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**ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF ACCOUNTING AND FINANCE**

**THESIS TITLE:-FACTOR AFFECTING CREDIT RISK MAMANGMENT PRACTICE
OF PRIVATE COMMERCIAL BANKS OF ETHIOPIA**

**A Partial Fulfillment for the Requirements of Masters of Science in
Accounting and Finance.**

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Statement of Declaration

This is to certify that, the thesis is prepared by *Hailu Endeshaw*, entitled: *Factor Affecting Credit Risk Management Practice of private Commercial Banks of Ethiopia* and submitted in partial fulfillment of the requirements for the degree of Master of Science in Accounting and Finance complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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Abstract

The study assessed factor affecting credit risk management practice of some selected private banks in Addis Ababa. The study was identifying the factors that influence credit risk management practices of the banks focused on the six dimensions of service quality such as, on the establishment of credit risk environment, credit granting process, credit risk measurement and monitoring processes, market risk, operational risk and legality risk. To achieve the overall objective of the study data were collected from four private commercial banks such as, Oromia International Bank, Birhan International Bank, Debub Global International Bank and Anbesa International. Accordingly, 106 respondents participated in the study using a purposive sampling technique. In this ways the study used both descriptive and explanatory research design and the data were analyzed using frequency, percentage, means, Std. deviation, Pearson correlation as well as regression. The data were analyzed by using SPSS Package version 20. Based, on this the result of correlation coefficient shows that all variables are statistically significant and positively correlated with the credit risk management practice of the studied banks. Accordingly, the bank's credit risk management was more affected by lack of establishing appropriate credit environment which represented, followed by challenges of credit appraisal measurement and monitoring, Lack of Market risk analyses, Operational risk and challenges sound Credit granting process, however, Legality of risk assessment has a negative relation and insignificant impact on credit risk management practices of the study banks. The Result regression coefficients also implied the extent of the independent variables influence on the dependent variables. Accordingly the result coefficient value of regression analysis indicated that, lack of appropriate credit risk environment (beta = .993, t = 9.612, p = < .000), followed by lack of operational risk management (beta = .713, t = 1.003, p = .318) and lack of credit measurement and monitoring process (beta = .610, t = -571, p < .569) respectively and significantly affect credit management practice of the studied private banks. Based on the findings the study recommend the following management bodies of the of the banks further investigate the main reason of that affect credit risk management practice of their respective banks and tried to create Continuous improvements on the major factors affecting credit risk management area.

Key words: Credit Risk Management, Credit Risk Environment, Credit Granting Process, legality Risk, Operational Risk, Market Risk,

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LIST OF ACROMYS

FIs =	Financial Institution
II =	Interest Income
NBE =	National Bank of Ethiopia
NPL =	Nonperforming Loan
ROA =	Return on Asset
ROE=	Return on Equity
ACRE =	Establishing an Appropriate Credit risk environment:
SCGP =	Operating under a sound Credit granting process
CAMMP=	Maintaining an Appropriate Credit Administration, Measurement and monitoring process
MRA=	Ensuring Adequate Market Risk management
ORA =	Appropriate Operational Risk assessment
ALR=	Assessment of Legality of Credit Risk

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

The financial sector plays an important role in the development of the economy and growth in any country. The banking sector is considered as an important source of financing for most businesses. The past decade has seen dramatic changes in managing risk in this industry. In recent years, supervisors and financial institutions have increased the focus on the importance of risk management (Davide and Thangavel, 2008).

According to Edward (2006) risk management defined as the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities.

Credit risks can come from uncertainty in financial markets, project failures, legal liabilities, credit risk, accidents, natural causes and disasters as well as deliberate attacks from an adversary. The strategies to manage risk include transferring the risk to another party, avoiding the risk, reducing the negative effect of the risk, and accepting some or all of the consequences of a particular risk (Yuqi Li ,2006)

Credit risk is by far the most significant risk faced by Banks and the success of their business depends on accurate measurement and efficient management of this risk to a greater extent than any other risk. Increases in credit risk will raise the marginal cost of debt and equity, which in turn increases the cost of funds for the Bank (Basel Committee, 2011).

Credit creation is the main income generating activity for the Banks. But this activity involves huge risks to both the lender and the borrower. The risk of a trading partner not fulfilling his or her obligation as per the contract on due date or anytime thereafter can greatly jeopardize the smooth functioning of Bank's business. On the other hand, a Bank with high credit risk has high bankruptcy risk that puts the depositors in jeopardy. To maintain adequate profit level in this highly competitive environment, Banks have tended to take excessive risks. However, it exposes the banks to credit risk. The higher the Bank exposure to credit risk, the higher the tendency of

the Banks to experience financial crisis and vice-versa (Cebenoyan, 2004). The Basel Committee on Banking Supervision (2003) asserts that loans are the largest and most obvious source of credit risk.

Having an effective risk management is a crucial for banking business. Without a doubt, in present day's unpredictable and explosive atmosphere all banks are in front of enormous risks such as, credit risk, liquidity risk, operational risk, market risk, foreign exchange risk and interest rate risk, along with other risks, which may possibly affect the Survival and successes of banks (Richard, 2011).

Credit risk management is very important to banks as it is an integral part of the loan process. It maximizes bank risk, adjusted risk rate of return by maintaining credit risk exposure with view to shielding the bank from the adverse effects of credit risk. Banks are investing a lot of funds in credit risk (Tibebu, 2011).

Banking industry in Ethiopia was dominated until very recently by the public owned commercial banks namely Commercial Bank of Ethiopia and Development Bank of Ethiopia. The sector was opened for private investors since the 90s. Since then some 16 private banks have been established and have been a significant engine for the growing economy. Private commercial banks in Ethiopia extend credit (loan) to different types of borrower for many different purposes. However, as the private banks in the country have are very young age they can be threatened by the lack of effective credit management practice. Therefore, it is important assessing private banks risk management practice and identify major factors which affect Private Banks's credit risk management practice.

1.2 Statement of the Problem

In its simplest form, credit risk management involves the identification, evaluation and management of a company's exposures to loss. In other words, credit risk management attempts to mitigate the occurrence of losses while initiating advance planning to assure that adequate funds will be available to cover those losses that occur (Yong, 2003).

While financial institutions have faced difficulties over the years for a multitude of reasons, the major cause of serious banking problems continues to be directly related to credit standards for borrowers and counterparties, poor portfolio risk management, or a lack of attention to changes in economic or other circumstances that can lead to a deterioration in the credit standing of a bank's counterparties (Cebenoyan, 2004).

Banks credit risk management practices can be affected by internal and external factors. Government policy, infrastructure facilities, inflation, global economic crises, credit culture of the society and economic level of the countries are among external factors that can affect credit risk management practice of commercial banks, on the other hand, Poor credit assessment technique, poor credit approval process, lack of credit management tools, lack of supervisory monitoring and evaluating, lack of effective credit guideline and inadequate employee are some of the internal factors determine credit risk management practice of commercial banks (Yuqi Li, 2006).

Since exposure to credit risk continues to be the leading source of problems in banks World-wide, banks and their supervisors should be able to draw useful lessons from past experiences. Banks should now have a keen awareness of the need to identify measure, monitor and control major credit risk factors before the bank incurred to risks (Atakelt, 2015).

Developing a strong credit risk management framework can help commercial banks to minimize exposures to risks and to improve the competitive ability within the market.

Private banks in Ethiopia provide several types of credit facilities such as, Overdraft credit service, merchandise loan facilities, pre-shipment export facilities, revolving credit facilities, special truck loan financing, short term loan, medium and long term loan agricultural input loans, etc.,.

According to the survey National Bank of Ethiopia (NBE) (2010), the private commercial banking system in Ethiopia has been witnessing a significant expansion over the past ten years than before though the Ethiopian banking industry was still Underdeveloped. The survey believes that such growth should be matched with strong credit risk management practices. This is because with the fastest economic growth of the country, societal demand of credit service also increase and this situation may credit risk on the banks unless and otherwise banks have effective credit risk management program. Accordingly, this research believe that to tackle credit risk management practice of private banks an academic study should focus first of all on identifying factors that affect credit risk management practice of private banks. Based on this study will focus identifying major factors determining credit risk management of private banks.

With related to credit risk issues the study tried to assess different published and unpublished research results to reduce similarities with other researches. Accordingly, there are a number of studies provided on issues related to credit risk management in Ethiopia: majority of the studies done in the banking sector of Ethiopia has been focused on the impact of credit management on financial performance, tools of credit management, liquidity risk and bank performance determinants. To mention just a few among the studies by different postgraduate students and researchers such as, Yalemzewd (2013) assess credit management practice of Bunna International Bank S.C and analyzed the process of accessing credit, credit control process and credit collection strategy against non-performing loan of the bank.

