ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

ANALYSIS OF THE CREDIT RISK MANAGEMENT SYSTEMS AND PRACTICES IN COMMERCIAL BANKS OF ETHIOPIA: A CASE STUDY OF COMMERCIAL BANK OF ETHIOPIA, HQ.

BY

NININAHAZWE PACIFIQUE

JULY, 2019

ADDIS ABABA, ETHIOPIA

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A THESIS SUBMITTED TO THE DEPARTMENT OF PROJECT MANAGEMENT, ST. MARY'S UNIVERSITY FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF MASTERS IN PROJECT MANAGEMENT

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APPROVED BY BOARD OF EXAMINERS

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DECLARATION

I, the undersigned, declare that this thesis is my original work; prepared under the guidance of Dejene Mamo (Asst. Prof). All resources and/or 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 other higher learning institution for the purpose of earning any degree.

__________________________ __________________________

Name Signature

St. Mary‘s University, Addis Ababa July, 2019

ENDORSEMENT

This thesis has been submitted to St. Mary‘s University, School of Graduate Studies for examination with my approval as university advisor.

_______________________________ _________________________

Advisor	Signature
St. Mary‘s University, Addis Ababa	May, 2019

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LIST OF ABBREVIATIONS & ACRONYMS

A: Agree

BOD: Board of directors

CBE: Commercial Bank of Ethiopia

D: Disagree

GE: Great Extent

HQ: Head quarter

LE: Little Extent

ME: Moderate Extent

N: Neutral

NBE: National Bank of Ethiopia

NE: No extent

NPL: Non –performing loans

ROA- Return on Asset

ROE- Return on Equity

SA: Strongly Agree

SD: Strongly disagree

VGE: Very great extent

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ABSTRACT

This paper is about "Analysis of credit risk management systems and practice in Commercial Banks of Ethiopia", a case study of Commercial Bank of Ethiopia, HQ. The numbers of respondents were two hundred and six (206). While collecting the requisite data four points such as: credit risk environment ,sound credit appraisal process credit administration, measurement and monitoring aspects and internal control over credit risk in Commercial Bank of Ethiopia, open ended and closed ended questioner and interview were used. The objective of the study was to critically asses the strategic attention and consideration given for credit risk management practice in CBE, review the credit risk management process and techniques of CBE and explore the considerations given to human resource skill variety in order to successfully manage credit risk. Descriptive statistics was applied to analyze respondent's information. From the analysis it was found that the board of directors and the management of Commercial Bank of Ethiopia have been exercising their power properly to oversight credit risk management, update the current credit risk management trend, and to apply combination of different risk management techniques and has competent employees. In addition, the result shows that the Commercial Bank of Ethiopia identifies, assesses, analyzes, monitors and evaluates credit risk throughout the processes. As a conclusion, the researcher recommends that Commercial Bank of Ethiopia should assess credit risk as appropriate, monitor and evaluate its credit risk management practice to formulate timely mitigation mechanisms.

Key words: Commercial Bank of Ethiopia, Credit Risk Management, and Credit Risk Management Practices

INTRODUCTION

This paper is intended to conduct a study about credit risk management system in CBE and entitled as "Analysis of credit risk management systems and practice in commercial banks of Ethiopia: A case study of Commercial Bank of Ethiopia, HQ"

The first chapter covered the background to the study, thus a general introduction, statement of the problem, research questions and objectives of the study. It also entails the definitions of terms, research questions, and the significance of study and scope limitations of the study.

Chapter Two is entirely on the literature review. This chapter contains reports and reviews made by people and firms on credit risk management including the gaps and loopholes identified in their reports and reviews. The chapter concludes with an assessment of how this study fills the gaps that has been created by the study of others.

Chapter Three and Four are respectively on the methodology and research findings and analysis of the data gathered. The methodology contains the research design, population of study sample size techniques of data collection, reliability and validity of the data gathering instrument, ethical considerations and data analysis and presentations. The fourth chapter is on the analysis of research findings and data gathered during the study.

Chapter Five is the summary of findings of the study, conclusion, useful suggestions and recommendations to the research findings made and avenues for further study by other researchers.

CHAPTER ONE

GENERAL BACKGROUND

1.1. Background of the Study

The credit risk management is important to the primary operation of a bank. As any bank makes decisions to borrow and lend money, operational risk it faces is also a financial risk. As such, it's required to be aware of the different types of risks that a bank can face, and how these can be managed and avoided, as well as acknowledging the importance of the Basel II agreement in helping to manage these risks (Shaima Al Hussiny, 2009).

Commercial banks are just like bridge in which fund of savers are transferred to borrowers through the process of financial intermediary, especially where capital markets are not yet well developed like in Ethiopia. They play vital role in any economy as similar as what the heart's releasing human body by pumping the blood of business from surplus to deficit area. As a result, bank service is considered as life blood for any economic unit while effective credit risk management system and practice is an ingredient part of safety, soundness, liquidity and profitability of banks (Atakelt Hailu, 2015).

Credit is the common fundamental component in any financial system. Different economic units both demand and supply sides, require credits. Individuals require credit for economic and social need. Governments also require credit for financing their deficit and building public projects. Most business organizations heavily rely on external source of finance for expansion, modernization, working capital requirement and financing new projects. As a result, credit risk is the most important risk banks face especially in developing countries where no formal stock market is available as alternative source of external funds (.Al-Tamimi, H. H., & Al-Mazrooei, F. M., 2007).

Credit risk managements in commercial banks start with the establishment of sound lending principles and an efficient framework for managing risk. Policies, industry specific standards and guidelines, together with risk concentration limits are designed under the supervision of risk management committees and departments. Credit risk, also known as counterparty risk is the risk of loss due to a debtor's non-payment of a loan or other line of credits. Also, credit risk is most simply defined as the potential that

a loan borrower or counterparty will fail to meet its obligations in accordance with agreed terms (Addo Boye, 2014).

In most banks, loans are the largest and most obvious sources of credit risk. However, other sources of credit risk exist throughout the activities of a bank. These include activities in the banking and trading books, and those both on and off the balance sheet. Banks are increasingly facing credit risk or counterparty risk in various financial instruments other than loans. These include bankers' acceptances, interbank transactions, trade financing, foreign exchange transactions, financial futures, swaps, bonds, equities, options and the settlement of transactions (Addo Boye, 2014).

Credit risk analysis (financial risk analysis, loan default risk analysis) and credit risk management are important to financial institutions which provide loans to businesses and individuals. Credit can occur for various reasons: bank mortgages (or home loans), motor vehicle purchase finances, credit card purchases, installment purchases, and so on. Credit loans and finances have the risk of default. To know the risk level of credit users, credit providers normally collect vast amount of information from borrowers. Statistical techniques can be used to analyze or determine risk levels involved in credits, finances, and loans, thus default risk levels (Chege, 2010).

While financial institutions have faced difficulties over the years for a multitude of reasons, the major causes of serious banking problems continue to be directly related to lax credit standards for borrowers and counterparties, poor portfolio risk management, lack of attention to changes in economic factors (interest rates, inflation rates, etc.)

In recent times, the flow of credit in global financial markets has slowed from a glacial pace to a virtual standstill and credit markets threaten to stay that way despite immense amounts of cash being pumped into various economies by their governments and central banks around the world.

Credit risk is a problem faced by banks all over the world and the question mostly asked is "what will it take for banks to regain enough confidence in the financial system to get credit markets moving again?"

Risk management is recognized in today's business world as an integral part of good management practice. It entails the systematic application of management policies, procedures and practices to the tasks of identifying, analyzing, assessing, treating and monitoring risk (Haneef, et al., 2012). Credit risk management is defined as

identification, measurement, monitoring and control of risk arising from the possibility of default in loan repayments (Coyle, 2000).

According to Basel Committee on Banking Supervision (2000) a sound and comprehensive credit risk management program needs to address four areas: (i) establishing an appropriate credit risk environment; (ii) operating under a sound credit granting process; (iii) maintaining an appropriate credit administration, measurement and monitoring process; and (iv) ensuring adequate controls over credit risks. Specific credit risk management practices may however differ among banks depending upon the nature and complexity of their credit activities. These practices should also be applied in conjunction with sound practices related to the assessment of asset quality, the adequacy of provisions and reserves, and the disclosure of credit risk (Toni Uhomoibhi, 2008)

Loan performance refers to the financial soundness of a financial institution on the performance of their disbursed loans to various sectors. It also means how the loans are scheduled to act and how they are actually performing in terms of the schedule payment compared to the actual payments. It is closely associated with timely and steady repayment of interest and principal of a loan. Default on borrowed funds could arise from unfavorable circumstances that may affect the ability of the borrower to repay (Hull, 2007).

The most common reasons for the existence of defaults include when the financial institution is not serious on loan repayment, the borrowers are not willing to repay their loan, the financial institutions staffs are not responsible to shareholders to make a profit, clients' lives are often full of unpredictable crises, such as illness or death in the family, if loans are too large for the cash needs of the business, extra funds may go towards personal use and if loans are given without the proper evaluation of the business (Norell, 2001). The main causes of default of loans are poor business performance, diversion of funds and domestic problems.

Breth (1999) argued that there are many socio-economic and institutional factors influencing loan repayment rates. The main factors from the lender's side are high-frequency of collections, tight controls, and good management of information system, loan officer incentives and good follow ups. Additionally, the size and maturity of loan, interest rate charged by the lender and timing of loan disbursement have also an impact

on the repayment rates (Okorie & Andrew, 2007). The main factors from the borrower side include socio-economic characteristics such as gender, educational level, marital status and household income level and peer pressure in group based schemes

1.2. Statement of the Problem.

In its nature, the banking business is very sensitive because more than 85% of their liability is on deposits from depositors (Sounders, Cornett, 2005). Banks use these deposits to generate credit for their borrowers, which is a revenue generating activity for most banks.

This credit creation process exposes the banks to high default risk, which might lead to financial distress including bankruptcy.

Where the financial environment is dynamic manifested in intense competitive pressure, volatile economic conditions, rising bankruptcies, and increasing levels of consumer and commercial debt; an organization's ability to effectively monitor and manage its credit risk can mean the difference between success and failure. Effective credit risk management attracts more attention than before.

