know	1	1.64
Total	**61**	**100**

Source: Questionnaire Results, 2022

As shown on the above table 4, the researcher would like to know how the bank can reduce credit risk or mechanism credit risk management in order to reduce credit risk. In this question, the respondents could choose more than one answer. The results show that Screening and Monitoring mechanism has the most respondents (37.70%) followed by Collateral Requirements (36.06%), Long term Customer Relationship (13.11%) and Credit Rationing (11.47 %). The findings imply that, in that order, screening and monitoring, collateral requirements, Long term Customer Relationship and credit rationing are the mechanisms for reducing the bank's credit risk.

Based on this finding Credit risk refers to the probability of loss due to a borrower's failure to make repayments of any type of credit, and credit risk management is the practice of mitigating the probability of loan loss due to borrower's failure to make loan payments at any given time. The importance of credit risk management for banks is tremendous. The banking industry has been facing Non-performance loans (NPLs) problem due to weak credit risk management processes and lack of effective controls in place Kelvin, (2019).

4.3.2. Mechanisms Used to Reduce Credit Risk

According to the interview, there are various mechanisms that the bank must meet before lending money to a consumer in order to reduced their risk.

DBE checks the creditworthiness of a borrower. In calculating the credit risk, lenders measure how they will recover all the principal and interest while making a loan. Borrowers consider it to be a low credit risk and charges lower interest rates. The lenders, investors, and the other counterparties consult rating agencies to assess the credit risk of doing business with companies.

While determining the credit risk involved in making loans, the lenders judge the borrower's ability to pay back the debt. A range of factors goes into assessing credit risk that includes credit history and credit score, debt to income ration, and collateral.

4.4. Effectiveness of Credit Risk Management in DBE

Table 5:- Expectation from Effective Credit Risk Management in Your Organization

What is your expectation from effective credit risk management in your organization?	Frequency	Valid Percent
Reduce financial loss	44	38.27
Improve decision making	27	23.48
Improve communication with the management	24	20.86
Other (please specify)	20	17.39
Total	**115**	**100**

Source: Questionnaire Results, 2022

As shown on the above table 5, the respondents were asked to identify their expectations of credit risk management in their firm; the researcher asked this in order to find out how important the respondents think credit risk management is, in this question the respondents could choose more than one answer. According to the data, the majority of respondents feel

risk management will assist them in reducing or avoiding financial losses (38.27%). Furthermore, good credit risk management is likely to improve decision making (23.48 %), communication with the management (20.86%), and (17.39%) boost resource distribution and allocation.

Effectiveness of Credit risk management process is highly dependent on proper application of sound Risk management documents, Staff quality, Credit culture, committed top management bodies, Adequate training program, suitable organizational structure, Adequate level of internal Control and Performance of intermediation function (Basel (1999), Baxter, N., Panova, G., & Platonov, V. (1998, p. 107-112) Colquitt, J. (2007), Srivastava R, (2008)). The researchers address Credit risk Management Practice by taking those core aspects in to account. Once the banks develop comprehensive and sound Risk management document, it should not be kept always on shelf instead it should be reviewed and up dated as well as rehearsed in the mind of risk management staffs so as to serve as guideline in each activities of credit cycle. However, having sound and comprehensive Risk management document merely, without its proper implementation, is not means that the bank is practicing effective Risk management system.

Furthermore, Desalegn, (2014) states the most difficulties that the banks are currently facing in managing risk are: lack of adequate, weak information management system, lack of competent and experienced staff, lack of exposure to the outside world and lack of awareness about the concept of risk management due to its newness in the institutions.