Tibebu (2011) assesses credit risk management practice of Nib International Bank S.C and find out that risk which emanates from credit is due to high degree of credit concentration in few sector and borrowers and Girma (2010) in his study of tools used to credit management in Wegagen Bank deal only focusing on the tools used by the bank to manage risk. However, in Ethiopia none of the studies addresses in examining factor affecting credit risk management practice of private banks. The main purpose of the study is to follow a comprehensive approach towards identifying credit risk determinant factors assessing several selected several private banks.

To this end, the underlying motivation of the researcher is to fill this gap on literature and to make an effort to bring empirical evidence by identifying major factors affecting credit risk management practice of private commercial banks of Ethiopia. Thus, this study contributed to

the limited literature on credit risk management practice of banks and its contributions in identifying major determinate factors on the finding.

1.3 Research Question

Based on the provided statement problem the study will tried to answer the following basic research questions

1. How establishing Credit risk environments affect credit risk of the banks?
2. How Credit Granting processes affect the Banks Credit risk management Practice?
3. How Credit Measurement and Monitoring process Affect Credit risk management Practice?
4. How Market Risk Affect the banks Credit risk management Practice?
5. How Operational Risk affect credit risk of the banks?
6. How Legality risk affect Risk management practice of the banks?

1.4 Objective of the Study

The major objective of the study is to assess factor affecting credit risk management practice of private commercial banks in Ethiopia

1.4.1 Specific Objective of the Study

The specific objective of the study is:

1. To examine the effect credit risk, procedures, rules, and others the establishing Credit risk environments effect on credit risk management practice of the Banks
2. To assess credit granting processes of the banks and its effect on credit risk management practice of the banks
3. To examine the effect of Credit Measurement and Monitoring process of the banks n credit risk management practice
4. To examine the effect of Market risk effect on the credit risk management practice of the banks
5. To examine the effect of operational challenges on the credit risk management practice of the banks
6. To examine the effect of legality risk on credit management practice of the banks

1.5 Significance of the Study

The researcher finding and recommendation is important for management of the banks and it can draw attention to some of the points where corrective actions are necessary and enables them to make such correction. Furthermore, this study would serve as an input and basis for other researches, academicians, consultants and some associations who conduct further researches on related fields.

1.6 Scope of the Study

This study is delimited only to assess, factors affecting credit risk management practice of commercial private banks of Ethiopia. The study also delimit on four selected private banks. The banks were selected considering their experience in the market. Accordingly, the study were selected four relatively less experienced private banks. This is because they are not well equipped and less experienced, the challenges of credit risk may pronounced in these banks. And assessing of similar areas may help to indicate their common challenges in aggregate. The study also delimited on the primary data that were gathered using questionnaires.

1.7 Organization of the Study

This research was organized in to five chapters. The first chapter deals with introduction of the study, background of the study area, statement of the problem, objective of the study, significance of the study, delimitation of the study, limitation of the study and definition of key terms. The second chapter introduces review of related literature in the area. The third chapter deals with the research design and methodology. The forth chapter presents the analysis and the fifth chapter were contain summary of the major findings, conclusion and recommendation of the study. Finally list of references and appendix will annex at the end of the page.

CHAPTER TWO

2. Literature Review of the Study

Introduction

This chapter presents what other scholars have written about the factors affecting credit risk management practice of commercial banks, the variables and methodology they used as well as their findings and recommendations. Therefore, in this research proposal study tried to indicate some of the theoretical and empirical related literatures which defined and elaborates the theories about each dependent and independent variables including the measurements of banks credit risk management and their determinates various authors

2.1 Theoretical Literature

On the theoretical part of the study provide theoretical related literatures related to factor affecting credit risk management practice of commercial banks.

2.1.1 Definition of Credit Risk

Credit risk is most simply defined as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms. The goal of credit risk management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters (Yuqi Li, 2006). Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Banks should also consider the relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization (Edward, 2006).

Credit risk, as defined by the Basel Committee on Banking Supervision (2003), is also the possibility of losing the outstanding loan partially or totally, due to credit events (default risk). It can also be defined as the potential that a contractual party will fail to meet its obligations in accordance with the agreed terms.

Credit risk is also variously referred to as default risk, performance risk or counterparty risk. A Bank exists not only to accept deposits but also to grant credit facilities, therefore inevitably

exposed to credit risk. Credit risk is by far the most significant risk faced by Banks and the success of their business depends on accurate measurement and efficient management of this risk to a greater extent than any other risks (Cebenoyan, 2004).

According to Davide and Thangavel, (2008), credit risk is the degree of value fluctuations in debt instruments and derivatives due to changes in the underlying credit quality of borrowers and counterparties. Koehn and Santomero (2006) defines credit risk as losses from the refusal or inability of credit customers to pay what is owed in full and on time. Credit risk is the exposure faced by Banks when a borrower (customer) defaults in honoring debt obligations on due date or at maturity. This risk interchangeably called ‘counterparty risk’ is capable of putting the Bank in distress if not adequately managed. Credit risk management maximizes Bank’s risk adjusted rate of return by maintaining credit risk exposure within acceptable limit in order to provide framework for understanding the impact of credit risk management on Banks’ profitability (Edwad, 2006).

2.1.2 Concept of Credit Risk Management

According to Tseganesh (2012) credit risk management includes all management function such as identification, measurement, monitoring and control of the credit risk exposure. The writer further indicated that for long term achievement of banking sector effective credit risk management practice is a vital issue in the current business environment and poor credit risk management policy will create serious source of crisis in the banking industry.

According to Atakelt (2015) Credit risk management practice define as the process of analyzing and renewing Credit risk management documents and apply constantly in actual Credit granting process, Credit administration and monitoring and risk controlling process with suitable Credit risk environment, understanding and identification of risk so as to minimize the unfavorable effect of risk taking activities and the effectiveness of credit risk management process is dependent on different variables such as proper application of best Risk management documents, Staff quality, Credit culture, devoted top management bodies, sufficient training program, proper organizational structure, ample level of internal Control and Performance of intermediation function. This indicates that credit risk management includes different issues such as developing and implementing suitable credit risk strategy, policy and procedure, accurate identifications of

risk, best credit granting process, credit administration, monitoring and reporting process determining and controlling the frequency and methods of reviewing credit policy and procedure and setting authority and responsibility clearly. Besides he mentioned that by establishing suitable credit risk environment, acceptable level of credit limit, best credit granting process, proper monitoring and controlling credit risk and optimizing risk return of a bank credit risk management develop credit performance.

2.1.3 Main Source of Credit Risk

The main source of credit risk include, limited institutional capacity, inappropriate credit policies, volatile interest rates, poor management, inappropriate laws, low capital and liquidity levels, direct lending, massive licensing of Banks, poor loan underwriting, laxity in credit assessment, poor lending practices, government interference and inadequate supervision by the central Bank (Davide and Thangavel, 2008).Credit risk is critical since the default of a small number of important customers can cause large losses, which can lead to insolvency (Basel Commute, 2003).

An increase in Bank credit risk gradually leads to liquidity and solvency problems. Credit risk may increase if the Bank lends to borrowers it does not have adequate knowledge about. Richard (2011) state that the most obvious characteristics of failed Banks is poor operating efficiency.

Cebenoyan (2004), suggest that Bank risk taking has pervasive effects on Bank profits and safety. Edward (2006) asserts that the profitability of a Bank depends on its ability to foresee, avoid and monitor risks, possible to cover losses brought about by risk arisen. This has the net effect of increasing the ratio of substandard credits in the Bank's credit portfolio and decreasing the Bank's profitability.

According to NBE (2010), Revised Risk Management Guidelines, credit risk arises any time bank funds are extended, committed, invested, or otherwise exposed, whether reflected on or off the balance sheet as a result of lax exposure management, poor economic conditions, or a variety of other factors. However, generally the risk is assumed to be a rise from transaction (default) risk, operation risk, lack of supervision and portfolio risk. These signify the role of credit risk management and therefore it forms the basis of present research analysis.

2.1.4 Credit Assessment

A thorough credit and risk assessment should be conducted prior to the granting of loans, it should also focus on the credit risk assessment of other determinate factors. The results of this assessment should be presented in a Credit Application that originates from the relationship manager/account officer (RM||), and is approved by Credit Risk Management (CRM). The RM should be the owner of the customer relationship, and must be held responsible to ensure the accuracy of the entire credit application (Yong, 2003)

According to Ayalew (2011) Credit Applications should summarize the results of the RMs risk assessment and include, as a minimum, the following details:

Borrower Analysis: The majority shareholders, management team and group or affiliate companies should be assessed. Any issues regarding lack of management depth, complicated ownership structures or inter group transactions should be addressed, and risks mitigated.