Interest income and interest expenses are the main determining factors for the profitability of private banks in Ethiopia (Yigremachew, 2008).The negative relationship of credit risk to corporate profitability may be evident that the more commercial banks expose themselves to credit risk, the more accumulation of unpaid loans, implying that these loan losses produce lower returns to the banks. The accumulation of non- performing loans caused by lack of proper credit risk management has substantial adverse impact on the performance of the banks in particular and the overall economy in general. In turn, this affects the government by reducing its tax income and banks by imposing dawn ward pressure on their respective profits and per share value of their stock price

The central bank and most financial institutions have realized the need for effective credit risk management in financial institutions in Ethiopia. So, solving the problems mentioned above will help to ensure good corporate governance. The main problem we are interested to know is: ''the extent to which financial institutions in Ethiopia have been managing the credit facilities issued out to their customers and members of the public,'' with Ethiopian Commercial Bank as the focal point. The research will investigate into comprehensive analysis of the credit risk management systems and

practices of commercial banks in Ethiopia: A case of Commercial Bank of Ethiopia.H.Q. These credit risk management aspects may include credit risk environment, credit appraisal process, credit administration, measurement and monitoring and internal control over credit risk.

1.3. Research Questions

- What is the credit risk environment in Commercial Bank of Ethiopia?
- What is the credit appraisal process in Commercial Bank of Ethiopia?
- What are the credit administration, measurement and monitoring aspects in Commercial Bank of Ethiopia?
- What is the internal control over credit risk in Commercial Bank of Ethiopia?

1.4. Objectives of the Study

1.4.1. General Objective

The main objective of the study is to analyze the credit risk management systems and practices in commercial banks of Ethiopia

1.4.2. Specific Objectives of the Study

- To determine the credit risk environment setting in Commercial Bank of Ethiopia.
- To establish the credit appraisal process in Commercial Bank of Ethiopia.
- To determine the credit administration, measurement and monitoring aspects in Commercial Bank of Ethiopia
- To determine the internal controls over credit risk in Commercial Bank of Ethiopia

1.5. Definitions of Terms

Credit risk: is simply defined as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms.

Credit risk management: is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters.

Financial institutions: A financial institution (FI) is a company engaged in the business of dealing with financial and monetary transactions, such as deposits, loans, investments and currency exchange

Loan and advances: means any financial assets of a bank arising from a commitment to advance funds by a bank to a person that is conditioned on the obligation of the person to repay the funds, either on a specified date or dates or on demand, usually with interest (NBE, 2008).

Credit administration: Disbursement procedures for Medium-term and Long-term Direct Loans and Guarantees in compliance with the bank's policies and procedures

Credit appraisal process: This is the process of assessing the various risks that can impact on the repayment of a loan

Credit monitoring: Process of periodically reviewing your credit reports for accuracy and changes that could be indicative of irregular credit activity

Credit risk Environment: Significant credit risk strategies and policies that are approved and reviewed annually by the Risk Committee and the Board. Through such policies, the Board establishes the Group's tolerance for risk.

Credit Risk measurement: The potential magnitude of the loss that may be incurred if a borrower defaults on any type of debt by failing to make required payments.

Internal control: The policies and procedures that financial institutions establish to reduce risks and ensure they meet operating, reporting and compliance objectives.

1.6. Significance of the Study

This study is a step in the right direction as it comes at the time when there is a public outcry against financial mismanagement and the failure of many debtors of various financial institutions to honor their obligations thus, paying monies they have enjoyed from these financial institutions as a result of loans granted to them for various reasons.

The recent financial crisis that have engulfed the globe should give us cause to worry about how our various financial institutions plan and take steps to recover loans granted out.

This study is significant for its contribution in enhancing knowledge, managerial decision making, reference material and serves as policy frame work. Each is described below:

Knowledge: The intended contribution of this research is to increase the knowledge in the area. The analysis is assumed to serve as a modest start and contributes to the existing knowledge.

Managerial Decision Making: The study findings and recommendations are important to management of the bank under study because it draws their attention to some of the points where corrective actions are necessary and enable them to make such corrections.

Literature and Reference: The research can be used to establish a framework for subsequent studies that can work with more comprehensive data set. Furthermore, it can stimulate further research; thus keeping sustained interest in the area of credit risk management and their use in minimizing the banks credit risk.

Policy Framing: Credit granting is one of the main activities of banks and hence it is beneficiary to make some reforms that lends to a better credit risk management. The findings and recommendations of the study are highly important to policy makers because it draws their attention to some of the points that need corrective measures on their side.

1.7. Scope and Limitations of the Study

I believe that the findings of this study would have been more productive if it has been conducted on all commercial banks in Ethiopia. However, due to time constraint, it was not possible to incorporate all in this study. The study encompasses one selected Ethiopian commercial bank (Commercial Bank of Ethiopia)

Due to the opaqueness of the sector and expected shortage of longitudinal data and other elusive structural difficulties the study is compelled to limit itself mainly on officially reported accounting data for a period of the last six subsequent years up to 2017. The study also likely to face problem of accuracy for some data, which were considered confidential by some banks, resulting from limited observation or degree of freedom.

It is known that loan losses can also occur as a result of the borrowers' character not to repay the debt in line with the agreement, apart from the lenders lax credit risk management system. Therefore, the problem should have been seen from both sides. Nevertheless, due to time constraint couldn't incorporate views of borrowers.

However, these limitations in their entirety did not reduce the accuracy of the findings since several measures were put in place to ensure that relevant facts were assessed.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. Theoretical Literature

Most financial institutions find that loans are the largest and most obvious source of credit risk. Other sources of credit risk exist throughout the activities of a bank. Financial institutions are increasingly facing credit risk in various financial instruments other than loans, including acceptances, trade financing, foreign exchange transactions, financial futures, options, bonds, equities, swaps and in the extension of commitments and guarantees (Michael Kwabena, 2014).

Since exposure to credit risk continues to be the leading source of problems in banks worldwide, banks and their regulators should be able to draw useful lessons from past experiences. Banks now have a keen awareness of the need to identify measure, monitor and control credit risk as well as to determine that they hold adequate capital against these risks. It is also vital that they are adequately compensated for the risks incurred in the running of their business (Addo Boye, 2014).

The Basel Committee’s capital adequacy guideline aims to encourage global banking supervisors to promote sound practices for managing credit risk. The list includes (i) Establishing an appropriate credit risk environment; (ii) Operating under a sound credit-granting process; (iii) Maintaining an appropriate credit administration, measurement and monitoring process. (iv) Ensuring adequate controls over credit risk.

Due to the importance of the credit risk management approaches, Claessens, Krahnen and Lang (2005) stressed that Basel II is to encourage banks to upgrade these practices and banks with sufficiently sophisticated risk measurement and management systems have more flexibility to use their own internal systems to determine regulatory capital minimums.

Although specific credit risk management may differ in banks depending upon the nature and complexity of their credit activities, a comprehensive credit risk management program should address all these issues. Implementation of the credit risk management strategies should also be applied in conjunction with sound practices related to the assessment of asset quality, the adequacy of provisions and reserves and the disclosure of credit risk.

Illustrated by the theoretical models of O'Brien, (1983) and recently modified to better current practices, a set of guidelines is released to promote better understanding of credit agreements to assist the banking industry to improve their services. These guidelines include full disclosure or credit history, independent credit analysis, legal consideration, sharing credit information between agents and prompt response to problems. Based on another study by Wu and Huang (2007), top management support is most important for management to be successful. In this context, and in order to solve these problems of bad loans, this study identifies and decomposes the origin of bad loans and to obtain efficiency measures adjusted for risk and environment, more refined than those hitherto proposed in other studies. The procedure proposed enables the total bad loans of each bank to be decomposed, into its two components: one part due to bad risk management and another due to exogenous economic and environmental factors.

The very existence of banks is often interpreted in terms of its superior ability to overcome three basic problems of information asymmetry, namely ex ante, interim and ex post (Uyemura and Deventer, 1993). The management of credit risk in banking industry follows the process of risk identification, measurement, assessment, monitoring and control. It involves identification of potential risk factors, estimate their consequences, monitor activities exposed to the identified risk factors and put in place control measures to prevent or reduce the undesirable effects. This process is applied within the strategic and operational framework of the bank.

Several risk-adjusted performance measures were proposed (Heffernan, 1996; Kealhofer, 2003). The measures, however, focus on risk-return trade-off, i.e. measuring the risk inherent in each activity or product and charge it accordingly for the capital required to support it. This does not solve the issue of recovering loanable amount. Effective system that ensures repayment of loans by borrowers is critical in dealing with asymmetric information problems and in reducing the level of loan losses, thus the long-term success of any banking organization, (Basel, 1999; IAIS, 2003). Effective credit risk management involves establishing an appropriate credit risk environment; operating under a sound credit granting process; maintaining an appropriate credit administration that involves monitoring process as well as adequate controls over credit risk, (Basel, 1999; Greuning and Bratanovic, 2003; IAIS, 2003). It requires top management to ensure that there are proper and clear guidelines in managing credit risk,

thus all guidelines are properly communicated throughout the organization; and that everybody involved in credit risk management understand them.

Considerations that form the basis for sound credit risk management system include: policy and strategies (guidelines) that clearly outline the scope and allocation of a bank credit facilities and the manner in which a credit portfolio is managed, i.e. how loans are originated, appraised, supervised and collected (Basel, 1999; Greuning and Bratanovic, 2003; PriceWaterhouse, 1994). Screening borrowers is an activity that has widely been recommended by, among others, (Derban et al. 2005). The recommendation has been put to use in the banking sector in the form of credit assessment. According to the asymmetric information theory, a collection of reliable information from prospective borrowers becomes critical in accomplishing effective screening.

The assessment of borrowers can be performed through the use of qualitative as well as quantitative techniques. One major challenge of using qualitative models is their subjective nature (Bryant, 1999; Chijoriga, 1997). However, borrowers attributes assessed through qualitative models can be assigned numbers with the sum of the values compared to a threshold. This technique is termed as "credit scoring" (Heffernan, 1996; Uyemura and Deventer, 1993). The technique cannot only minimize processing costs but also reduce subjective judgments and possible biases (Kraft, 2000; Bluhm et al., 2003; Derban et al., 2005). The rating systems, if meaningful should signal changes in expected level of loan loss, (Santomero, 1997).Chijoriga, (1997)concluded that quantitative models make it possible to, among others, numerically establish which factors are important in explaining default risk, evaluate the relative degree of importance of the factors, improve the pricing of default risk, be more able to screen out bad loan applicants and be in a better position to calculate any reserve needed to meet expected future loan losses.

Clearly established process for approving new credits and extending the existing credits has been observed to be very important while managing credit risk, (Heffernan, 1996). Further, monitoring of borrowers is very important as current and potential exposures change with both the passage of time and the movements in the underlying variables (Donaldson, 1994; Mwisho, 2001), and also very important in dealing with moral hazard problem (Derban et al., 2005). Monitoring involves, among others, frequent contact with borrowers, creating an environment that the bank can be seen as a solver of

problems and trusted adviser; develop the culture of being supportive to borrowers whenever they are recognized to be in difficulties and are striving to deal with the situation; monitoring the flow of borrower's business through the bank's account; regular review of the borrower's reports as well as an on-site visit; updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted (Donaldson, 1994; Treacy and Carey, 1998; Tummala and Burchett, 1999; Basel, 1999; Mwisho, 2001).