Table 6:- Process of Effectively Communicating to Reduced Credit Risk in Organization

How does your organization effectively communicate to reduce credit risk? (you can choose more than one answer)	Frequency	Valid Percent
creating clear and trustworthy information	24	23.52
developing understanding between management team and employee	31	30.39
Fast and sharp communication between management team	11	10.79
Regularly communicating among management and staff	24	23.52
Creating and maintaining a clear communication	12	11.75
Other (please specify)	-	-
Total	**102**	**100**

Source: Questionnaire Results, 2022

In the table 6, the researcher would like to know how the organizations effectively communicate in order to reduce credit risk. In this question, the respondents could choose more than one answer. The results show that the most common way of communicating effectively to reduce risk is developing understanding between management team and employee, with (30.39%) of the respondents picking this answer. It means that most of the respondents think that developing this understanding is a first priority for organizations. The next results both were regularly communicating among management staff and creating clear and trustworthy information with (23.52%). Creating and maintaining a clear communication and fast communication between management team and customers followed with (11.75%) and (10.79%) respectively.

The lowest ranking was fast and sharp communication between management team, with (10.79%). This means that fast and sharp communication between management team not a common way of communicating to reduce risk and is outranked by creating understandable and clear information in the bank. The responses believed that developing understanding between management team and employee, regularly communication between management and staff, create information clear and trustworthy, maintaining clear to communication and fast and

sharp communication in organization all is support effective communication in risk management procedures.

4.5. Credit risk management policy, progress and guideline in DBE

Table 7:-Documents Related with Credit Risk Management in DBE

Does your organization have a documented credit risk management guideline or policy?	**Frequency**	**Valid Percent**
Yes	58	100
No	-	-
Total	**58**	**100**

Source: Questionnaire Results, 2022

In table 7, the respondents were asked if their organizations have a documented credit risk management guideline or policy using a yes/no question. 'Yes' was answered by every single respondent. This aids the company's credit risk management because; the organization's personnel are bound by the organization's guidelines or policies. The internal system of relationships, authority, and communication in an organization is called organizational structure. The information and data that travel through established lines of authority and communication make up structure (Stank, Daugherty and Gustin, 1994). Organizational structure and procedures are most effective when their design functions fit their surroundings and impact on the strategies of the organization (Hunter, 2002). The respondents agree that their organization have a documented guideline or policy for risk management.

Table: - 8 Guidelines That Support the Goals and Objectives of Credit Risk Management

Does the guideline support the goals and objectives of credit risk management?	Frequency	Valid Percent
Yes	58	100
No	-	-
Total	**58**	**100**

Source: Questionnaire Results, 2022

Table 8:- reveals that (100 %) of respondents had guidelines that support the credit risk management goals and objectives. The guideline, according to all of the respondents, supports risk management's aims and objectives. One of the most significant factors of good risk management, according to Hasanali (2002) and the Department of State and Regional Development (2005), is organizational structure. The steering committee conducts the organization's structure, which gives principles, guidelines, direction, and support to personnel. The respondents understand the credit risk management policy or guideline in order to support their vision and goal.

Table 9:- Understanding of Credit Risk Management Guideline or Police

Do you understand the credit risk management guideline or policy?	Frequency	Valid Percent
Yes	51	87.93
No	7	12.07
Total	**58**	**100**

Source: Questionnaire Results, 2022

As shown above on table 9 the respondent indicated that (87.93%) of respondents were aware of the risk management policy or guideline. (12.07%), on the other hand, did not understand the risk management policy or guideline. From the table, it can be concluded that practically all credit risk management employees are familiar with the standards established by their

employers, which enables them to manage credit that arises in their workplace before a risk occurs.

The credit manager of the bank, there are some rules that must be followed before the bank will grant credit to a customer or applicant. One of the rules is to know the applicant's background, which means that he or she must be able to pay their debts, interest, and principal on time and have sufficient collateral. The bank credit officers implement the policy based on their understanding of the credit guidelines and policies.