Industry Analysis: The key risk factors of the borrower's industry should be assessed.

Any issues regarding the borrower's position in the industry, overall industry concerns or competitive forces should be addressed and the strengths and weaknesses of the borrower relative to its competition should be identified.

Supplier/Buyer Analysis: Any customer or supplier concentration should be addressed, as these could have a significant impact on the future viability of the borrower.

Historical Financial Analysis: An analysis of a minimum of 3 years historical financial statements of the borrower should be presented. Where reliance is placed on a corporate guarantor, guarantor financial statements should also be analyzed. The analysis should address the quality and sustainability of earnings, cash flow and the strength of the borrower's balance sheet. Specifically, cash flow, leverage and profitability must be analyzed.

Projected Financial Performance: Where term facilities (tenor > 1 year) are being proposed, a projection of the borrower's future financial performance should be provided, indicating an analysis of the sufficiency of cash flow to service debt repayments. Loans should not be granted if projected cash flow is insufficient to repay debts.

Account Conduct: For existing borrowers, the historic performance in meeting repayment obligations (trade payments, cheques, interest and principal payments, etc) should be assessed.

Adherence to Lending Guidelines: Credit Applications should clearly state whether or not the proposed application is in compliance with the bank's Lending Guidelines. The Bank's Head of Credit or Managing Director/CEO should approve Credit Applications that do not adhere to the bank's Lending Guidelines.

Mitigating Factors: Mitigating factors for risks identified in the credit assessment should be identified. Possible risks include, but are not limited to: margin sustainability and/or volatility, high debt load (leverage/gearing), overstocking or debtor issues; rapid growth, acquisition or expansion; New business line/product expansion; management changes or succession issues; customer or supplier concentrations; and lack of transparency or industry issues.

Loan Structure: The amounts and tenors of financing proposed should be justified based on the projected repayment ability and loan purpose. Excessive tenor or amount relative to business needs increases the risk of fund diversion and may adversely impact the borrower's repayment ability.

Security: A current valuation of collateral should be obtained and the quality and priority of security being proposed should be assessed. Loans should not be granted based solely on security. Adequacy and the extent of the insurance coverage should be assessed.

2.1.5 Credit Risk Enhancement

Credit enhancement is the technique of risk-sharing and mitigation to facilitate commercial performances and operations in line with the institute's objectives and goals. The fundamental tasks include customers or client development operations, credit-based financial transactions efficiency and effectiveness, transactions performance, innovations, transparency, and risk awareness and others (Basel Committee, 2003). Client development is basic and integral part of the commercial success and profitability. It is a demand-driven operation that grounded into the financial institutes' strategies and interests' frameworks towards the economic developments (Richard, 2004). Efficiency and effectiveness is a key to the commercial sectors in terms of their

development and impacts it focusing on healthy and operable financial transactions and its comparative advantages (in consideration of their long-term and/or sovereign risk) while letting its financing clients focus on their comparative advantages (such as short-term, medium-term, and/or commercial risks) (Cebenoyan, 2004).

2.1.6 Lending Process

2.1.6.1 Process and Work Analysis of Bank Lending Activity

Koch and Macdonald (2000) pointed out that the activities in the process of commercial and industrial (C&I) loans follow eight steps. These steps are application, credit analysis, decision, document preparation, closing, recording, servicing and administration, and collection.

2.1.6.2 Internal Measures before Lending Decision

According to Menkhoff, Neuberger and Suwanaporn (2006), the factors for evaluation generally used in this situation are in line with the 6C principles of basic lending. These 6C's are Character, Capacity, Capital, Collateral, Conditions and Control, which are also important reference indexes for banks when making a credit analysis to decide whether or not a borrower is worthy of a loan. Viewed overall, according to the principles, the internal measure for measuring the value or quality of the output at this stage, regarding the visiting report, can be determined by whether the collection of information by the loan officer concerning the is accurate and complete, or not (Haider and Birley, 2001).

By analyzing a borrower's situation using the 6C principles, the comparatively more difficult situations encountered by a loan officer become capacity and condition because in addition to the understanding and analysis of the information about capacity and condition, it is also necessary to determine whether any future changes will affect the financial situation and the loan repaying ability of an enterprise. Therefore, if an excellent, professional loan officer can accurately and completely collect information in these capacity and condition, the value of the visiting report will be high (Koch and Macdonald, 2000).

2.1.7 Tools of Credit Risk Management

2.1.7.1 Credit Risk Control Tools

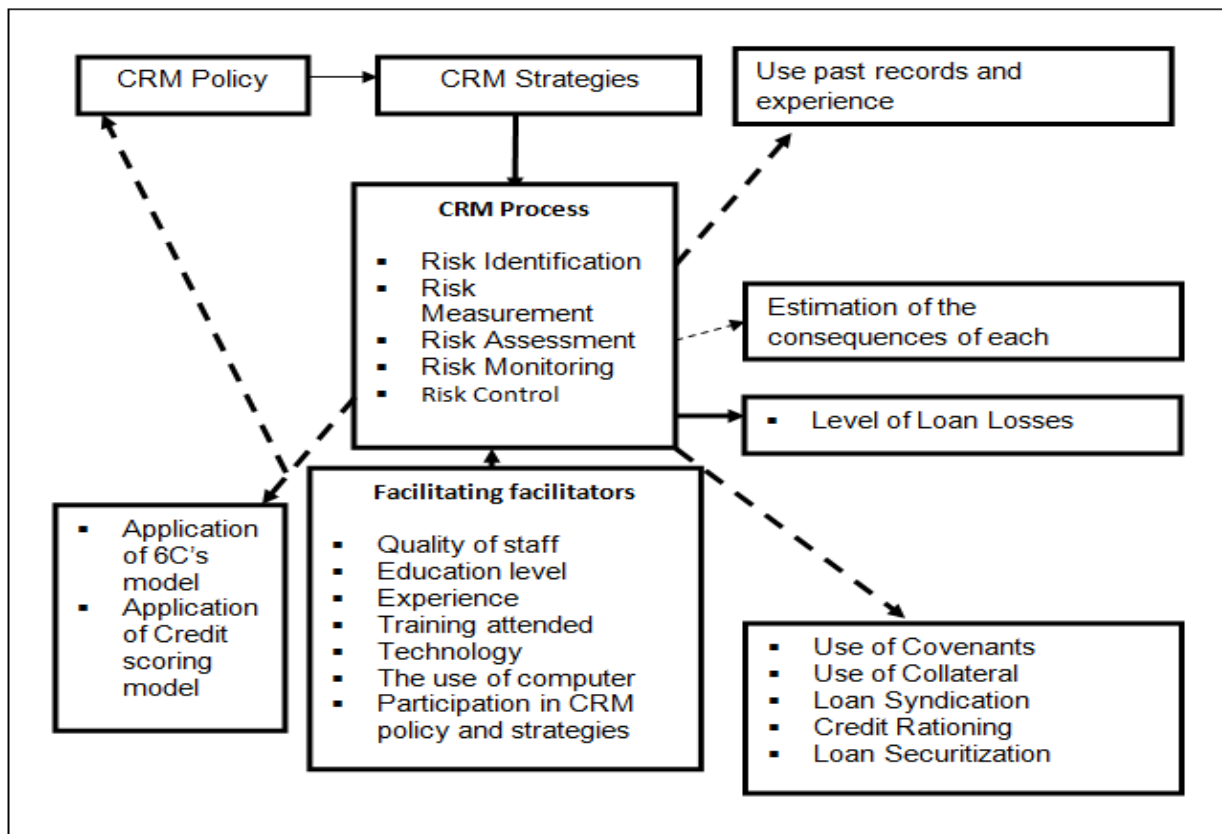
Tools like covenants, collateral, credit rationing, loan securitization and loan syndication have been used by banks in developing the world in controlling credit losses (Hugh, 2001). Marphatia and Tiwari (2004) argued that risk management is primarily about people – how they think and how they interact 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 CR. Figure 2.1 presents a summary of the CRM system as explained in the literature. It is established in the financial economics literature that the CRM system of a CB is made up of credit policy and strategies that provide general and detailed operational guidelines. It also includes the facilitating factors such as quality of staff and technology. According to Davide and Thangavel (2008) ‘) the tools through which credit risk management is carried out are:

- a) **Exposure Ceilings:** Prudential Limit is linked to Capital Funds - say 15% for individual borrower entity, 40% for a group with additional 10% for infrastructure projects undertaken by the group, Threshold limit is fixed at a level lower than Prudential Exposure; Substantial Exposure, which is the sum total of the exposures beyond threshold limit should not exceed 600% to 800% of the Capital Funds of the bank (i.e. six to eight times).
- b) **Review/Renewal:** Multi-tier Credit Approving Authority, constitution wise delegation of powers, Higher delegated powers for better-rated customers; discriminatory time schedule for review/renewal, Hurdle rates and Bench marks for fresh exposures and periodicity for renewal based on risk rating, etc are formulated.
- c) **Risk Rating Model:** Set up comprehensive risk scoring system on a six to nine point scale. Clearly define rating thresholds and review the ratings periodically preferably at half yearly intervals. Rating migration is to be mapped to estimate the expected loss
- d) **Risk based scientific pricing:** Link loan pricing to expected loss. High-risk category borrowers are to be priced high. Build historical data on default losses. Allocate capital to absorb the unexpected loss.
- e) **Portfolio Management:** The need for credit portfolio management emanates from the necessity to optimize the benefits associated with diversification and to reduce the

potential adverse impact of concentration of exposures to a particular borrower, sector or industry. Stipulate quantitative ceiling on aggregate exposure on specific rating categories, distribution of borrowers in various industry, business group and conduct rapid portfolio reviews.