Tools like covenants, collateral, credit rationing, loan securitization and loan syndication have been used by banks in developing the world in controlling credit losses (Benveniste and Berger, 1987; Greenbaum and Thakor, 1987; Berger and Udell, 1992; Hugh, 2001). It has also been observed that high-quality credit risk management staffs are critical to ensure that the depth of knowledge and judgment needed is always available, thus successfully managing the credit risk in the financial institutions (Koford and Tschoegl, 1997; Wyman, 1999). (Donaldson, 1994), PricewaterhouseCoopers in their survey report on Barclays bank noted that low motivation and lack of due diligence on the part of the banking staff as a major contributor to loan default. (Jeremy and Stein, 1999) observed that computers are useful in credit analysis, monitoring and control, as they make it easy to keep track on trend of credits within the portfolio (Marphatia and Tiwari, 2004) argued that risk management is primarily about people – how they think and how they interact with one another. Technology is just a tool; in the wrong hands it is useless. This stresses further the critical importance of qualified staff in managing credit risk.

Credit risk has caused loan losses problem in developing countries, including Ethiopia. The problem has its roots in information problems that particularly cause adverse selection and moral hazards. Ethiopian economy being in a transition makes information asymmetry more pronounced. Effective credit risk management system minimizes the credit risk, hence the level of loan losses. Empirical studies show differences in approaches to credit risk management when different contexts are considered (Menkhoff et al., 2006; Mlabwa, 2004). It is important therefore to take into consideration the context within which the study is being conducted. This situation requires the incorporation of an inductive approach (Haider and Birley, 1999).

International comparisons of banking efficiency have not loomed large in the literature. The lack of homogeneous accounting data and the existence of different regulatory

frameworks notably complicate these comparisons. The very few studies in this field, based on the construction of a common frontier for all countries, have traditionally found high degrees of inefficiency. This result may be due to the fact that the procedure used implicitly assumes that any difference of efficiency between countries is exclusively due to bad management, without considering the possible existence of technological differences (Pastor, Perez and Quesada, 1997) or differences in the economic environment (Pastor, Lozano and Pastor, 1997) which may bias the results and provide under-estimated efficiency measures for those banking systems that are subjected to less favorable economic environments. To avoid this problem it is necessary to introduce environmental variables to control the different economic circumstances under which the banking firms of different countries carry out their activities. In this respect, the most notable exceptions are the recent studies by Dietsch and Lozano, (1996) and Pastor, Lozano and Pastor, (1997) which incorporate environmental variables with the aim of establishing a common standard of comparison for all firms.

Loans that constitute a large proportion of the assets in most banks' portfolios are relatively illiquid and exhibit the highest credit risk (Koch and MacDonald, 2000). The theory of asymmetric information argues that it may be impossible to distinguish good borrowers from bad borrowers (Auronen, 2003), which may result in adverse selection and moral hazards problems. Adverse selection and moral hazards have led to substantial accumulation of non-performing accounts in banks (Bester, 1994; Bofondi and Gobbi, 2003). The increased competition associated with the process of liberalization and globalization and the attempts of European banks to increase their presence in other markets especially Africa may have affected the efficiency and credit risk of the banking institutions in Africa with Ethiopia being no exception. There are two aspects to this dimension. The first of these aspects, already analyzed in other studies, is based on the incentive to the banks to reduce costs and to improve the management of their resources in order to gain in competitive advantage. The second aspect, which has not yet been analyzed, is explained by the poorer knowledge of the new markets by the newly entered banks and/or the greater permissiveness in the acceptance of risk with a view to increasing the market share in certain sectors and/or regions. Despite the importance of these two aspects, banking literature has usually analyzed banking efficiency without considering them together. Efficiency measures, based on the consideration of outputs and inputs, are usually a good instrument of

analysis of the performance of firms; however, it is sometimes necessary to consider other factors. In the case of banking, one of the most important of these is risk, as it is desirable not only that a banking firm should be efficient, but also that it should be secured. This is certainly not exclusive to the banking sector, but it is of greater importance than in other sectors, given the potential economic repercussions of banking failures. However, despite its importance, the relationship between cause and effect of bad loans has hardly been studied in any literature. Only the studies by Berg et al(1992), Hughes et al (1993 and 1996);and Mester, (1994a, 1994b) have attempted to obtain risk-adjusted efficiency measures in relation to bad loan causes. However, their approaches may be unsuitable insofar as they are based on the inclusion of risk (measured by means of total bad loans) as an additional input, implicitly assuming that all bad loans are caused by the bad management of banks, without considering that some may be due to adverse economic circumstances beyond the banks' control. If these exogenous or uncontrollable factors are not filtered out, the efficiency of those firms whose bad loans are due to an adverse economic environment will be underestimated. Furthermore, none of the existing studies attempts to decompose total bad loans into these two components: bad loans due to bad management (internal factors) and bad loans due to economic environment (external factors).

The nature of the study required an understanding of the credit risk management phenomena within an Ethiopian context. The credit risk management as a phenomenon is a process whose understanding required rich data in its respective context to be collected. It is very clear in the above discussions that little or no emphasis has been placed on the causes of bad loans. This study approach is therefore an appropriate strategy in collecting the required empirical data which will help to enumerate the causes of loan default or bad loans. The information required is qualitative and contextual in nature and is therefore to be analyzed qualitatively.

2.2. Principles for the Assessment of Banks' Management of Credit Risk by Basel committee

2.2.1 Establishing an Appropriate Credit Risk Environment

Principle 1: The Board of Directors should have responsibility for approving and periodically (at least annually) reviewing the credit risk strategy and significant credit risk policies of the bank. The strategy should reflect the bank's tolerance for risk and the level of profitability the bank expects to achieve for incurring various credit risks.

Principle 2: Senior management should have responsibility for implementing the credit risk strategy approved by the board of directors and for developing policies and procedures for identifying, measuring, monitoring and controlling credit risk.

Such Policies and procedures should address credit risk in all of the bank's activities and at both the individual credit and portfolio levels.

Principle 3: Banks should identify and manage credit risk inherent in all products and activities. Banks should ensure that the risks of products and activities new to them are subject to adequate risk management procedures and controls before being introduced or undertaken, and approved in advance by the board of directors or its appropriate committee.

2.2.2. Operating Under a Sound Credit Granting Process

Principle 4: Banks must operate within sound, well-defined credit-granting criteria. These criteria should include a clear indication of the bank's target market and a thorough understanding of the borrower or counterparty, as well as the purpose and structure of the credit, and its source of repayment.

Principle 5: Banks should establish overall credit limits at the level of individual borrowers and counterparties, and groups of connected counterparties that aggregate in comparable and meaningful manner different types of exposures, both in the banking and trading book and on and off the balance sheet.

Principle 6: Banks should have a clearly-established process in place for approving new credits as well as the amendment, renewal and re-financing of existing credits.

Principle 7: All extensions of credit must be made on an arm's-length basis. In particular, credits to related companies and individuals must be authorized on an

exception basis, monitored with particular care and other appropriate steps taken to control or mitigate the risks of non-arm‘s length lending.

2.2.3 Maintaining an Appropriate Credit Administration, Measurement and Monitoring

Process Principle 8: Banks should have in place a system for the ongoing administration of their various credit risk-bearing portfolios

Principle 9: Banks must have in place a system for monitoring the condition of individual credits, including determining the adequacy of provisions and reserves.

Principle 10: Banks are encouraged to develop and utilize an internal risk rating system in managing credit risk. The rating system should be consistent with the nature, size and complexity of a bank‘s activities.

Principle 11: Banks must have information systems and analytical techniques that enable management to measure the credit risk inherent in all on- and off-balance sheet activities. The management information system should provide adequate information on the composition of the credit portfolio, including identification of any concentrations of risk.

Principle 12: Banks must have in place a system for monitoring the overall composition and quality of the credit portfolio.

Principle 13: Banks should take into consideration potential future changes in economic conditions when assessing individual credits and their credit portfolios, and should assess their credit risk exposures under stressful conditions.

2.2.4 Ensuring Adequate Controls over Credit Risk

Principle 14: Banks must establish a system of independent, ongoing assessment of the bank‘s credit risk management processes and the results of such reviews should be communicated directly to the board of directors and senior management.

Principle 15: Banks must ensure that the credit-granting function is being properly managed and that credit exposures are within levels consistent with prudential standards and internal limits. Banks should establish and enforce internal controls and other practices to ensure that exceptions to policies, procedures and limits are reported in a timely manner to the appropriate level of management for action.

Principle 16: Banks must have a system in place for early remedial action on deteriorating credits, managing problem credits and similar workout situations.

2.3. Empirical literature

Researchers are trying to summarize the main finding of some selected studies mainly on the area of macroeconomic and banks specific determinants of credit risk.

Abdullah et al (2012) conducted research using Johansen's co-integration test to assess the long-term relationship between Credit risk and bank specific factors. Researchers found that Bank size had a positive and significant relationship with credit risk in domestic banks. Liquid assets and credit risk had negative and significant in foreign banks.

Selma and Jouini (2013) conducted a study on three countries namely Italy, Greece and Spain for the period of 2004-2008 to identify the determinants of non-performing loans for a sample of 85 banks. The variables included both macroeconomic variables (GDP growth rate, unemployment rate and real interest rate) and bank specific variables (return on assets, loan growth and the loan loss reserves to total loans). They apply Fixed Effect model and found a significant negative relationship of ROA & GDP growth rate, and also positive relationships of unemployment rate, the loan loss reserves to total loans and the real interest rate with NPLs. For a significant positive association between NPLs and real interest rate, they justify that when a rise in real interest rates can immediately leads to an increase in non-performing loans especially for loans with floating rate since it decrease the ability of borrowers to meet their debt obligations. In addition, a significant negative relationship between ROA and the amount of NPLs justify that a bank with strong profitability has less incentive to generate income and less forced to engage in risky activities.

Klein (2013) investigates the determinants and macroeconomic performance of NPLs in Central, Eastern, and South Eastern Europe (CESEE) for 1998 to 2011 period data for ten banks of each 16 countries. The study includes loan growth rate, inflation, unemployment rate and GDP growth rate as explanatory variables of the study. The study was used fixed effect/ dynamic model and found as inflation has positive whereas loan growth rate, GDP growth rate have negative significant effect on the occurrences of NPLs. However, the study found as unemployment rate has no significant effect on NPLs.