Table 10: - Change of Guidelines to Manage Credit Risk by the Organization

How often does your organization change its guidelines or policies to manage risks?	**Frequency**	**Valid Percent**
Once per year	34	58.63
Once per two years	14	24.13
Once in more than two years	10	17.24
Never	-	-
Total	**58**	**100**

Source: Questionnaire Results, 2022

Table 10, the majority of respondents (58.63%) said their company modifies its credit risk management guidelines or policies once per year. According to (24.13%) of respondents, their organizations modify their rules or policies every two years, with (17.24%) changing in more than every two years. That is, the majority of businesses believe their credit risk management guidelines or policies should be updated once per year.

From the above table it can be concluded the bank have developed that organizational structure be evaluated and modified on a regular basis which means once per year to respond to changing financial situations because the financial world is always in development, in this case it is so important to manage credit risks. 96.55 % of respondents said their company's standards or regulations are changed once a year. The majority of firms makes revisions and

assesses their organizational structure once a year Mindy (2001). Furthermore, Grabowski and Roberts (1999) assert that risk management is closely linked to organizational structure flexibility. It's a versatile strategy that allows you to adapt to changing events in a number of ways and quickly.

Table 11:- Policy to Support the Development Risk Management in Future

In the future, does your organization have a policy to support the development of credit risk management?	**Frequency**	**Valid Percent**
Yes	56	96.55
No	2	3.45
Total	**58**	**100**

Source: Questionnaire Results, 2022

The researcher utilized a yes/no question to ask the respondents about their future credit risk management policies in table 11. According to the results, 96.55% of respondents said yes, indicating that top management is willing to assist the creation of future risk management policies. As a result, the Bank needs to review and evaluate the current policy, outline the policy that needs to be improved in the future, and then set direction.

Table 12:- Factors Conceder for Pricing in Credit Risk

Please indicate, the relative importance of the following factors you conceder for pricing credit risk	**Frequency**	**Valid Percent**
Portfolio quality	24	25.26
Value of collateral	25	26.31
Market forces	12	12.63
Perceived value of accounts	3	3.15
Future business potential	13	13.68
Portfolio industry exposure	8	8.42
Strategic reasons	10	10.53
Total	**95**	**100**

Source: Questionnaire Results, 2022

Respondents were asked to rate the importance of that factor in DBE's credit risk pricing. Respondents had the option of selecting multiple answers to this question. Table 12 shows that the majority of them (26.31 %) believe knowing value of collateral is very important, (25.26%) Collateral: it is a grantee for lending money which borrowers provided to their loan next that believe portfolio quality is important, (13.68%) believe future business potential is important, (12.63%) believe market force is important, (10.53%) believe strategic reasons are important, (8.42%) believe portfolio industry exposure is important, and the last one (3.15%) believes perceived value of accounts is important. Furthermore, creditworthiness quantification is the process of assigning measurable and comparable values to the risk of default, and it is a key issue in modern finance. Credit risk is influenced by a variety of factors, ranging from borrower-specific criteria to market-wide issues. Liabilities can be objectively evaluated and projected to assist protect the lender from financial loss.

4.5.1. The Processes of The Bank used to Managing Credit Risk in DBE

Based on the interview result, there are various conditions that the bank must meet before lending money to a consumer.

- **Pre credit:-**Does the applicant have sufficient assets to repay the loan this is because if the bank does not know the customer's potential, it will take full information about the customer so that he or she does not fall into defaults. The bank wants to verify the identity of the customer in order to determine whether the source of the assets is legitimate or not the evaluation based on 5c, capacity, collateral, condition, character.
- **Post credit**: - after the project can be started and the bank will start monitoring whether the customer has actually used the loan or not.
- **Critical risk identification: -** during appraisal stage Risk identification is the critical first step of the risk management process the objective of risk identification is the early and continuous identification of events that, if they occur, will have negative impacts on the project's ability to achieve performance or capability outcome goals.
- **Strict project follow-up:-** Follow-up is defined as "the monitoring and evaluation of the impacts of a project or plan for management of, and communication about the performance of that project or plan**".**
- **Legal business audit:-**An audit examines customer business's financial records to verify

they are accurate. This is done through a systematic review of customer transactions. Audits look at things like customer financial statements and accounting books for small business. Many businesses have routine audits once per year.