- f) **Loan Review Mechanism:** This should be done independent of credit operations. It is also referred as Credit Audit covering review of sanction process, compliance status, and review of risk rating, pickup of warning signals and recommendation of corrective action with the objective of improving credit quality. It should target all loans above certain cutoff limit ensuring that at least 30% to 40% of the portfolio is subjected to LRM in a year so as to ensure that all major credit risks embedded in the balance sheet have been tracked

Figure 2.1: Research model for the CRM System of a commercial bank



Source: Berger and Udell (2002)

2.1.8 The two Dimensions of Credit Risk Management

According to Yalemzewd (2013) credit risk management practice can be classified into two distinct dimensions as preventive measures and curative measures. Preventive measures include risk assessment, risk measurement and risk pricing, early warning system to pick early signals of future defaults and better credit portfolio diversification. The curative measures, on the other hand, aim at minimizing post sanction loan losses through such steps as securitization, risk sharing, legal enforcement etc. It is widely believed that an ounce of prevention is worth a pound of cure.

2.1.9 Factors Influencing Effectiveness of Credit Risk Management Practices

Loans that constitute a large proportion of the assets in most banks' portfolios are relatively illiquid and exhibit the highest. The theory of asymmetric information argues that it may be impossible to distinguish good borrowers from bad borrowers, 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. 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, 2000).

2.1.10 Credit Risk Management Process

According to Basel (2004), the management of CR 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.

2.1.11 Risk – Adjusted Performance Measures

Several risk-adjusted performance measures have been proposed (Heffernan, 2002; Kealhofer, 2003). The measures, however, focus on risk-return trade-off, which include 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, 2003).

2.1.12 Credit Risk Management Practices

Effective CRM involves establishing an appropriate CR environment; operating under a sound credit granting process; maintaining an appropriate credit administration that involves monitoring process as well as adequate ensure that there are proper and clear guidelines in managing CR, that is, all guidelines are properly communicated throughout the organization; and that everybody involved in CRM understand them. Considerations that form the basis for sound CRM 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, that is, how loans are originated, appraised, supervised and collected The recommendation has been widely 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 (Basel, 2004).

Assessment of Borrowers

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. 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”. The technique cannot only minimize processing costs but also reduce subjective judgments and possible biases. The rating systems if meaningful should signal changes in expected level of loan loss 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 (Uyemura and Deventer, 2000).

Clearly Established Credit Approval Process

Clearly established process for approving new credits and extending the existing credits has been observed to be very important while managing. Further, monitoring of borrowers important as current and potential exposures change with both the passage of time and the movements in the underlying variables, and are also very important in dealing with moral hazard problem. 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, 2000; Tummala and Burchett, 2000; Mwisho, 2001; Basel, 2004; Treacy and Carey, 2004;).

2.1.13 Internal Performance Measures of Bank Lending

A. Basel II Criteria

Banks are learning to review their risk portfolios using the criteria laid down by Basel II. Greenspan has indicated that Basel's goal is to induce bankers to improve their risk management capability, including how the institutions price products, reserve for loss, and control their operations (Rehm, 2002). This research is in line with the purpose of Basel II, that is, to reduce a bank's operational risk during the lending process through a better monitoring of the employees in the lending department. According to Basel Committee on Banking Supervision (2006), the Basel II guidelines establish capital adequacy requirements and supervisory standards for banks to be implemented by 2007. The main objective of Basel II is: to develop a framework that would further strengthen the soundness and stability of the international banking system, while maintaining sufficient consistency that capital adequacy regulation will not be a significant source of competitive inequality among internationally active banks. The Committee believes that the revised framework will promote the adoption of stronger risk management practices by the banking industry, and views this as one of its major benefits (Basel Committee on Banking Supervision, 2006).

Ferguson (2003) observed that Basel II Accord provides a roadmap for the improved regulation and supervision of global banking. Basel II will provide strong incentives for banks to continue improving their internal risk-management capabilities as well as the tools for supervisors to focus on emerging problems and issues more rapidly than ever before. Basel II is intended to align capital adequacy assessment more closely with the key elements of banking risks and to provide incentives for banks to enhance their risk measurement (Basel Committee on Banking Supervision, 2006). Particularly, the risk adjusted backing of credit exposures with recourse equity (regulatory capital) is one of the key issues in the New Basel Capital Accord. Basel II will affect banks and customers equally. Significant changes include: (i) the introduction of ratings as the basis for risk assessment and calculation of regulatory capital; and (ii) the assessment of credit costs based on the degree of risk. The Basel II Accord proposes, among other things, more detailed criteria for the treatment of credit risk, and for the first time introduces criteria for the regulatory treatment of operational risk. Beyond merely measuring the capital requirements for the risk categories, it also puts strong emphasis on criteria for supervisory review and increased public disclosure (Rowe, Jovic and Reeves, 2004).

2.1.14 The First Pillar – Minimum Capital Requirements

The comprehensive version of the Basel II Accord provides improved risk sensitivity in the way capital requirements are calculated for three major components of risk that a bank faces; credit risk, operational risk and market risk. The capital ratio is calculated using the definition of regulatory capital and risk-weighted assets (RWA) (Basel Committee on Banking Supervision, 2006). The total capital ratio must be no lower than 8 per cent. Tier 2 capitals are limited to 100 per cent of tier 1 capital. While market risk assessment has not been changed – a standardized approach or value at risk (VaR) is retained – credit risk assessment has been changed and operational risk has been introduced for the first time. For credit risk, Basel II provides three approaches to calculate credit risk-based capital (Leippold and Vanini, 2003). The first approach is the standardized approach, which relies on external ratings. Based on this approach, banks' activities are divided into eight business lines: corporate finance, trading and sales, retail banking, commercial banking, payment and settlement, agency services, asset management, and retail brokerage. For the purpose of calculating capital for operational risk, each of these lines is a percentage of the bank's gross income from that particular line of business.

The second approach is the foundation internal ratings-based (IRB) approach which allows banks to calculate their credit risk-based capital on the basis of their internal assessment of the probability that the counterparty will default (Basel Committee on Banking Supervision, 2006). The third and most sophisticated approach is the advanced IRB approach, which allows banks to use their own internal assessment not only of the probability of default (PD), but also the percentage loss suffered if the counterparty defaults and the quantification of the exposure to the counterparty. For the IRB there are four parameters to consider: VaR; (i) loss function, PD of a borrower; loss given default (LGD), the estimate of loss severity; (ii) exposure at default, the amount at risk in the event of default and the facility's remaining maturity (M) (Kealhofer, 2003). Calculation of these components requires advanced data collection and sophisticated risk management techniques (Allen, 2004).

2.1.15 The Second Pillar – Supervisory Review Process

Basel II emphasizes that financial institutions should fulfill their self-responsibility for appropriately assessing and managing the various risks they face, and maintaining sufficient capital according to such risks including those not covered within the first pillar (minimum capital requirements). It also mentions that supervisors should review and evaluate risk management methods which are adopted by individual financial institutions on their own initiative, and take appropriate supervisory actions as necessary. For this Implementing Basel II purpose the Basel II Accord sets four key principles of supervisory review (Basel Committee on Banking Supervision, 2006), as follows: (i) Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels; (ii) Supervisors should review and evaluate banks' internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with regulatory capital ratios. Supervisors should take appropriate supervisory action if they are not satisfied with the results of this process; (iii) Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum; (iv) Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular bank and should require rapid remedial action if capital is not maintained or restored (Dutta and Perry, 2006).