Achou and Tenguh (2008) reveal that there is a significant relationship between bank performance (in terms of return on asset) and credit risk management (in terms of loan performance). Better credit risk management results in better bank performance.

Ganic (2012) conducted research on Bank Specific Determinants of Credit Risk in the Banking Sector of Bosnia and Herzegovina using the panel regression model and found that inefficiency and credit growth had a significant negative influence on credit risk while ROE and deposit rate had significant positive impact on credit risk. However, capital adequacy, liquidity, market power, ROA and reserve ratio had an insignificant impact on credit risk.

The study made by Daniel (2010), focusing on management of non-performing loan on private commercial banks in Ethiopia. The study employed the mixed type of research. The result showed that credit policy and supervision by the management has less contribution to the NPLs and most of the NPLs are caused by factors after the loan released, like Moral hazard of the borrower, ineffective monitoring, and operational loss of the borrower has created high NPLs in private commercial banks in Ethiopia. However, authors focus on management of nonperforming loans in private banks, not on its statistical determinants and state-owned/public bank.

Girma (2011) studied “Credit Risk Management and Its Impact on Performance on Ethiopian commercial Banks”. The researcher used empirical data analysis technique to investigate credit risk management on banks performance. He uses six private commercial banks as reference and used their annual report for reference; the researcher used quantitative research method and interpreted the output single regression. From the research he has arrived at there is a significant relationship between bank performance (in terms of return on asset) and credit risk management (in terms of loan performance). Better credit risk management results in better bank performance. However, the study examined only the extent at which credit risk affected by profitability of banks in Ethiopia and only used private commercial banks.

A survey study by the National Bank of Ethiopia (NBE) 2009, presented that irrespective of the strengths by Ethiopian commercial banks in the management of risks, weaknesses dominate Ethiopian commercial banking sector risk management. Mekasha (2011) studied credit risk and its impact on the performance of a sample of six Ethiopian commercial banks using return on asset as a surrogate of performance and

nonperforming loan to total loan ratio, loan provisions to nonperforming loan ratio, loan provision to total loan ratio and loan provision to total assets ratio used as a surrogate of credit risk measures. The result revealed that nonperforming loan to total loan ratio and loan provision to total loan ratio have inverse relationship with return on asset but only nonperforming loan to total loan was statistically significant. Whereas loan provision to nonperforming loan and loan provision to total asset have positive association with return on asset but both are insignificant to impact return on asset.

Awoke (2014) conducted a study on the impact of credit risk on the performance of samples of eight commercial banks in Ethiopia over the period of years 2008-2012 using return on asset as dependent variable and provision to total loans, loans to total assets, cost to total loans and natural logarithm of total asset as independent variables. The findings shown that provisions to total loans and cost to total loans have inverse association with return on asset but loans to total assets and the natural logarithm of total assets have positive association with return on asset and all variables have significant impact on return on asset.

Bizuayehu (2015) carried out a study on the impact of credit risk on the financial performance of banks in Ethiopia using bank specific and macroeconomic factors covering a period of years 2003-2008. Return on equity used as a proxy for financial performance and nonperforming loan to total loan ratio, capital adequacy ratio and total loan to deposit ratio, bank size, interest rate spread, gross domestic product and inflation rate as a proxy for credit risk. The study revealed that both bank specific factors and macroeconomic factors have inverse association with return on equity but only the bank specific factors are significant factors influencing return on equity.

Gizaw, Kebede and Selvaraj (2015) evaluated the impact of credit risk on the performance of commercial banks in Ethiopia over a period of years 2003-2004. Return on asset and return on equity used as proxy of performance and nonperforming loan to total loan ratio, capital adequacy ratio, and loan and advance to deposit ratio and loan loss provision to total loan ratio were used as a proxy for credit risk. The findings revealed that non-performing loan to total loan and loan and advances to deposit have inverse association with return on asset while the other two have positive association with return on asset. However; only nonperforming loan to total loan and loan loss provision to total loan are statistically significant to impact return on asset. Further, the study revealed that except loan loss provision to total loan ratio all the proxies of credit

risk have inverse relationship with return on equity and all are significant factors impacting return on equity.

2.4. Research gaps

From the studies conducted, there seems to be a consensus regarding negative effects of Non-performing loans on the performance of banks. Non-performance of loans has been pointed out as one of the major factors leading to poor performance of banks worldwide as well as bank failures. From the available literature, factors affecting loan performance include: Macroeconomic factors such as GDP, interest rates, inflation, unemployment and bank specific factors such as bank Credit risk management practices. Further, available empirical literature concedes that there is a strong relationship between credit risk management and loan recovery performance in banks especially commercial banks. A negative relationship has been found between credit risk management and non-performing loans by a majority of the studies conducted locally and internationally.

However, most of the studies in this area have focused on the banking sector as a whole, commercial banks and microfinance institutions on aggregate. Not much research has been done to assess how credit risk management systems and practices specifically for commercial banks in Ethiopia. In order to fill this gap, this study seeks to determine the parameters of credit risk management in commercial banks in order to act as a guide to commercial banks' management in controlling loan performance as they pursue good financial performance for the institutions they manage.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter articulates the means by which data were gathered for the study. Specifically, it covers the research design, population of study, area of study, sample size, technique and data collection and ethical consideration, data analysis and presentation.

3.1. Research Design

A research design was a plan showing how the research problem was solved (Mugenda & Mugenda, 2003). This study has been used a descriptive research design. This design aims at collecting data without manipulating the research variables or the respondents in an attempt to get the information required (Mugenda & Mugenda, 2008). The descriptive design was used in this study because of its appropriateness in establishing the variables and facilitating the collection of information for achieving the objectives of the study. Further, Mugenda and Mugenda (2003) denoted that descriptive research enables subjects to give more information on the issue of interest under study. This research design will be therefore appropriate in investigating the credit risk management systems and practices in Commercial Banks.

3.2. Population of Study

The population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions. The population usually has varying characteristics and it is also known as the theoretical population (Kothari, 2008).The population under consideration is Commercial bank of Ethiopia. The researcher selected the staffs who working in credit risk management.

Table 1. Population of the study

Total staff of credit management	**Number of staff**
Customer relation officers	243
Corporate customers officers	182
TOTAL	**425**

Source: Own Survey, 2019

Due to the fact that I cannot reach 425staff of credit management, I was forced to make a sample among this population. My research used a stratified random sampling. This is a procedure that starts with stratification of items, and then followed by sampling (Kombo & Tramp, 2006). According to Sartnakos, (1998) the sampling is one of the methods, which allow the researcher to study relatively small number of units representing the whole population.

3.3. Area of Study

The area of study is the Risk Division in the head office of the Commercial Bank of Ethiopia, Addis Ababa

3.4. Sample Size

In principle, accurate information about given population could be obtained only from census study. However, due to time constraint, in many cases, a complete coverage of population is not possible; thus sampling is one of the methods, which allow the researcher to study relatively small number of units representing the whole population (Sartnakos, 1998). In order to sample the population, the researcher has used probability sampling of stratified sampling technique and selects 206 credit management staff.

This study applied simplified formula provided by Yamane, (1967) to determine the required sample size at 95% confidence level, degree of variability = 0.5.

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = Desired sample size

N =Total population size

e = Accepted error limit (0.05) on the basis of 95 percent degrees of confidences put into decimal *form*

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{425}{1 + 425(0.05)^2}$$

$$n = \frac{425}{2.0625}$$

$$n = 206$$

Table.2. Sampling using stratified sampling technique

Total staff of credit management	**Number of staff**	**Sample Size**
Customer relation officer	243	118
Corporate customers officers	182	88
TOTAL	**425**	**206**

Source: Own Survey, 2019

3.5. Techniques of data collection

The data information to be used would be both primary and secondary data.

Questionnaires

Primary data has mainly been collected through conduction of questionnaire. A guideline of questions in the form of questionnaires which reflect the objectives of the study was used to gather information from respondents. The questionnaires would be designed in a way that would help test the research questions appropriately to enable the researcher obtain enough information on which conclusions were drawn on the gaps as identified in the literature review. Questionnaires have been administered in English language to staff of credit management in Risk Division in the head office of the Commercial Bank of Ethiopia, Addis Ababa.

The questionnaire was composed by closed-ended. Closed-ended questions are easier and quicker to answer, and it is simpler to make comparison of answers from different study respondents. Closed-ended questions help the researcher to ensure fewer confused answers, and coding answers is easier for analysis (Reja et Al., 2003). Questionnaires have been used to collect particularly quantitative data. There was no space for personal identification information such as name, phone number of the participants to prevent discomfort.

Document review

According to Bailey (1987:188), documentation includes all references and sources that offer to the reader a way to retrace his research. The secondary data came from published works, records of commercial bank of Ethiopia and the internet. Also, the researcher sought the views of independent sources on the internet which gave me a lot insight into my study. Apart from the above existing literature such as journals, books, and periodicals would be relied upon to get an accurate knowledge of credit risk management in Ethiopia.

3.6. Reliability and Validity of the Data Gathering Instrument

Content validity of the structured questionnaire was checked and incorporated comments by providing the instrument to professionals who are working in the corporation and the research advisor. In the process, the questionnaire was modified by the advisor. In addition, the content validity was checked by ensuring that the by designing data collection instruments very carefully to include all the necessary questions related to answer the problem statement.

The Cronbach‘s alpha coefficient test conducted to measure the internal consistency reliability. Before distributing the questionnaire to the selected respondents, a pilot-test exercise was conducted. It also tasted using Cronbach‘s Alpha test and done upon 20 individuals who was selected at random in order to check the internal reliability of the questionnaire. Accordingly, the reliability of the instrument was measured using Cronbach`s alpha and calculated by using statistical software SPSS version 20. In theory, reliability can range from 0 to 1.00, but the reliability of measures of human traits and behaviors never quite reaches 1.00. Some very good achievement tests may reach .98, but probably not any higher than that. In this regard, the result of Cronbach`s coefficients alpha was highly reliable which is 0.922 as shown in table below.

Table 3.Reliability Statistics

Cronbach's Alpha	N of Items
.922	33

Source: Own Survey, 2019

3.7. Ethical Considerations

The researcher observed ethics in the process of data collection and presentation. The researcher had explained the purpose and objective of study to respondents. The data collection tools were administered in a conducive environment. The respondents were assured of total confidentiality and that the information was collected for only research purpose. Authorization to carry out the study has been obtained from St. Mary's University, department of Project Management.