Table 13:- Offering Training for New Employees

Does your organization offer training for new employees?	**Frequency**	**Valid Percent**
Yes	56	96.55
No	2	3.45
Total	**58**	**100**

Source: Questionnaire Results, 2022

The researcher also asked yes or no question about training courses for employees. The results show that (96.55%) have a training course for employees and (3.45%) do not. That mean most of the respondents organizations think training employees is important. Risk management becomes a part of good business practice and should include training staff appropriately. The main reason for an education and training program is to ensure that the members are comfortable with the system and increase the expertise and knowledge level of the members. Most companies offer training courses for new employees. The purpose of training is to improve knowledge, skills and attitudes that in turn increase confidence, motivation and job satisfaction (Fill and Mullins, 1990).

Table 14:-How Often Organizations Provide Risk Management Training Courses

How often does your organization provide credit risk management training courses?	**Frequency**	**Valid Percent**
Never	5	11.90
1 times per year	21	50
2 times per year	9	21.43
More than two times per year	7	16.67
Total	**42**	**100**

Source: Questionnaire Results, 2022

In table 14, it was asked the respondents about the frequency of credit risk management training in their organizations. Some the respondents couldn't choose one answer. The results show that most of the respondent's choose (50%) have a risk management training course one times per year. next (21.43%) have a risk management training course two times per year and, more than 2 times per year percentages, (16.67%). Since the purpose of training is to improve knowledge, skill and attitudes to job satisfaction it is better to know how frequent the organizations provide training for employees and the rest of the other respondents choose never with, (11.90%). According to table 12 it can be concluded that the organizations give training to employees 'one times per year'. This is short be period and enables employees to understand the credit risk management practices and to do better effort in the behalf of the organization benefit. Additional credit Risk management training can assist the credit risk department in recognizing and understanding how risk management benefits them, their performance, and the whole organization. Only then will the bank be able to make precise and powerful judgments on behalf of a company, driving real-world actions.

Table 15:- Organizations Established Procedures For Keeping up to- Date and Informed with Changes in Regulations

Does your organization have established procedures for keeping up-to-date and informed with changes in regulations?	**Frequency**	**Valid Percent**
Yes	32	76.19
No	10	23.81
Total	**42**	**100**

Source: Questionnaire Results, 2022

The results show that table 15 (76.19%) of the respondents answered 'Yes', their organization does have established procedures for keeping up-to-date and informed with changes in regulations. But (23.81%) do not. From the table 14 it can be concluded that some the respondents couldn't choose one answer and the organization is in the way to provide training to its employee for the changes that will be happen in the regulations of credit risk management. The ability to respond to changing conditions in an organization's operation is

related to a range of activities including the development of risk training courses and involvement of staff in responding to an early warning system (Carey, 2001). The respondents state that their organizations have established procedures for keeping up-to-date and informed with changes in regulations to their staff. In addition, they provide risk management training courses at least ‘once per year’. The other banks also offer training courses more than once a year.

4.5.2. The Responsibility to Established Credit Risk Management Policy in DBE

According to the manager, the most essential factors are top management commitment and support. Top-level management monitors credit risk and responds to business operations. The majority of firms feel that credit risk management is the duty of the Board of Directors or Committee, as well as the Executive Management team. Top management sets the goals and strategies for the organization's credit risk management activities, as well as its mission and general goals.

Top management can support risk management policy in a variety of ways, according to the respondents. They create specific credit risk management teams or department, revise risk management plans on a regular basis, clearly delegate credit risk management responsibilities, carefully adhere to credit risk management policy, and listen to employee complaints and allocate appropriate resources. The majority of businesses have policies in place to encourage the growth of credit risk management. The benefit of senior management support is successful risk management decision-making. One of the respondents' expectations is for this to happen.