2.1.16 The Third Pillar – Market Discipline

The aim of this pillar is to strengthen market discipline through increased disclosure. Market discipline imposes strong incentives on banks to conduct their business in a safe, sound and efficient manner, including an incentive to maintain a strong capital base as a cushion against potential future losses arising from risk exposures (Fatemi and Glaum, 2000).

The market discipline proposed greatly increases the disclosures that the bank must make. This is designed to allow the market to have a better picture of the overall risk position of the bank and to allow the counterparties of the bank to price and deal appropriately (Allen, 2004). The Basel II Accord indicates in this regard: Supervisors have an array of measures that they can use to require banks to make such disclosures. Some of these disclosures will be qualifying criteria for the use of particular methodologies or the recognition of particular instruments and transactions (Basel Committee on Banking Supervision, 2006).

2.1.17 Risk management Process

Risk management is a process which involves an interlinked of sequence of function which should be performed in order to measure, manage and control risk. Different methodologies for identifying capture, analyzing and reporting credit market, liquidity and operational risks are at the disposal of financial institutions (Bonnieve, 2003). According to Bennevie, credit risk management process as a methodology of identifying, capturing and containing risk has eight different phases. These phases are shown on appendices 5 and 6 are also explained below:

The first phase involves position and market analysis. According to Bonnieve (2003), this phase is marked by the following: first there is need for the financial institution to understand the market environment in which it operates. In this case the financial institution should analyze its position in the market, the intensity of competition in the market, the price elasticity of demand for its product and customers' needs having identified its position and own share in the market, the financial institution should also identify the sources of data after which an information management structure is established. Finally, there is need to understand the legal aspect of the risk to be taken.

The second phase is concerned with developing the knowledge about the risk awareness and identification of tools to be used to manage risk. In this phase, there is need to evaluate the

degree of risk awareness, risk incentives, risk reward, perceptions and the risk acceptance limits. In this phase, the institution should evaluate the risk in terms of volatilities and probabilities or occurrence. The institution should also priorities the risk areas in relation to organizational goals and risk appetite.

According to Bonnevie (2003) and Vanden (2004), risk appetite is the degree to which an organization links its objectives and goals to risk finally, this phase is characterized with the identification and deciding of the tools to be used in measuring monitoring and controlling risk and how to integrate them into other organizational processes.

The next phase is the decision making phase. This involves deciding and agreeing on strategies and tactics that should be used to link the risk appetite to business activities. Such strategies and tactics may include the top-down or bottom techniques of measuring, evaluating and reporting risks.

The fourth phase is concerned with the defining and deciding on the limits to steer the risk management process. There is need to define and expose the stop-loss limits for each credit risk. The institution should also decide on the corrective measure to be taken, the channels of responsibility and the decision process to be followed.

Phase five involves communication of plans and decisions. In this phase, there is need to establish a communication process among working groups between reporting lines and to decide on the periodicity and means of communication. There is also a need to ensure that the risk culture is widespread in the entire organizations' staff.

Phase six is the implementation of plans and decisions. According to Bonnevie (2003) and BIS (2004), this phase requires senior management sponsorship, a clear vision of what is to done and to ensure commitment to the organization's objectives.

The next phase is monitoring of results and events. It involves the linking of the assessed risk to the established risk limits, aggregating of risk, diversification of risk and reporting of risk. In this monitoring phase the top-down or bottom-up reporting method may be adopted.

The last phase in the management process has to do with management of the risk data in order to meet organizational goals and expectations.

In conclusion, there are eight phases that constitute the requisites of measuring, managing and controlling risk. In a commercial bank, the most dominant risk to measure and contain is the credit risk.

Although credit risk is not the only risk faced by a commercial bank, it is the risk that has caused financial devastation in Uganda Commercial Banks for example; Green land bank, (Ssewagudde, 2000).

According to Ssewagudde (2000), the business of banking is measuring and accepting risk. Because the major risk faced by commercial banks is the credit risk. Credit risk can be interchangeable called loan default risk. Guidelines and procedures to measure and contain default risk are explained in the next subsection as part of commercial bank credit policy, procedures and guidelines.

2.1.18 Credit Policy in Commercial Banks

Credit policy is a frame work which provides the guidelines, procedures and responsibilities involved in measuring, monitoring and controlling loan default risk. According to Ssewagudde (2000), a credit policy should provide parameters define responsibilities and establish a system of checks and balances. It should include general policies, specific loan strategies, miscellaneous loan policies and quality control committees whose role is to guide the credit decision taken by the bank. A credit policy should be specific, clear, concise, relevant and should be supported by credit procedures. It should also define the bank's acceptable and un acceptable risks. A good number of authors BIS (2003), Sinkey (1998), Santomero (1996) and Ssewagudde (2000) agree that since taking is central to banking, it is profitable for banks to take risks that are reasonable, controllable and with in their financial resources and competences

According to these authors, banks need not engage in businesses in a manner that necessarily impose risks on them. Similarly, they should not absorb risks that can adversely affect their clients.

In their strategic planning, there is need for the banker to clearly specify and if need be quality the risk factors and level of risk for each market target, target customer segments and loan concentration. According to Sunkey (1998) and Ssewagudde (2000), the lender must weigh the pros and cons of specialization and concentration of lending to industry sector, groups and individuals borrowers to establish limits on their overall exposure to risk. If the loans in the portfolio are highly concentrated and correlated with existing loans, then the lender is also concentrating loans on loan default risks. If loans portfolio risk becomes excessive, it manifests itself in the form of bad loans. High bad loans provisions and loan losses destroy the bank value (Ssewagudde, 2000).

Credit procedures are steps clarifying the techniques used by the bank to execute its credit policy. Credit directives on the other hand are those to address credit policy issues in response to the market and economic changes. Credit directives provide general parameters for the type of clients and market the bank is willing to serve, the loan concentration levels and the acceptable risk in each market and industry.

According to Ssewagudde (2000), when a bank strategy, credit policy procedures and directives have been carefully formulated and administered from the top and well understood all organizational levels, it enables the bank to maintain proper credit standards, avoid excess risk and evaluate business opportunities properly.

A. Identification and prioritization of Market Targets

The formation of bank's strategic plan by top management is a very important aspect for the success of the business. For banks, this strategy should, be outlines in terms of risk concentration, commitment to market segment, the acceptable asset/liability exposure and the need to hedge against systematic risk of a particular type (Sentomero, 1996). In the strategic plan, management should meticulously design credit policies, credit directives and procedures that are consistent with the desired credit risk in each market target

Various authors (MC Naughton et al 1996, Merton at el 1999, Sinkey, 1998 ad Santomero, 1996) agree that risk is central to banking. For a bank to accept a risk, the bankers must fully comprehend and if possible qualify the risks so taken. Banking institutions need not engage in

business that will unnecessarily impose risks upon them and also upon other stakeholders. Because the major risk faced by commercial banks is the default risk, it also follows that major risks must measure, accept and manage in each market target is the default risk.

When a bank strategic plan and credit policies are properly formulated by top management and well-understood at all organizational levels, it enables the bank to maintain risk properly. It also enables that bank to operate consistently and to adhere to uniform and sound bank practices.

B. Credit Initiation/ Analysis Process

Credit analysis is a process which involves procedures which a commercial has to follow in assessing whether a prospective loan applicant should qualify for the loan. These procedures include credit origination, credit evaluation, credit negotiation and approval. Each of these is an important element of credit risk management and are examined under the following subheadings.

C. Credit origination

When a client applies for credit, bank officers should identify whether this customer's compatible with the bank's credit policy. Credit origination involves the collection of sufficient and relevant information about the credit. By so, the bankers are capable to assess the compatibility of his/her need for cash and the bank's credit, procedures and directives. Credit staff in the bank is expected to visit the potential client's business premises to access the prevailing situation.

This initial step of physical visit and data collection is an important element of credit initiation as it gives the banker the basis for decision-making. It helps the banker to decide whether to grant credit or deny it. It paves the way for the next element of credit management. Credit origination is followed by credit evaluation.

D. Credit evaluation

Credit evaluation involves assessing whether the client is credit worthy. In credit evaluating, the banker is able to assess the purpose of the loan, the business and the financial position of the potential customer. In credit principles of lending, the 5C's of credit. These 5C's are discussed by Kakuru (2003), an Horne (1998), Pandeny 1997) and Sinkey (1998). They refer to the

customer's conditions or business cash flow and net worth, collateral securities and economic conditions or business fluctuations. There is need for the banker to evaluate the customer's capacity to pay persistently. There is always information asymmetry between the bankers and their clients due to the ever-changing economic conditions. Ideally sensitivity analysis on the client's ability should be carefully conducted by the banker to minimize risks.