3.8. Data analysis and Presentation

Data analysis entailed the use of descriptive statistics which was done using the Statistical Package for Social Sciences (SPSS). The main reason behind the use of descriptive method of analysis is to describe the characteristics of the study related to credit risk management systems and practices in commercial banks of Ethiopia. Accordingly, frequencies, percentages, and tables, were used to elaborate the results in detail. Furthermore, data collected through interview has been discussed in detail.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

In chapter four, statistical analysis has been made by the researcher to present information of respondents and results obtained. A survey has been carried out using the attached questionnaire with the goal of analysis credit risk management systems and practices in Commercial Bank of Ethiopia. Questionnaires were distributed to credit process employees in head office particularly credit analysts, managers and directors. Among them, ninety eight percent (98%) have responded. These questionnaires are related to risk management systems and practices in Commercial Bank of Ethiopia.

The first part covers the analysis of the credit risk environment in the Commercial Bank of Ethiopia. The second part discusses results of questions designed to assess the sound appraisal process for credit risk management systems and practices in Commercial Bank of Ethiopia. To investigate this research question, the researcher designed six research questions. The questions were based on a five point liker scale ratings. The respondents were asked to tick on a scale stated from ―Strongly Disagree (1) up to ―Strongly Agree(5) the extent to which they agree with statements given, indicating the degree of their understanding and the extent to which they are aware of the risks that are associated with their actions.

The third part covers results of questions designed to assess the credit administration, measurement and monitoring process of CBE. The researcher designed closed ended and open ended qualitative questions to obtain more details from the employees about monitoring control used by Commercial Bank Of Ethiopia and five scale liker scale grading‗s were used to assess the credit risk management process .The fourth part covers results of questions designed to assess the internal control over credit risk management.

4.1. Credit risk environment

Understanding credit risk strategy, policy and procedures as well as identifying risks are the cornerstone for Credit risk management process. Lack of common understanding on Credit risk strategy, policies and procedures across the bank may cause inconsistent interpretation and application of credit policy and procedures across the bank and finally lead to lack of common code of conducting credit risk management activities among staff and staff also get difficulties to ward identifying Credit risk inherent in all product and activities of bank

Table 4. Credit risk environment

Statements	SD	D	N	A	SA
Does your bank have a sound credit risk management system?	11(5.5%)	27(13.4%)	22(10.9%)	137(68.2%)	4(2.0%)
Do you have a Board of Directors that approves the credit risk strategy and relevant credit risk policies of your bank?	11(5.5%)	34(16.9%)	41(20.4%)	81(40.3%)	34(16.9%)
Does the senior management in your bank strictly implement the credit risk strategy approved by the Board of Directors?	0(0%)	37(18.4%)	41(20.4%)	99(49.3%)	24(11.9%)
Does the senior management in your bank develop policies and procedures for identifying, measuring, monitoring and controlling credit risk?	0(0%)	33(16.4%)	63(31.3%)	88(43.8%)	17(8.5%)
Does the credit risk policies and procedures developed address credit risk management in all the bank's activities and at both the individual level, bank level?	5(2.5%)	33(16.4%)	60(29.9%)	89(44.3%)	14(7.0%)
Does your Bank identify and manage credit risk inherent in all products and activities?	0(0%)	48(23.9%)	43(21.4%)	88(43.8%)	22(10.9%)
Does the bank subject new credit products and activities to adequate risk management procedures and controls before being introduced or undertaken?	0(0%)	29(14.4%)	57(28.4%)	103(51.2%)	12(6.0%)
Do you think your Bank has established an appropriate overall credit risk environment?	0(0%)	32(15.9%)	53(26.4%)	93(46.3%)	23(11.4%)
Do you think the existence of an appropriate credit risk environment affects Loan performance in your bank?	0(0%)	21(10.4%)	30(14.9%)	143(71.1%)	7(3.5%)

Source: Own Survey, 2019

From the above table, respondents asked: "Does your bank have a sound credit risk management system?" For this statement out of the total respondents 68.2% selected

options agree and 2.0% selected strongly agree which is equivalent to sum of 70.2%. This indicates the CBE has sound credit risk management system which helps the managers of credits to manage very well the risk of credits.

Second query is "Do you have a Board of Directors that approves the credit risk strategy and relevant credit risk policies of your bank?" For this statement also out of the total respondents 40.3 selected options agree and 16.9 selected strongly agree which is equivalent to sum of 57.2%. This shows the board of directors needs to be improved because 57.2% it's not enough for approving the credit risk strategy and the relevant credit risk policies of their bank.

The third query is "Does the senior management in your bank strictly implement the credit risk strategy approved by the Board of Directors?" For this statement out of the total respondents 49.3% selected option agrees and 11.9% selected strongly agree which is equivalent to sum of 60.2%. On the other hand 18.4% of the respondents selected option disagree 20.4% selected neutral which equivalent to 38.8% showing lowest percentage as compared to respondents accepted. This indicates the senior management is working strictly for implementing the strategy approved by the board of directors.

The fourth is "Does the senior management in your bank develop policies and procedures for identifying, measuring, monitoring and controlling credit risk?" For this statement out of the total respondent's 43.8 selected options agree and 8.5% selected strongly agree which is equivalent to sum of 52.3%. For this statement there is 16.4 disagreement and 31.3% of the total respondents selected option neutral. This showing the policies and procedures are not well developed because the managers of credit risk management should have skills, knowledge and ability for monitoring and controlling credit risk.

The fifth is "Does the credit risk policies and procedures developed address credit risk management in all the bank's activities and at both the individual level, bank level?" For this statement out of the total respondent selected 44.3% agree and 7.0 %strongly agree which is equivalent to sum of 51.3%. The policies and procedures should be ameliorated because 51.3% are not enough for effectiveness and efficiency of credit risk management.

The sixth is" Does your Bank identify and manage credit risk inherent in all products and activities" For this statement out of the total respondents 43.8 %selected option agree and 10.9% selected strongly agree which is equivalent to the sum of 57.7% where disagree is 23.9% and 21.4 selected option neutral. This statement indicates all products and activities are not identified and managed in connection with credit risk(because 57.7% is not enough for managing credit risk). The bank should manage all activities inherent to credit risk for avoiding the failure of bank.

The seventh is "Does the bank subject new credit products and activities to adequate risk management procedures and controls before being introduced or undertaken?" For this statement out of the total respondents 51.2 %selected option agrees and 6.0% selected strongly agree which is equivalent to the sum of 57.2%. This indicates the bank has an adequate risk management procedures and controls before introducing new products and activities.

The eighth is "Do you think your Bank has established an appropriate overall credit risk environment?" For this statement out of the total respondents 46.3% selected options agree and 11.4% selected strongly agree which is equivalent to sum of 57.7%. On the other hand 15.9% of the respondents selected option disagree 26.4% selected neutral which equivalent to 42.3% showing lowest percentage as compared to respondents accepted. This statement showing the credit risk environment is not effective, the bank should establish an appropriate credit risk environment to overcome the problems caused by the credits

The ninth is "Do you think the existence of an appropriate credit risk environment affects Loan performance in your bank?" For this statement out of the total respondent's 71.1% selected options agree and 3.5% selected strongly agree which is equivalent to sum of 74.6%. Hence, the majority of the participants gave 'somewhat' positive response on the establishment of appropriate Credit risk environment in commercial bank of Ethiopia

It is stated that a credit risk strategy should clarify the types of credit the bank is willing to grant and its target markets as well as the required characteristics of its credit portfolio. According to Saunders (2003), these strategies should reflect the bank's tolerance for risk and the level of profitability the bank expects to achieve for incurring various credit risks. Again, Boating's (2004) study shows that the credit risk strategy of a bank should give recognition to the goals of credit quality, earnings and growth.

Every bank, regardless of size, is in business to be profitable and, consequently, must determine the acceptable risk return trade-off for its activities, factoring in the cost of capital (Richard, 2010).

While credit policies express the bank's credit risk management philosophy as well as the parameters within which credit risk is to be controlled, covering topics such as portfolio mix, price terms, rules on asset classification(Hennie 2003). According to Boating (2004), a cornerstone of safe and sound banking is the design and implementation of written policies and procedures related to identifying, measuring, monitoring and controlling credit risk. Such policies, according to Harper (2008), should be clearly defined, consistent with prudent banking practices and relevant regulatory requirements, and adequate for the nature of the bank (Fotoh, 2005); states that the credit risk strategies and policies should be effectively communicated throughout the organization. All relevant personnel should clearly understand the bank's approach to granting and managing credit and should be held accountable for complying with established policies and procedures. Moreover, establishing an appropriate credit environment also indicates the establishment of a good credit culture inside the bank, which is the implicit understanding among personnel about the lending environment and behavior that are acceptable to the bank (Strischek, 2002).

4.2. Sound credit appraisal process

Operating under a Sound Credit appraisal process is the Basis for an effective Credit risk management process under which feasible and creditworthy client is identified. Table 4 indicates the descending order of six questions in terms of percentage**.**

Table 5 .Sound credit appraisal process

Statements	SD	D	N	A	SA
Do you think your Bank operates within the standards of accepted credit appraisal system?	0(0%)	8(4.0%)	16(8.0%	165(82.1%)	12(6.0%)
Do you think your Bank has established overall credit limits both at individual borrowers and counterparties level	0(0%)	24(11.9%)	42(20.9%)	111(55.2%)	24(11.9%)
Do you think your Bank has a clearly established System for approving new and re-financing of existing credits?	0(0%)	7(3.5%)	26(12.9%)	147(73.1%)	21(10.4%)
Do you think that all extensions of credit are made on an arm's-length basis	0(0%)	4(2.0%)	94(46.8%)	67(33.3%)	36(17.9%)
Do you think your credit risk management system operates under a sound credit appraisal process?	0(0%)	12(6.0%)	35(17.4%)	117(58.2%)	37(18.4%)
Do you think a sound credit appraisal process affects loan performance in your Bank in general?	0(0%)	7(3.5%)	26(12.9%)	126(62.7%)	42(20.9%)

Source: Own Survey, 2019

The first question is" Do you think your Bank operates within the standards of accepted credit appraisal system?" For this statement 82.1% of the total respondent agrees and the remaining 6.0% respondent strongly agrees for the given statement. This indicates the bank operating its activities within the standards of accepted by credit appraisal system.

The second statement is" Do you think your Bank has established overall credit limits both at individual borrowers and counterparties level'' For this statement 55.2 % of respondents were agreed and 11.9% of them agreed strongly. These show there are some limits related to the individual borrowers and counterparties level.

In connection with the above two questions the third statement is "Do you think your Bank has a clearly established System for approving new and re-financing of existing credits?" For this statement also 73.1 % of the respondents were agreed and 10.4% strongly agreed. The sum of the respondents agreed was 83.5% while the remaining

12.9% didn‘t decide and 3.5% disagreed. Generally speaking Commercial Bank of Ethiopia has been assessing the possible occurrences credit risks by using qualitative and quantitate methods.