4.6. Challenges Affecting Credit Risk Management in DBE

Table 16:- Problems Related with Credit Risk Management

What are the main challenge/ problem of credit risk management in the case of DBE bank?	Frequency	Valid Percent
Lack of experience to words managements	8	13.79
Environmental and natural challenges	35	60.34
Lack of skilled man-power	11	18.97
problem of collateral registration	4	6.90
Total	**58**	**100**

Source: Questionnaire Results, 2022

According table 16 (39.05%) of respondents replied that there is lack of experience towards management of its credit risk, Lack of skilled man-power and problem of collateral registration while (60.34%) of them replied that environmental and natural factors can be mentioned problems in the bank to manage its credit risk. Therefore, from the above result the researcher understand that environmental and natural factor are the main problems of the bank. In addition to this, the most common asset of the bank is loan on different sectors and the collection process of loan is challenged. The reason is that most of agricultural projects are facing different environmental, natural and political challenges. As a result, borrowers cannot pay their loan on due date. Based on interview, there are some challenges the bank face when managing credit risk which means events of unexpected situations like, political violence, emergency like covid 19 and also other lone division by the customer.

4.7. The Bank Strength to Manage Credit Risk in DBE

To help alleviate risks (both identified and inherent) in individual credits, banks can use transaction structure, collateral, and guarantees. Although transactions should be entered into primarily on the strength of the borrower's repayment capabilities, the other strength is to minimize factors in order to affect the credit risk management. Those factors are internal factors and external factors. Adopting proactive lone policy, good quality, credit analysis,

loan monitoring, remedial action, sound credit culture, strong monitoring and internal control system, and also accountability the other one is external factors diversified loan portfolio, scientific credit appraisal, norms for single and group borrowers, norms for spectral development of fund (DBE Zena 2016).

4.8. Guiding principle and Criteria for Loan Repayment of Customers

Loan repayment is determined on the base of liquidity position and economic life of each project. Repayment schedules must be made flexible so that it will be adjusted to projects cash flow pattern. In addition to this credit policy instruments, some relevant lending principles are used by banks as their guiding principles (DBE Zena, 2015). These include; borrowers perceived need, competence or repayment capacity and personal character such as honesty, integrity, responsibility etc. Customers must meet certain criteria in order to obtain bank strength, which was utilized to manage credit risk in DBE. Customers' creditworthiness and business experience, a business plan/feasibility study, equity involvement, and collateral are all required for successful loan collection (DBE revised credit policy, 2018).

In addition the researcher identifies the major kinds of tools or methods used to manage credit risks. The tool that the banks used to manage their credit risks includes: (DBE revised credit policy, 2018)

Loan portfolio management: - Portfolio management shall cover bank-wide exposures on account of lending, investment, other financial services activities spread over a wide spectrum of region, industry, size of operation, technology adoption, etc. There should be distribution of borrowers in various industries & business group.

Loan review:- Credit Approving Authority, constitution wise delegation of powers, sanctioning authority‘s higher delegation of powers for better-rated customers; discriminatory time schedule for review / renewal, Hurdle rates and Bench marks for fresh exposures and periodicity for renewal based on risk rating.

Credit Audit/Loan Review Mechanism:- This should be done independent of credit operations, covering review of sanction process, compliance status, review of risk rating, pick up of warning signals and recommendation for corrective action with the objective of improving credit quality. Credit Audit is conducted on site, i.e. at the branch that has appraised the advance and where the main operative limits are made available.