E. Credit negotiation and approval

This is the last step of the credit initiation process. It involves negotiating with the credit worthy customer on the terms of the credit; the loan interest rate, the loan amortization schedule, agreement. Negotiation process should ensure that the credit advanced by the bank is beneficial to the client and the payment will be orderly and favorable. It should result into a good qualify loan portfolio. Once the process of negotiation is concluded, then the loan is approved. The bank's loan committee should ensure that all term and procedures have been adhered to.

Credit evaluation is a very important element of credit initiation and credit risk management process. If it is carried out properly and in accordance to the bank's credit policy and procedures, the resulting performance of the loan advanced becomes good. It greatly reduces the loan default risk. A proper credit evaluation management. This relationship between the client and the bank management. This relationship management of ten leads to lifetime client management, constant renewal of contacts all of which culminate client-customer loyalty.

In credit evaluation, there is need to apply a rating scheme to all investment alternatives before the bank makes a decision. According to Harrison (2003), a credit-scoring scheme ought to be used by the banker to predict whether the potential client is worth the credit. A common credit risk rating system for all bank loan portfolios is likely to achieve lower loan defaults than the traditional method of credit awarding by experienced bank managers. Once the credit evaluation procedures are accomplished and the decision to advance credit is made, then the process of credit negotiation takes place.

A proper negotiation process will also result a better quality loan portfolio. It ensures that the banker gives to the customer a credit product that is profitable and credit product that will be paid timely. According to Sinkey (1996), Chester (2003), banks need not involve in deal that will

neither involve them in losses, nor involve their clients in loss making venture. Once credit negotiation is completed, then the process of credit approval follows.

F. Credit Approval

Credit approval is the last step in the credit initiation and analysis process. In this stage, the bank's credit committee should be composed of approving the credit impartial committee members. They should devote sufficient amount of time in receiving analysis and approving or disapproving several loan application presented to them at the same time. The committed ensures that all the procedures, guidelines and directives in the credit; policy has been followed.

Credit Documentation and Disbursement

Credit documentation is the fourth element of the credit management process. It includes the taking of all security and precautionary measures are obtained and documented before the funds are disbursed. It ensures that modification on all approved credit have been compatible with the credit policy. It also involves the maintenance of orderly and up-to-date credit files. It includes the imposition of the relevant fees, updating of relevant records and prompt modification of the credit review and renewal dates (MC Naughton et al (1996). Credit documentation also ensure that the loan covenants are also made before the loan is checks and document review to ensure that the bank fully protected. According to Day et al (1996), if weakness and problems for the bank particularly in the area of protection because they leave the bank unprotected if the clients run into difficulties. When the process of credit disbursement must ensure that funds are not paid out; the procedure guidelines in the credit policy are met. If the process of disbursing the funds is weak funds is weak, the entire credit risk management process can easily be jeopardized.

Credit risk measurement, monitoring and control

This is the last step of credit risk management and measurement of risks guidelines and procedures of minimizing them. It also involves the following administrative aspects: monitoring of the portfolio performance, classification of the portfolio according to performance, ensuring that the credit is orderly and fully repaid, conducting of ob site visits and regular contact with clients, conducting of credit audit or risk asset review to assess portfolio quality and management and review clients files and documents as well as collated securities. It should also involve

quantification of the risk in each market to measure the magnitude of the risk and to monitor whether the bank credit is being properly implemented.

All these aspects of credit administration are vital in monitoring change in behaviour and noncompliance. In this way bankers are able to detect early warning signals of deterioration or non or non-compliance and timely effect corrective measures to avoid losses. Another important aspect of credit administration is, collecting, processing and analyzing of up to date and accurate information on portfolio performance. RMA (2004), Sinkey. (1998) and Greuning et al (1999) agree that best ways to detect the flaws and weaknesses in the quality of banker's portfolio is through gathering processing, and analyzing quality information. Because of changing economic conditions and customer's behaviour (moral hazards) and the failure to give timely data, there is information asymmetry and the bank must constantly update its management information system and the database. Thus good quality portfolio management and administration should contain risks in market segments.

2.1.19 Control and Management of Credit Risks

The Basel Committee on Banking Supervision (1999; 2000; 2001) having surveyed the difficulties connected with banks management of credit globally, issued a few rules that have come to be viewed as benchmark credit risk management rehearses keeping in mind the end goal to loan sound practices for overseeing credit risk (Nsiah-Agyeman, 2010). The report of the Basel Committee on Banking Supervision (2000 referred to in Nsiah-Agyeman, 2010) on lay away risk concentrated around four fundamental zones as basic in each credit management process. These areas are:

- 1) Establishing a suitable credit environment.
- 2) Operating a sound credit granting process.
- 3) Ensuring satisfactory controls over credit risk.
- 4) Evaluation and implementation of protective covenants

A. Establishing a suitable credit environment

The controlling and working spine of each organization is the top managerial staff as per (Wheehem & Hunger, 2008). As for every other area of a bank's dealings, the governing body has a genuine part to play in administering the credit granting and credit risk management elements of the bank. The governing body, as indicated by the report of the Basel Panel (2000)

ought to have obligation regarding endorsing and intermittently (in any event every year) investigating the credit risk technique and critical credit risk strategies of the bank. Every bank ought to build up a credit risk methodology or arrangement that sets up the goals controlling its credit-giving activities and embrace the important strategies and techniques for directing such activities (Machiraju, 2004). The board needs to perceive that the system and strategies must cover the numerous activities of the bank in which credit introduction is a critical risk. Saunders (2007) likewise places that, these methods ought to mirror the bank's resilience for risk and the level of benefit the bank hopes to accomplish for bringing about different credit risks.

The technique ought to incorporate a bank's announcement readiness to allow credit taking into account exposure type (for instance, commercial, consumer, real estate) monetary part, geographical area, currency, development and foreseen productivity (Matyszak, 2007). This may additionally incorporate the distinguishing proof of target markets and the general qualities that the bank would need to accomplish in its credit portfolio (including levels of enhancement and resistances).

The top managerial staff ought to occasionally survey the monetary consequences of the bank and, in light of these outcomes, figure out whether changes should be made to the system. The board should likewise focus the bank's level capital ampleness (Boateng, 2004).

Wilson (1998) is additionally of the perspective that, the credit risk method of any bank ought to give progression in methodology. Henceforth, the system should contemplate the intermittent parts of the economy and the resultant changes in the structure and estimation of the aggregate credit portfolio. In spite of the fact that the procedure ought to be occasionally assessed and adjusted, it ought to be doable over the long haul and through different monetary cycles (Machiraju, 2004).

Fotoh (2005) upheld that the credit risk arrangements and methods ought to be successfully imparted all through the organization. All noteworthy faculty ought to be obviously made to comprehend the bank's way to deal with allowing and overseeing credit and ought to be considered responsible for agreeing to built-up approaches and methodology. The board ought to guarantee that senior management is completely fit for dealing with the credit activities directed by the bank and that those activities are done inside of the risk procedure, approaches and

resistances endorsed by the board (Basel Council, 2001). The board ought to additionally frequently (i.e. in any event yearly), either inside of the credit risk system or inside of an announcement of credit strategy, favor the bank's general credit-allowing criteria (counting general terms and conditions). Furthermore, it ought to affirm the way in which the bank will sort out its credit-giving capacities, including autonomous audit of the credit granting and management capacity and the general portfolio (Nsiah-Agyeman, 2010).

B. Operating a sound credit granting process

The Basel Board of trustees (2000; 2001) underlined that with a specific end goal to keep up a sound credit portfolio, it is fundamental a bank have set up a built up formal exchange assessment and support process for the conceding of credits. Regards ought to be made as per the bank's composed rules and conceded by the suitable level of management. There ought to be an unmistakable review trail reporting that the regard procedure was consented to and distinguishing the individual(s) and/or committee(s) giving data and also settling on the credit choice (Boateng, 2004). As per Wilson (1998), banks frequently profit by the foundation of expert credit gatherings to examine and sanction credits identified with noteworthy product offerings, sorts of credit offices and modern and geographic parts. Banks ought to put resources into sufficient credit choice making assets so they find themselves able to settle on sound acknowledge choices reliable for their credit procedure and meet aggressive time, estimating and organizing weights.