The fourth statement is “Do you think that all extensions of credit are made on an arm’s-length basis?” For this statement also 33.3% of the respondent‘s agreed and 17.9% strongly agreed. The sum of the respondents agreed was 51.2% while the remaining 46.8% didn‘t decide and 2% disagreed .Here, the bank extents the credits without considering the policies and procedures because the 51, 2% is less for managing the extensions of credit.

The fifth question is” Do you think your credit risk management system operates under a sound credit appraisal process?” For this statement also 58.2 % of the respondents were agreed and 18.4% strongly agreed. This is indicates the credit risk management of bank should be operated under a sound appraisal process. Hence, without monitoring and controlling the bank can’t understand the risk of credit it will be difficult for managers to know and manages the credits risk.

In connection to the above five question the last statement is “Do you think a sound credit appraisal process affects loan performance in your Bank in general?” For this statement 62.7% of respondents were agreed and 20.9% of them agreed strongly. The remaining 12.9% of the respondents didn‘t decide and 3.5% of the respondents are disagreed. This indicates that Commercial bank of Ethiopia enhances Credit limit system, level of Credit diversification and obtaining sufficient and up-to-date micro and macro-economic data relatively. Lending business without gathering the necessary information is just like putting money in fire.

The Basel Committee (2000; 2001) asserts that in order to maintain a sound credit portfolio, a bank must have an established formal transaction evaluation and approval process for the granting of credits. Approvals should be made in accordance with the bank’s written guidelines and granted by the appropriate level of management. There should be a clear audit trail documenting that the approval process was complied with and identifying the individual(s) and/or committee(s) providing input as well as making the credit decision (Boating, 2004).

A sound credit granting process requires the establishment of well-defined credit granting criteria as well as credit exposure limits in order to assess the creditworthiness

of the obligors and to screen out the preferred ones. In this regard Schonbucher (2000) and Maharaja (2004) assert that banks have traditionally focused on the principles of five Cs to estimate borrowers' creditworthiness. This model was developed in the 1970.

These five Cs are:

i. Character. This refers to the borrower's personal characteristics such as honesty, willingness and commitment to pay debt. Borrowers who demonstrate high level of integrity and commitment to repay their debts are considered favorable for credit.

ii. Capacity. This also refers to borrowers' ability to contain and service debt judging from the success or otherwise of the venture into which the credit facility is employed. Borrowers who exhibit successful business performance over a reasonable past period are also considered favorable for credit facility.

iii. Capital. This refers to the financial condition of the borrower. Where the borrower has a reasonable amount of financial assets in excess of his financial liabilities, such a borrower is considered favorable for credit facility.

iv. Collateral. These are assets, normally movable or unmovable property, pledged against the performance of an obligation. Examples of collateral are buildings, inventory and account receivables. Borrowers with a lot more assets to pledge as collateral are considered favorable for credit facility.

v. Condition. This refers to the economic situation or condition prevailing at the time of the loan application. In periods of recession borrowers find it quite difficult to obtain credit facility. Banks must develop a corps of credit risk officers who have the experience, knowledge and background to exercise prudent judgment in assessing, approving and managing credit risks.

4.3. Credit Administration, Measurement and Monitoring Process

Proper administration of credit documentation as well as monitoring the status of borrowers, loan term & conditions and collateral coverage periodically as well as keeping credit file up to date and repayments continuously is the basic post credit approval activities of credit risk management process. This helps to discover mistakes at early stage, while management information system and internal risk rating is the main ingredient for monitoring, reporting and controlling risks to assess the monitoring

systems and practices of CBE. The researcher developed eight questions and the results are presented below:

Table 6. Credit Administration, Measurement and monitoring process

Statements	NE	LE	ME	GE	VGE
Do you think your Bank has a system for the on-going administration of various credit risk-bearing portfolios?	0(0%)	38(18.9%)	22(10.9%)	138(68.7%)	3(1.5%)
Do you think your Bank has a system for monitoring the condition of individual credits, including determining the adequacy of provisions and reserves?	10(5.0%)	53(26.4%)	33(16.4%)	100(49.8%)	5(2.5%)
Do you think the rating system is consistent with the nature, size and complexity of your Bank's activities?	8(4.0%)	21(10.4%)	46(22.9%)	110(54.7%)	16(8.0%)
Do you think your Bank has information systems and analytical technics that enable management to measure the credit risk inherent in all on- and off-balance sheet activities?	0(0%)	33(16.4%)	70(34.8%)	91(45.3%)	7(3.5%)
Do you think the management information system should provide adequate information on the composition of the credit portfolio?	0(0%)	41(20.4%)	29(14.4%)	99(49.3%)	32(15.9%)
Does your Bank take into consideration potential future changes in economic conditions when assessing individual credits and their credit portfolios?	0(0%)	51(25.4%)	43(21.4%)	94(46.8%)	13(6.5%)
Does your Bank maintain an appropriate credit administration, measurement and monitoring processes?	0(0%)	19(9.5%)	35(17.4%)	130(64.7%)	17(8.5%)
Do you think an appropriate credit administration, measurement and monitoring process affect loan performance in your Bank?	10(5.0%)	4(2.0%)	39(19.4%)	116(57.7%)	32(15.9%)

Source: Own Survey, 2019

The first statement was "Do you think your Bank has a system for the on-going administration of various credit risk-bearing portfolios?" For this tribute 68.7% of the respondents were a great extended, 1.5 were very great extended for sum of 70.2% the

remaining 3.6% said moderate extent and 18.9% no extent. This statement shows the bank has an effectiveness administration of credit system; the bank should have the portfolios of credit risk.

The second statement says “Do you think your Bank has a system for monitoring the condition of individual credits, including determining the adequacy of provisions and reserves?”49.8% to a great extent, 2.5% to a very great extent. It is not easy to monitor the credits with the individual’s conditions; the bank should pay attention to this one, itcould use the monitoring system which permits him to manage the credit risk.

The third statement was “. Do you think the rating system is consistent with the nature, size and complexity of your Bank’s activities? “For this query also 54.7% said to a great extent and 8.0% very great extent which is equivalent the sum of 62.7% of great extent. This indicates the rating system is consistent with credit environment. The managers of credit should have the knowledge required because the activities of banks are complexes.

To assess the communication of monitored results the researcher requested the respondents by the forth statement “Do you think your Bank has information systems and analytical technics that enable management to measure the credit risk inherent in all on- and off-balance sheet activities” For this request 45.3% of the respondents said great extent and 3.5% very great extent. This figure shows 48.8%of respondents answered great extent the existence of monitoring results credit doesn’t performer‘ while the remaining 34.8% moderate extent and 16.4% no extent. Communication of results has absolute importance to come up with proactive decision especially in preventing credit risks before its negative impact. Therefore CBE should give due consideration for communication throughout in the process of granting credit products up to settlement

The fifth question is” Do you think the management information system should provide adequate information on the composition of the credit portfolio?” for this request 49.3 of respondents said great extent and 15.9 very great extent which is equivalent to 65.2% of great extent. This indicates the information system is adequate in Commercial Bank of Ethiopia, every credit managers should know what they have in credit portfolio

The sixth statement is “Does your Bank take into consideration potential future changes in economic conditions when assessing individual credits and their credit portfolios?”

For this tribute 46.8 % of the respondents said a great extent, 6.5% very great extent for sum of 53.3% the remaining 21.4% said moderate extent and 25.4% little extent. This indicates the potential future changes in economic conditions is less because it difficult to the individuals conditions.

The seventh statement is “Does your Bank maintain an appropriate credit administration, measurement and monitoring processes?” For this tribute 64.7 % of the respondents said a great extent, 8.5% very great extent for sum of 73.2% the remaining 17.4% said moderate extent and 9.5% little extent. This shows the bank maintain an appropriate administration to truck progress of credit risk management

The last general statement says “Do you think an appropriate credit administration, measurement and monitoring process affect loan performance in your Bank?” Majority of the respondents by 73.6 %(57.7% great extent, 15.9 very extent) confirmed monitoring as integral part credit risk management process few of them (5.0%) no extent.

From all this analysis monitoring activities as integral part of credit process in monitoring the existence of response plan and implementation in case of credit risk probabilities, follow up of the loan status and communicating results in time for appropriate decision should help CBE, not only minimize credit risk but also to sustain in the banking industry and achieve its vision in general. Credit administration is a critical element in maintaining the safety and soundness of a bank. Once a credit is granted, it is the responsibility of the bank to ensure that credit is properly maintained. This includes keeping the credit file up to date, obtaining current financial information, sending out notices and preparing various documents such as loan agreements, and follow-up and inspection reports. Credit administration, as emphasized by Wesley (1993), can play a vital role in the success of a bank, since it is influential in building and maintaining a safe credit environment and usually saves the institution.

4.4. Internal control over credit risk management

Ten items were included in the questionnaire to address the issue of ensuring adequate internal control over Credit risk. Table 6 shows descending orders of ten items in terms of their percentages

Table7. Internal control over credit risk management

Statements	NE	LE	ME	GE	VGE
Does your Bank have an independent internal control system for conducting on going assessment of the bank's credit risk management process?	10(5.0%)	13(6.5%)	36(17.9%)	112(55.7%)	29(14.4%)
Does the results of credit risk management communicated directly to the Board of Directors and senior management?	1(.5%)	11(5.5%)	64(31.8%)	92(45.8%)	33(16.4%)
Does the Internal control system ensure that the credit granting function is properly managed?	7(3.5%)	13(6.5%)	18(9.0%)	124(61.7%)	39(19.4%)
Does the internal control system ensure that the credit exposures are within prudential standards and internal limits?	2(1.0%)	20(10.0%)	37(18.4%)	111(55.2%)	31(15.4%)
Does the internal control system ensure that exceptions to policies, procedures and limits are reported timely to management?	0(0%)	19(9.5%)	48(23.9%)	81(40.3%)	53(26.4%)
Does your Bank have a system in place for early remedial action on deteriorating credits and managing problem related to credits?	0(0%)	19(9.5%)	48(23.9%)	97(48.3%)	37(18.4%)
Do you think that the internal controls over credit risk at your bank are adequate?	0(0%)	18(9.0%)	49(24.4%)	91(45.3%)	43(21.4%)
Do you think the internal control over credit risk affects loan performance in your Bank?	0(0%)	15(7.5%)	38(18.9%)	101(50.2%)	47(23.4%)
Do you think the credit risk management practices adopted by your Bank influences loan performance in general	0(0%)	8(4.0%)	44(21.9%)	102(50.7%)	47(23.4%)
Does your Bank have an internal control system over credit risk management?	0(0%)	7(3.5%)	69(34.3%)	77(38.3%)	48(23.9%)

Source: Own Survey 2019

The first query is “Does your Bank have an independent internal control system for conducting on going assessment of the bank’s credit risk management process? “For this statement out of the total respondents 55.7% selected option ―great extent and 14.4% selected very great extent which is equivalent to sum of 70.1%. This indicates the bank has an independent internal control system for conducting the credit risk management of bank.