Risk Rating Model: - Set up comprehensive risk scoring system on different point scale. Clearly define rating thresholds and review the ratings periodically preferably at half yearly intervals. The goal of credit risk management is to maintain a bank's credit risk exposure within parameters set by the board of directors and senior management. The establishment and enforcement of internal controls through independent internal review ensure that credit risk exposures do not exceed levels acceptable to the individual bank. Such system will enable bank management to monitor adherence to the established credit risk objectives. Likewise, 100% of the banks said they do have an internal review system that performs the following functions

Examine whether loan approvals adhered to the bank's credit policies and procedures. Determine whether loan approvals are within the bank's lending authority. It determines whether the documentation provided was sufficient prior to the loan being approved. Check to see if new loans have been posted correctly and if they are in good standing. Examine and double-checks entries to various loan accounts, control ledgers, and other financial records for interest posting. Confirm collaterals on a trial basis.

CHAPTER FIVE

SUMMARY, CONCLUTIONS AND RECOMMENDATIONS

In this chapter, a conclusion of the research findings that has been discussed and analyzed in detail in the previous chapters is briefly presented. In addition, general conclusions that are highly related with the research objective of this paper are offered. Furthermore, possible recommendations based on the findings are made.

5.1. Summary of Findings

The research tries to identify the respondent by their educational level in order to know the qualification of the respondent to analyze weather their response are pertinent. From this analysis; one could conclude that males are a majority respondents or participants for this study. Only a very small number (5.17%) of the respondents are divorced. Other key findings of the study are:

- The bank has credit management policies, strategies and guidelines that guide the credit risk management process.
- The bank uses different credit risk management tools, techniques and assessment models to manage its credit risk, and that this has one main objective, i.e. to reduce the amount of loan default which is the principal cause of bank failures.
- The bank face different challenges that face in managing credit risk those risks are natural and environmental factors.
- In DBE Managing credit risk is an important aspect of good business practices and should involve properly training staff. The majority of respondents believed that firms give training for employees once a year because the goal of training is to enhance knowledge, skill, and attitudes toward job satisfaction. In addition, the respondents state that their organizations have established procedures for keeping up-to-date and informed with changes in regulations to their staff.
- Top-level management monitors credit risk and reacts to company operations. The Executive Management team, according to the majority of firms, should set up credit risk

management, not the Board of Directors or Committee.

- The bank have channel of communication they employ to lower the risk of credit. The findings indicate that building a rapport between the management team and employees is the most frequent method of communicating effectively to lower risk.
- The bank have process include pre-credit, post-credit, identifying critical risks, closely monitoring projects, and conducting a legal business audit. Bank performance improves with better credit risk management. Therefore, it is crucial that banks manage credit risk responsibly, protect their assets, and look out for the interests of their investors.

5.2. Conclusions

According to the uncertainty of conditions, the financial industries are facing a large number of risks. For this reason, the financial industries like banks emphasize risk management. Moreover, effective risk management is so important that it can increase project success.

- According to the study, bank employed a variety of effective credit risk management tools, techniques, and evaluation models to manage their credit risk, and they all had the same goal in mind, which was to reduce the amount of loan default, which is a major cause of bank failure.
- The surveys show that respondents identified commitment and support from top-level management as the most important. Top-level management responds to business processes and manages credit risk. Most organizations believe that it is the responsibility of the Board of Directors or Committee and the Executive Management team to establish credit risk management. Top management decides the objectives and strategies for organizational credit risk management activities, mission, and overall objectives.
- All of the respondents indicate that their organization has documented credit risk management guidelines and most of the respondents understand the guidelines of credit risk management. The guidelines also help the institutions support the goals and objectives of credit risk management. Because the financial world is constantly changing, nearly half of those polled believe that organizational structure should be reviewed and adjusted on a regular basis to adapt to changing financial environments, with changes made once a year and when it is expected to change.