Every credit proposition ought to be subjected to cautious examination by a skillful acknowledge examiner for the ability comparing to the size and complexity of the exchange. In the expressions of Boateng (2004), a successful credit evaluation process builds up least prerequisites for the data on which the examination is based. There ought to be arrangements set up with respect to the data and documentation expected

An exploration by Machiraju (2008) uncovered that, one of the management rules that banks have utilized in their client data get-together process is screening. Screening as indicated by the researcher includes the procedure of recognizing just solid and trustworthy clients from a pool of various candidates for money related help. Banks screen "good" credit risk from "bad" ones in order to make productive loans. Screening is typically done before a credit is conceded. Successful screening obliges banks to gather precise and dependable data from potential borrowers. The point is to assess the default risk of their clients. The potential borrower is

regularly needed to supply the loan officer with data about their experience, salary and total assets. Distinctive credit risk models extending from subjective to quantitative ones may be utilized to encourage the screening procedure to land at an educated choice.

C. Ensuring adequate controls over credit risk

As per Ganesan (2000), there must be credit points of confinement set for every officer whose expected set of responsibilities has a relationship with credit granting to guarantee sufficient controls over credit. Material exchanges with related gatherings ought to be liable to the board's endorsement of executives (barring board individuals with irreconcilable situations), and in specific circumstances (e.g. an extensive credit to a noteworthy shareholder) answered to the saving money supervisory powers.

Banks should likewise consider the time span for conceding credit since time is of specific significance to borrowers (Nsiah-Agyeman, 2010). Borrowers for the most part oblige credit inside of a given time, and for such credits to be significant they must be conceded inside of the period the office is needed. As indicated by Hubbard (2000), if a borrower obliges a credit inside of, say, one month, the giving bank must meet such time period without undue deferrals. This implies that lending institutions must make known in unequivocal terms to the borrowers the terms and conditions to allowing the credit. Having allowed credit there is the requirement for keeping up a proper credit organization, estimation and checking procedure. Once more, banks must build up an arrangement of autonomous, nonstop evaluation of customers' operational results, paying special mind to ahead of schedule cautioning indications of operational troubles.

2.2 Empirical Review

This part of the study summarizes various studies conducted in different countries which are related with factor affecting credit risk management practice of commercial banks.

2.2.1 Risk Identification

Risk identification is vital for effective risk management. In order to manage credit bank risks effectively, management of bank have to know what risks face the bank. The important thing during risk identification is not to miss any risks out. There are a number of different techniques that can be used in risk identification The first step in organizing the implementation of the risk

management function is to establish the crucial observation areas inside and outside the corporation (Edward, 2006). Then, the departments and the employees must be assigned with responsibilities to identify specific risks.

For instance, interest rate risks or foreign exchange risks are the main domain of the financial department. In relation to commercial banks' practice of risk management, as study by Machiraju,(2003), found that the UAE commercial banks were mainly facing credit risk. The study also found that inspection by branch managers and financial statement analysis are the main methods used in risk identification. The main techniques used in risk management are establishing standards, credit score, credit worthiness analysis, risk rating and collateral. The recent study by Richard (2012) was conducted on banks' risk management of Kenya national and foreign banks. Their findings reveal that the three most important types of risks encountered by Kenya's commercial banks are foreign exchange risk, followed by credit risk, then operating risk.

2.2.2 Impact of Bank Size on Credit Risk Management

The empirical evidence relating to the impact of bank size on credit risk appears to be mixed. For instance, some studies report a negative association between credit risk and bank size, Koehn and Santomero (2006) according to these studies, the inverse relationship means that large banks have better risk management strategies that usually translate into more superior loan portfolios vis-a-vis their smaller counterparts. There are also studies which provide evidence of a positive association between NPLs and bank size (Rajan and Dhal, 2003). In this study the size variable is constructed by computing the relative market share of the asset of each commercial bank.

Theoretical arguments suggest a negative relationship between these two variables. Such a relationship is justified by the most natural argument that is diversification by size. Indeed, larger banks are expected to have lower risks because they have the capability of holding more diversifiable portfolios. Natural logarithm of total assets has been used as a proxy for measuring bank size in most prior research (Basel Committee, 2003).

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Theoretical arguments suggest a negative relationship between these two variables. Such a relationship is justified by the most natural argument that is diversification by size. Indeed, larger banks are expected to have lower risks because they have the capability of holding more diversifiable portfolios (Girma, 2001).

2.2.3 The relation between Regulatory Capital and Credit Risk Management

The literature on regulatory capital and bank credit risk shows an inverse relationship. For example, Richard (2004), in the context of 11 developing countries have shown a negative relationship between capital ratio and portfolio risk. Davide, and Thangavel, (2008) have presented a comparative study of all factors contributing to the credit risks of commercial banks in a multi-country setting: Australia, France, Japan and the U.S. represent developed economy banking systems while emerging ones are represented by India, Korea, Malaysia, Mexico and Thailand. They have found that the regulatory capital is an important factor influencing the credit risk of any banking system that offers a range of services. This study also highlights that the credit risk in emerging economy banks is higher than that in developed economies and that risk is formed by a larger number of bank specific factors in emerging economies compared to their counterparts in developed economies. In the context of emerging countries, Basel committee (2011) has found that the regulation of capital and risk are negatively related.

2.2.4 The Effect of Loan Growth on Credit Risk Management Practice

Credit growth sometimes called loan growth implies credit expansions by banks. Excessive rapid loan growth, as well as sharp declines in bank capital levels are useful pointers to the deterioration in the financial health of banks and can be employed as early warning indicators of future problem loans (Richard, 2011). A study by Tibebu (2011) shows growth in loan is a cause for credit risk. A strong loan growth translates into significantly higher credit losses with a lag of 2-4 years (Basel Committee, 2011).

2.2.5 Impact of Operating Inefficiency on Credit Risk Management

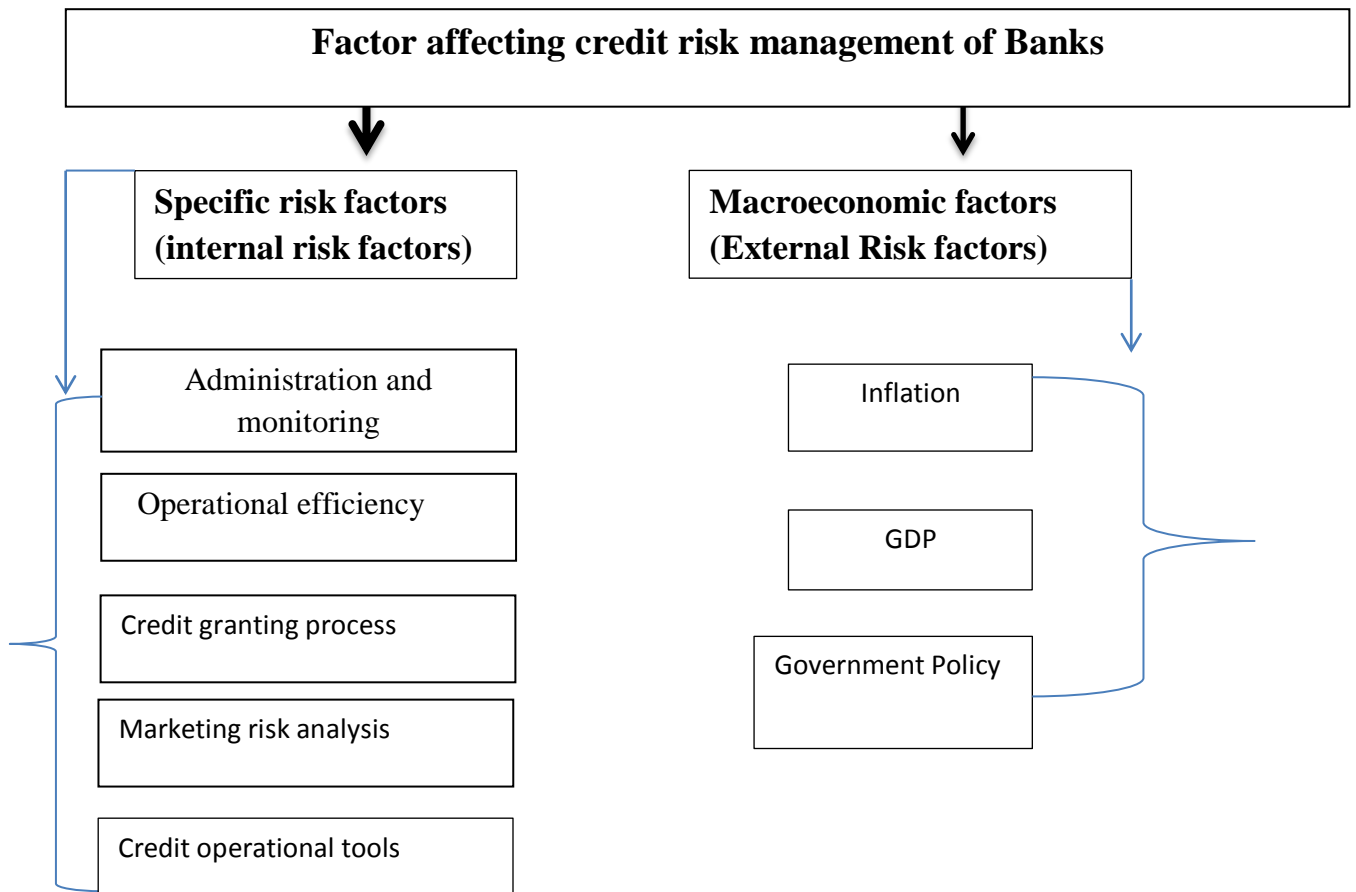
Regarding operating efficiency, Richard (2011) found a negative but insignificant relationship with credit risk of Pakistan commercial banks. Inefficient managers will not cope successfully with the process of granting and monitoring loans that will lower the banks' credit quality and bring about a growth in problem loans. Inefficient banks hold riskier portfolio (Lis, Pages and Saurina, 2000). As studied by Berger and De Young (1997), poor management in the banking institutions results in bad quality loans, and therefore, escalates the level of non-performing loans. They argue that bad management of the banking firms will result in banks inefficiency and affects the process of granting loans.