Second query is “Does the Internal control system ensures that the credit granting function is properly managed?” For this statement also out of the total respondents 61.7%selected option great extent and 19.4 selected very great extent which is equivalent to sum of 81.1% great extent. This shows the granting function is efficiently managed

The third query is “. Does the results of credit risk management communicated directly to the Board of Directors and senior management?” For this statement out of the total respondents 45.8% selected option great extent and 16.4% selected very great extent which is equivalent to sum of 52.2%. On the other hand 5.5% of the respondents selected option little extent 5% selected moderate extent which equivalent to 31.5% showing lowest percentage as compared to respondents accepted.

The forth is “Does the internal control system ensures that the credit exposures are within prudential standards and internal limits? “For this statement out of the total respondent selected 55.2% great extent and 15.4% very great extent which is equivalent to sum of 70.6%. This shows the bank respect the standards and internal limits for internal control system.

The fifth is “Does the internal control system ensures that exceptions to policies, procedures and limits are reported timely to management?” For this statement out of the total respondent selected 40.3% great extent and 26.4% very great extent which is equivalent to sum of 66.7% of great extent. This indicates the internal control system policies, procedures and limits are reported timely to the management.

The sixth is” Does your Bank have a system in place for early remedial action on deteriorating credits and managing problem related to credits? ” For this statement out of the total respondents 48.3%selected option great extent and 18.4% selected very great extent which is equivalent to the sum of 66.7% where little extent is 9.5% and

23.4 selected option moderate extent. This indicates that CBE reacts quickly when there is a problem connected to the credits.

The seventh is “Do you think that the internal controls over credit risk at your bank are adequate?” For this statement out of the total respondents 45.3 %selected option great extent and 21.4% selected very great extent which is equivalent to the sum of 66.7%. The controls over credit are adequate for anticipating management of credits risk, it is better to be proactive.

The eighth is “Do you think the internal control over credit risk affects loan performance in your Bank?” For this statement out of the total respondents 50.2% selected option great extent and 23. 4% selected very great extent which is equivalent to sum of 73.6%. On the other hand 7.5% of the respondents selected option little extent 18.9% selected moderate extent which equivalent to 26.4% showing lowest percentage as compared to respondents accepted.

The ninth is “Do you think the credit risk management practices adopted by your Bank influences loan performance in general?” For this statement out of the total respondent’s 50.7% selected option great extent and 23.4% selected very great extent which is equivalent to sum of 74.1%. The credit risk management practices adopted in CBE affects loan performances. Hence, if the system and techniques of credit risk management are respected, it should affect the loans performance positively.

The tenth is “Does your Bank have an internal control system over credit risk management?” For this statement out of the total respondents 38.3 %selected option great extent and 23.9% selected very great extent which is equivalent to the sum of 62.2% great extent.

In order to ensure adequate controls over credit, Ganesan (2000) asserts that there must be credit limits set for each officer whose duties have something to do with credit granting. Material transactions with related parties should be subject to the approval of the board of directors and in certain circumstances should be reported to the banking supervisory authorities. The means for guaranteeing adequate controls over credit risk in banks lay in the establishment of different kinds of credit reviews. Regular credit reviews can verify the accordance between granted credits and the credit policies, and an independent judgment can be provided on the asset qualities. This is showing that CBE has the internal control system over credit risk management.

4.5. Results and Discussion from the Interview

1. What credit risk management systems (policies, procedures, strategies and principles) are being employed by the bank so far?

Policies, procedures strategies and principles of the bank

- The commercial code of the country
- Directives of NBE
- Credit policy of CBE
- Credit procedure of the bank
- Basel of principles

2. What gaps are there between what is written in theories and what is actually practiced on the ground at the organizational setting?

- sometimes the bank tried to narrow the gap by circular memos
- The gap on the written procedures when it comes to the ground are not applied according to the procedures
- What I have observed between the theories and practices is that the principle and the written materials usually fail to incorporate the dynamic nature of the actual business.

3. What are the main reasons that can be main causes for credit risks in Commercial Bank of Ethiopia?

- In identifying the risk ,the performer may miss some criteria
- At the time of follow up
- Business cycle
- Behavior change
- Lack of proper following
- Diverting loans by customers to other
- Mal practices in the business world
- Diversion of the loan to unintended purpose
- Lack of proper follow up.

4. What tools or techniques should banks use to manage or mitigate their credit risk exposures?

- Collateral
- Follow up
- Sheet of balance
- Proper control and follow ups
- Strong controlling mechanism
- Emphasis on the following up

5. What should the bank do in the future to set-up effective credit risk management system and practices that would enable them optimize their operations and minimize their risks?

- Prudent lending habit has to be developed both by applicant and banks
- The governmental institutions need to be technologically well managed
- The employees need to be professionals and good personal communication
- The bank should maximize the check and balance system
- Should make the procedure and framework more transparent
- Make the employees more understand the importance of the procedures and provide training
- Internal control system should be strengthened
- The Basel principles should be implemented in full manner
- The bank shall improve its public relationship and corporate citizenship works

4.6. Current credit risk management practice in Commercial Bank of Ethiopia (CBE)

Commercial bank of Ethiopia is now managing its credit risk by two big systems: loan policy and procedures and organizational structure. This specific bank carries a big burden of being part of the banking industry and financing the economic development. Commercial bank of Ethiopia has a share of 55% loan and advances given by the banking industry in Ethiopia on the year 2016. This bank takes only 37.5% of the capital in the industry on the same year. Currently, the commercial banks in Ethiopia are 18, but Commercial Bank of Ethiopia is growing faster and becoming bigger and bigger. This bank manages to get the biggest share of profit in the industry. Commercial bank of Ethiopia is giving a lot of its capital as loan and advance but still required to

improve in managing it. One of the tools used by this bank is organizational structure. The bank put the credit management and credit appraisal and portfolio management under different vice presidents. And the customer handling and the credit appraisal is done in different directorates and the loan approving is done by a committee. If we see the NPL (Non-performing Loans) of this bank with the willingness of the bank, the researcher was able to collect five years data with break down by sector. This helps the researcher to identify the weak spot of this bank.

It seems Commercial Bank of Ethiopia is facing the greatest non-performing loan on the manufacturing sector loan. And the construction and building sector has less and constant nonperforming loan. The other loans seem well managed. To consider the size difference between the sectors, the researcher goes through the loan portfolio of the bank. Then why the NPL of manufacturing sector loan elevate on the year 2017? The portfolio shows there is a constant growth on the manufacturing sector loan provided by Commercial Bank of Ethiopia. And the loan given to the building and construction is low. So, the NPL is depending on the size of the loan provided. But the fast increase of the NPL in the year 2017 by the manufacturing sector indicates some problems in the credit risk management. Or problems have happened in the economy and the bank was not good enough in considering the economic condition of the country. The increase on manufacturing sector seems it is form the increase in the outstanding as even it shows a bit elevated in the year 2017. The building and construction seems totally out lying on the year 2013 but the bank manages to control it and decrease the NPL by the subsequent years.

4.7. Best practice for management of credit risk

The bank that the researcher wanted to use as a benchmarking is the Central Bank of Malaysia (BANK NEGARA MALAYSIA).The Bank has further strengthened its financial stability framework and governance arrangements in the management of financial stability over the 10-year period. The regulation and supervision of financial institutions during this decade has become more risk-focused and pre-emptive to reflect the nature, size and complexity of different institutions. This has been accompanied by a significantly more pronounced focus for the effective oversight of financial institutions by boards and senior management.

The management of system-wide risks to financial stability has also been strengthened, with improved data and information, enhanced tools and methodologies, closer inter-

agency and regional cooperation, and expanded financial stability powers. The following ten best practices can be broken in to four and can be part of the sound practices of credit risk management by Basel committee on bank supervision which is shown in the literature. According to bank of Negara Malaysia best practice guideline for managing credit risk is as follows (BANK NEGARA MALAYSIA (September, 2001)):

- The BOD is expected to adopt a supervisory role and be responsible for ensuring that adequate risk management processes are in place.
- The credit approving function should be performed by full time executive personnel or committee comprising of such The BOD need to have veto power to reject or to modify loans.
- Banking institutions are required to set up a committee to specifically assist the BOD in overseeing the credit risk management process.
- Banking institutions are required to have a product evaluation program, which requires all new credit products to be signed off by all relevant departments affected by the product and approved by the committee or BOD.
- Banking institutions are requires to develop appropriate credit grading systems.
- Banking institutions are required to ensure that personnel involved in credit appraisal, credit approval and credit review are subject to common training programs, pass a common test and receive certification from accredited bodies or individual acknowledged by the BOD before being eligible to approve a credit proposal.
- Banking institutions are required to have an independent credit review department/ unit.
- Banking institutions are required to conduct stress analysis at least once every six months.
- Banking institutions are required to set an internal limit on single customer exposure.
- Banks are required to assess credit based primarily on repayment capacity rather than on collateral, which should be secondary.

From the above mentioned best practices the Commercial Bank of Ethiopia has implemented most of it. CBE’s BOD delegate the responsibility of insuring that

adequate risk management process to the process council. For credit approving function CBE has full time executive personnel or committee comprising of such. The BOD need to have veto power to reject or to modify loans. Banking institutions are required to set up a committee to specifically assist the BOD in overseeing the credit risk management process which CBE has.

Banking institutions are required to have a product evaluation program, which requires all new credit products to be signed off by all relevant departments affected by the product and approved by the committee or BOD. Commercial Bank of Ethiopia implements it partially, presents new products after they are approved by the process council, which is composed of relevant department heads. As shown in the best practice banking institutions are required to develop appropriate credit grading systems and CBE did. Commercial bank of Ethiopia works on training officers and skill improvement which is not enough. The separation of duty in CBE can be mentioned as the banking institutions are needed to have an independent credit review department/ unit. Thanks for the NBE it obliges the banks to do a stress test. The same is true for single borrower limit is set by NBE.