- The survey shows the respondents credit risk management becomes a part of good business practice and should include training staff appropriately. Since the purpose of training is to improve knowledge, skill and attitudes to job satisfaction the organizations provide training for employees once per year as agreed by most of the respondents. In addition, the respondents state that their organizations have established procedures for keeping up-to-date and informed with changes in regulations to their staff.
- The paper shows the means of communication that they use to reduce credit risk. The results show that the most common way of communicating effectively to reduce risk is by developing an understanding between the management team and employees.
- The study also reveals that banks with good or sound credit risk management policies have lower loan default ratios (bad loans) and higher interest income (profitability).
- This study shows that there are processes the bank uses to manage credit risk. These are pre-credit, post-credit, critical risk identification, strict project follow-up, and legal business audit. Better credit risk management results in better bank performance. Thus, it is of crucial importance that banks practice prudent credit risk management and safeguard the assets of the bank and protect the investors' interests.
- Furthermore, variables affecting credit risk management at DBE include a lack of competent manpower, natural and environmental conditions, and a lack of expertise in credit risk management on the part of employees. Furthermore, due to their fundamental characteristics, DBE selections are subject to a variety of hazards, including credit risk. Regarding political influence and natural hazard, both external variables have a negative effect and are statistically significant, indicating that they have an impact on customer loan repayment performance and that the project has also faced political influence such as conflict among genesis, where the probability of default has increased, and the project has also faced natural hazard such as disease (covid 19), flash floods, landslides, and other natural disasters, in which case the probability of default risk has increased.
- Finally, the study also reveals banks with higher profit potentials can better absorb credit losses whenever they crop up and therefore record better performances.

5.3. Recommendations

Based on the findings the researcher would recommend that the banks could establish a credit risk management team that should be responsible for the following actions that will help in minimizing credit risk.

- Noting the importance of attractive, convenient, and flexible credit policies and procedures in assisting loan creation and growth, the bank's top management needs to periodically follow up on its credit policies and procedures, incorporating the feedback of clients and employees, and then credit officers should find out from customers exactly what kind of facilities they want, to prevent them from giving out the wrong facilities, which in turn would make it difficult for customers to pay back the loan. In other words, customers should be certain of the amount they need before requesting the facility.
- As it is disclosed in the analysis part of the study, most of the employees understand credit risk management. According to their understanding, they must implement the policies and guidelines. The bank should provide effective credit training across the bank for credit officers because the bank needs to re-train, educate, and re-train credit card employees.
- To implement the process, the credit risk management credit officer should know the background of the borrower. In other words, in the pre-credit stage, knowing borrower condition, capacity, capital, collateral, and market condition after full filing of these 5 cs, the next one is the post-credit at this stage; follow up the lone evaluation in detail to determine whether or not the borrower is investing the money in terms of market conditions.
- The bank faces natural and environmental obstacles, which have an impact on single repayment. When borrowers confront this type of risk, they are less likely to pay their loans on time. As a result, the bank should employ portfolio risk management. In other words, if one project fails due to environmental or natural factors, the bank will allocate the funds based on the risk. If one project fails, the bank will release funds to the other project.

- The bank should The Bank shall regularly monitor the use of the loan in accordance with the terms of the loan agreement entered into with the Regulator. Based on this the bank should be keeping the strength faces in conforming to NBE regulation in credit risk management practice and try to find possible solution regarding with then existing challenges as respondents responded in term of interviews.

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APPENDIX I; **Questionnaire**

St Marry University

School of Business and Public Administration

Department of Accounting and Finance

Dear respondents: - This is a questionnaire aimed to collect data on credit risk management practices, which will be used as an input for a thesis as part of a partial fulfillment of MA requirements. A bachelor's degree in accounting and finance is required. Your honest response will only be used for academic purposes, and the information you provide will be kept private. As a result, we appreciate your cooperation in advance.

Instructions: - There are two sets of questionnaire will be prepared which comprised both closed-ended questions and open-ended questions. Closed-ended questions are multiple choice questions. **You will put X in the box that is given in each of the choice cells**. For the other multiple questions you will choose answers as per the questions and label them according to your priorities, open-ended questions that blanks will be left to be filled by respondents.