These are not the only problems; the banks have a problem of predicting the economy and understand how the market operates. The skill gap shown in predicting the economy and limited understanding of the market exposes them to unseen risks. And from the evaluation conducted with the help of the principles provided by Basel committee on bank supervision, the researcher understood the above mentioned problems are contradictions with the principles and furthermore the researcher observes less effective strategy in understanding the market and the economy

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary of major findings

- Senior management of the Commercial Bank of Ethiopia understood their responsibility for implementing the credit risk strategy approved by the Board of Directors and for developing policies and procedures for identifying, measuring, monitoring and controlling credit risk in order to address credit risk in the bank‘s activities and at both the individual credit and portfolio levels. This has been confirmed by the respondents.
- The result shows that Commercial Bank of Ethiopia has significant Achievement with regards to current risk management trends by creating credit risk management environment up to date.
- Commercial Bank of Ethiopia identifies possible risks in order to grant credit products with defined parameters and scope. In doing so the bank keeps its staff updated through training on possible risks. In addition the identified risk were registered for further analysis and also helps the performers to anticipate the risks mitigation measure And that is helping the Commercial Bank of Ethiopia to achieve the objective of the loan and financial performance of the bank at large with minimum risk recorded.
- During the research the findings have shown that Commercial Bank of Ethiopia uses different quantitative and qualitative method of measurements to assess the possible occurrences of credit risks. After assessment of the possible occurrences of credit risks by using qualitative and quantitative methods Commercial Bank of Ethiopia develops action plans in order to implement and manage credit risk if it happens. Finally risk management processes are well documented and provide guidance to staffs about the management of risk.
- The analysis has revealed that the CBE conducted monitoring activities as integral part of credit process in monitoring the existence of response plan and implementation in case of credit risk probabilities, follow up of the loan status and communicating results in time for appropriate decision should help CBE not only minimize credit risk but also to sustain in the banking industry and achieve its vision.

- The analysis result shows attitude, perceptions, behaviors, styles, practices, and believes of CBE's employee in managing the credit risk is up to the standards that is helping the bank for the quality of judgment, knowledge of subjective information to critically solve problems under consideration.
- The result shows the existing work force composition with different skills and competence with proper understanding of credit appraisal is also competent enough with banks credit risk exposure that helps to see different credit risk possibilities in advance and anticipate the solution.
- According to respondents' result the participation of credit performers in credit related staff training is not frequent.
- Respondents result evident that the interval of assessment about credit risk was not made frequently.
- The finding showed that Commercial Bank of Ethiopia did not give priority for evaluation like the other credit risk management processes component.
- According to respondents' result, the interval of credit risk management is not frequent as needed. Further improvement may be required.

5.2 conclusion

Commercial Bank of Ethiopia as a government owned bank has a key role to play in the development of the country including financing different infrastructures. To achieve this critical goal, the bank mobilizes finance in different ways from the citizens across the country and counter finances different projects, businesses and infrastructures that play a catalyst role in the development of the country at a reasonable price.

Therefore CBE should manage the allocation of mobilized money to repay back the citizens for further circulation and sustainability. The investigation of the healthiness of credit risk management systems and practices of Commercial Bank of Ethiopia in view of its strategic management development and implementation of its strategy by developing the right techniques and processes with trained and experienced human resources who are able to using the art of technology was one of the key aspects the research considered.

Finally, the success of the risk management within Commercial Bank of Ethiopia has been possible due to the measure taken by the following reasons

- ❖ Board of Directors and management did actions that determine the long run performance of the organization.
- ❖ Senior management had understood their responsibility for implementing the credit risk management strategy approved by the Board of Directors.
- ❖ Commercial Bank of Ethiopia achieves significant stapes to keep up to date with current risk management trends by creating credit risk management environment up to date.
- ❖ Commercial bank of Ethiopia identifies possible risks in order to grant credit products with defined parameters and scope.
- ❖ Different combination of technique is used to consistently identify credit risk.
- ❖ Identified risk was registered for further analysis to anticipate solutions.
- ❖ Commercial Bank of Ethiopia uses different quantitative and qualitative methods to measure and assess the possible occurrences of credit risks.
- ❖ Monitoring activities was an integral part of credit risk management.
- ❖ Attitude, perceptions, behaviors, styles, practices, and believes of CBE‘s employee in managing the credit risk help also to move forward
- ❖ The existing skilled personnel in credit appraisal is also contributing to the significant results that Commercial Bank of Ethiopia had achieved

5.3 Recommendations

Based on the findings the researcher would recommend the following points:

- ❖ To achieve better result in managing credit risks, Commercial Bank of Ethiopia should make frequent credit risk assessment and monitoring.
- ❖ Commercial Bank of Ethiopia should inculcate and improve evaluation as a basic process in its credit risk management process, the effectiveness of the risk management strategy should be evaluated frequently, verify whether the resulting risk taking remains in line with the strategy and apply corrections whenever deemed necessary.
- ❖ Communication of results to the concerned credit performers is important to come up with an informed decision especially in preventing credit risks before it occurs. Therefore CBE should give due consideration for communication throughout the process of granting credit products up to settlement is done.
- ❖ For any company to achieve success, human resource is always at the heart because activities are exercised by humans and the risk appetite is not constant

for all credit performers. It will change and evolve over time as the case in which the organization operates changes. For this reason CBE should consider all credit processing staffs as important factors for healthy credit risk management by offering them professional training to empower them to perform efficiently their critical mandate for the benefit of the Bank.

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APPENDICES

APPENDIX I

Work plan (time- frame)

The research work time is planned in 6 months from December 2018 to May 2019.

No	Activities	M1	M2	M3	M4	M5	M6
1	Proposal writing	X					
2	Review of Related Literature		X				
3	Data Collection			X			
4	Research Report Writing				X		
5	Submission of Draft Report					X	
6	Submission of Final Report						X

APPENDIX II

Research budget

Expense	**Unit**	**Cost unit ($)**	**Total cost ($)**
Transport			**50**
Materials			
Stationery materials	**Overall**		**75**
Secretarial service	**Overall**		**25**
Airtime	**Overall**		**30**
TOTAL			**180**

APPENDIX III

Questionnaire

Instructions: Please tick where appropriate. Your cooperation and feedback is valued and highly appreciated.

Section A: Credit Risk Environment

1. To what extent do you agree with the following statement on establishing a proper credit risk environment in your Bank? **Rate using a scale of 1 to 5 where 5 is strongly agree, 4 is Agree, 3 is Neutral, 2 is Disagree and 1 is Strongly disagree.**

Statements	1	2	3	4	5
Does your bank have a sound credit risk management system?					
Do you have a Board of Directors that approves the credit risk strategy and relevant credit risk policies of your bank?					
Does the senior management in your bank strictly implement the credit risk strategy approved by the Board of Directors?					
Does the senior management in your bank develop policies and procedures for identifying, measuring, monitoring and controlling credit risk?					
Does the credit risk policies and procedures developed address credit risk management in all the bank's activities and at both the individual level, bank level?					
Does your Bank identify and manage credit risk inherent in all products and activities?					
Does the bank subject new credit products and activities to adequate risk management procedures and controls before being introduced or undertaken?					

Do you think your Bank has established an appropriate overall credit risk environment?					
Do you think the existence of an appropriate credit risk environment affects Loan performance in your bank?					

Section B: Sound Credit Appraisal Process

2. To what extent do you agree with the following statements about operating under a sound credit appraisal process in your Bank**? Rate using a scale of 1to 5 where 5 is strongly agree, 4 is Agree, 3 is Neutral, 2 is Disagree and 1 is strongly disagree**

Statements	**1**	**2**	**3**	**4**	**5**
Do you think your Bank operates within the standards of accepted credit appraisal system?					
Do you think your Bank has established overall credit limits both at individual borrowers and counterparties level					
Do you think your Bank has a clearly established System for approving new and re-financing of existing credits?					
Do you think that all extensions of credit are made on an arm's-length basis					
Do you think your credit risk management system operates under a sound credit appraisal process?					
Do you think a sound credit appraisal process affects loan performance in your Bank in general?					

Section C: Credit Administration, Measurement and Monitoring Process

3. To what extent do you agree with the following statements about credit administration, measurement and monitoring process in your Bank? **Use a scale of 1to 5 where to a very great extent, 4 is to a great extent, 3 is to a moderate extent, 2 is to a little extent while 1 is to no extent**

Statements	**1**	**2**	**3**	**4**	**5**
Do you think your Bank has a system for the on-going administration of various credit risk-bearing portfolios?					
Do you think your Bank has a system for monitoring the condition of individual credits, including determining the adequacy of provisions and reserves?					
Do you think the rating system is consistent with the nature, size and complexity of your Bank's activities?					
Do you think your Bank has information systems and analytical technics that enable management to measure the credit risk inherent in all on- and off-balance sheet activities?					
Do you think the management information system should provide adequate information on the composition of the credit portfolio?					
Does your Bank take into consideration potential future changes in economic conditions when assessing individual credits and their credit portfolios?					
Does your Bank maintain an appropriate credit administration, measurement and monitoring processes?					

Do you think an appropriate credit administration, measurement and monitoring process affect loan performance in your Bank?					

Section D: Internal Control over credit risk management

4. To what extent does the following credit risk management element influence loan performance in your Bank? **Use a scale of 1 to 5 where 5 indicates to a very great extent, 4 is to a great extent, 3 is to a moderate extent, 2 is to a little extent while 1 is to no extent**

Statements	**1**	**2**	**3**	**4**	**5**
Does your Bank have an independent internal control system for conducting on going assessment of the bank's credit risk management process?					
Does the results of credit risk management communicated directly to the Board of Directors and senior management?					
Does the Internal control system ensure that the credit granting function is properly managed?					
Does the internal control system ensure that the credit exposures are within prudential standards and internal limits?					
Does the internal control system ensure that exceptions to policies, procedures and limits are reported timely to management?					
Does your Bank have a system in place for early remedial action on deteriorating credits and managing problem related to credits?					
Do you think that the internal controls over credit risk at your bank are adequate?					
Do you think the internal control over credit risk affects loan performance in your Bank?					

Do you think the credit risk management practices adopted by your Bank influences loan performance in general					
Does your Bank have an internal control system over credit risk management?					

Open questionnaire

1. What credit risk management systems (policies, procedures, strategies and principles) are being employed by the banks so far?

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2. What gaps are there between what is written in theories and what is actually practiced on the ground at the organizational setting?

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2. What are the main reasons that can be the main causes for credit risks in commercial Bank of Ethiopia, particularly at the HQ?

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4. What tools or techniques should banks use to manage or mitigate their credit risk exposures?

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5. What should the banks do in the future to set-up effective credit risk management system and practices that would enable them optimize their operations and minimize their risks?

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THANK YOU FOR YOUR KIND PARTICIPATION