Part I: Personal Profile

1. Respondent's sex

□ Male □. Female

2. Respondent's Level of Education?

□ Diploma

□ First Degree

□ Master Degree

□ PH.D

□ Any other, specify _____________

3. Martians stages

□ marred

□ Single

□ Divorced

4. Age of Respondent

□ 18-25 years

□ 26-35 years

□ 36-40 years

□ More than 40 years

Part II: Questions Related to Credit Policy and Credit Risk Management Practice:

5. How many years of experience do you have working with bank and in the area risk management?

Bank Risk management area

□ Less than 1 year

□ 1-2 years

□ 3-5 years

□ More than five years

Working experience of Respondents

□ Less than 1 year

II

□ 1-2 years

□ 3-5 years

□ More than five years

6. Current position;

□ Analyst (Appraisal officer)

□. Credit Follow-up Officer

□. Loan Officer

□ Credit Relationship manager

□ Branch Manager

□ Any other (please specify)

7. What is your expectation from effective credit risk management in your organization? (You can use more than one answer)

□ Reduce financial loss

□ Improve communication with the management

□ Improve decision making

□ Improve resource allocation

□ Other (please specify)

8. What are the main challenge/ problem of credit risk management in the case of DBE bank?

□ Lack of experience to words managements

□ Environmental and natural challenges

□ Lack of skilled man-power

□ Problem of collateral registration

9. Does your organization have a documented credit risk management guideline or policy?

□ Yes □ No

10. Does the guideline support the goals and objectives of credit risk management?

□ Yes □ No

11. Do you understand the credit risk management guideline or policy?

□ Yes □ No

12. How often does your organization change its guidelines or policies to manage risks?

□ Once per year □ Once per two years □ Once in more than two years □ Never

For long term loan--

For short term loan--

13. In the future, does your organization have a policy to support the development of credit risk management?

□Yes □ No

14. Does your organization offer training for employees?

□ Yes □ No

15. How does your organization effectively communicate to reduce credit risk? (you can choose more than one answer)

□ creating clear and trustworthy information

□ developing understanding between management team and employee

□ Fast and sharp communication between management team and stakeholders

□ Regularly communicating among management and staff

□ Creating and maintaining a clear communication

□ Other (please specify)

16. How often does your organization provide credit risk management training courses?

□ Never □ 1 times per year □ 2 times per year □ More than 2 times per year

17. Does your organization have established strategies for keeping up-to-date and informed with changes in regulations?

□ Yes □ No

18. Which credit risk management mechanism do you think is the most important to reduce credit risk in your bank?

□ Screening and monitoring (kyc)

□ Credit Rationing

□ Collateral Requirements

□ Long-term Customer Relationship

□ I don't know

19. Which technique/instrument, do you use for Credit Risk Management in your bank? (Please tick)

□ Credit Approval Authority

□ Prudential Limits

□ Risk Ratings

□ Risk Pricing or Risk Adjusted Return on Capital (RAROC)

□ Portfolio Management

□ Loan Review Policy

20. Please indicate, the relative importance of the following factors you consider for pricing Credit Risk?

□ Portfolio Quality

□ Value of Collateral

□ Market forces

□ Perceived value of accounts

□ Future business potential

□ Portfolio Industry Exposure

□ Strategic Reasons

APPENDIX II; **Key Informative Guideline**

St. Mary's University

School of Graduate Study

Key Informative Interview Guideline

Using semi structured interview guide interview is held with one purposely selected key informant to collect in-depth information about commitment of the management and senior employees to credit department.

Interview questions for senior employee and management

1 what are the process used to credit risk management in DBE? ---------------------------------
- -
- -

2 what are the mechanism used to reduce credit risk? ---
- -
- -
- -

3 What is strength of the bank managing credit risk DBE?

- -

- -

4 What techniques are used to manage its credit risk?

- -

- -

5 Who has the authority to establish credit risk management in policy or procedure your organization?

____

____