2.3 Conceptual Frame Work

The main objective of this study is to assess factor affecting credit risk management practice of private commercial banks in Ethiopia. Based on the objective of the study, the following conceptual model is framed. As it described previously in the related literature review parts, banks credit risk management practice can be affected by banks specific factors or macroeconomic factors.

There are a lot of specific factors affecting banks credit risk management practice such as, operational efficiency; types of tools used manage risk, bank size, loan rate, loan deposit, liquidity and leverage. In addition to this there are also macroeconomic factors which can affect credit risk management practice of commercial banks such as inflation, interest spread, GDP regulatory policy of the country. Thus, the following conceptual model is framed to summarize the main focus and scope of this study in terms of variables included.

Figure 1: Conceptual Framework



Source: own conceptual frame work

CHAPTER THREE

3. Methodology of the Study

3.1 Research Design

The study used dependent and independent variables. The Independent part is that the researcher was used to assess how they affect the dependent variable. The dependent variable is that which change were when the independent variable changes. The dependent variable will depend on the outcome of the independent variable. Therefore, the study will employ descriptive as well as explanatory survey method for it is efficient to evaluate and determine the adequacy of a program under existing condition against the established standards (Best and Kohn, 1999). The descriptive method is of special importance for this particular study to portray how several factors affect the activities of credit risk management practice of the selected banks. On the other hand, using explanatory research design the study were tested the causal relationship between dependent and independent variables.

3.2 Study Population

A population study is a study of a group of individuals taken from the general population who share a common characteristic. Accordingly, the target population of this study grouped in to two; the first target population of the study focus on the total number of commercial private banks of the country while the second grope of target population focuses on employee respondents of the banks. Accordingly, there are sixteen private commercial banks in Ethiopia which are: Dashin Bank, Awash International Bank, Bank of Abyssinia, Wegagen Bank, United Bank, Lion International Bank, Cooperative Bank of Oromia, Nib International Bank, Zemen Bank, Oromia International Bank, Bunna Bank, Birhan International Bank, Abay Bank, Addis International Bank, Dehub Global Bank and Enat Bank.

3.3 Sampling Technique of the Study

The study were used non – probability sampling technique. From the given non – probability sampling frame purposive sampling technique were applied. This is because the researcher wants to select relatively four medium experienced banks for the comparative purpose. Accordingly respondents were selected from the respective banks who have been working in credit risk management process area.

3.3.1 Sample size of the Study

It would be impractical and unmanageable to include all population in the study, but it shall be advisable to come up with representative samples and generate the findings of the study. Accordingly, the private banks were selected based on their experience. In this regard the study prefers to select medium experienced private banks. This is because, as they are not well equipped and relatively long stayed on the markets challenges' of credit risk management may pronounced to them. In addition assessing similar areas subjects may help to indicate their common challenges' in aggregate. Accordingly, the study select relatively, the following medium experienced private banks these are Birhan International S.C Bank, Oromia International Bank S.C, Anbesa International S.C Bank and Debub Global International S.C Bank.

The second level of sampling size determination was focused on view of respondents. The choice of employee respondents from the given banks were only focus on employee worked related to credit analysis and appraisal; credit monitoring, risk management and credit relationship managers. The total staffs involved in credit management of the sample banks were 224 in head office and main branches. Therefore, the sample size that was selected out of 224 total population based up on sampling technique of Belcourt and Saks (2000). The formula is large enough to allow for precision and confidence in general ability of the research. Based on the method formula for the calculation of sample size present as follow:

$$n = \frac{N}{1 + Ne^2}$$

Where n = sample size

N= Number of population

e = standard error used (0.1) or 90% confidence interval.

$$\begin{aligned}n &= \frac{224}{224 (0.1)^2} \\ &= \frac{224}{2.12} \\ &= \frac{224}{2.12} = 105.6\end{aligned}$$

Based on the above sampling technique nearly 106 sample respondents were presented in the study. Sample proportion allocation among the four banks selected based on their staffs number

who work related to credit area. So to have appropriate representative total sample size (106) divided to staffs employee on the credit area.

Table 3.1 Distribution of sample size

Types Of Banks	Population	Sample Population
Birhan Bank	80	38
Oromia Bank	88	42
Anbesa Bank	24	12
Debub Global Bank	32	14
Total	224	106

Source: Each banks human resource department (2017)

3.4 Method of Data Collection

The quantitative and qualitative data collection tools were applied to collect data from the concerned bodies. Accordingly, questionnaire and interview used as instrument of data collection.

To collect the primary data the study develops structured questionnaire based on the Basel's Credit risk management principles/activities of 1999 and NBE's Credit risk management guideline of 2009. Accordingly the study provides a five scale Likert questioner to measure respondent's level of agreement and disagreement.

3.5 Method of Data Analysis

The study employed both descriptive and inferential tools for analyzing the data. After data collected through questionnaires they were edited and categorized according to their dimensions. Based on this the study were analyzed using descriptive and explanatory data analysis method; in the disruptive analysis method the study describe respondents response using table, frequency, graph, percentage, mean and standard deviation. On the other hand, in the explanatory part the data were analyzed the cause – effect relation between the dependent and independent variables using correlation and regression analysis. Based on this to analysis the cause effect relation the study were developed the following model;

$$Y_i = (b_0 + b_1 \text{ACRE}_{i1} + b_2 \text{SCGP}_{i2} + b_3 \text{CAMMP}_{i3} + b_4 \text{MRM}_{i4} + b_5 \text{ORA}_{i5} + b_6 + \text{ALR}_{i6}) + \varepsilon_i$$

Y is the outcome variable (dependent variable), b_1 is the coefficient of the first predictor ($ACRE_1$), b_2 is the coefficient of the second predictor ($SCGP_2$), b_3 is the coefficient of the third predictor ($CAMM_3$), b_4 is the coefficient of the fourth predictor (MRM_{i4}), b_5 is the coefficient of the fifth predictor (ORA_{i5}), b_6 is the coefficient of the sixth predictor (ALR_{i6}) and ε_i is the difference between the predicted and the observed value of Y for the i the participant.

$CR=f(ACRE, SCGP, CAMMP, MRM, ORA, ALR,)$.

Where:

ACRE = Establishing an Appropriate Credit risk environment:

SCGP = Operating under a sound Credit granting process

CAMMP=Maintaining an Appropriate Credit Administration, Measurement and monitoring process

MRM= Ensuring Adequate Market Risk management

ORA = Appropriate Operational Risk assessment

ALR= Assessment of Legality of Credit Risk

3.6 Ethical Consideration

During the course of administering the questionnaires, names and any identifying remarks were not used. The confidentiality of the respondents is kept and any data received for the study kept at the hands of the researcher and the advisor. The data's were used based on the questionnaires and interview of respondents rather than using the researcher opinion and input. The researcher will stay truth full to responses of the respondents and free from any personal assessment. Results depicted were only from out puts of truth full inputs.

CHAPTER FOUR

4. Data Analysis and Interpretation

4.1 Introduction

As indicated in the methodology part the study basically conducted using questionnaires filled by respondents. The study totally distribute 106 questionnaires however, the analysis were done based 98 (96%) the rest 8 questioners were not returned back.

4.2 Background of Respondents

Analyzing background of respondents is very necessary to associate how employee educational level, work experience, and demographic factors effect on credit risk management practice of the given banks. Accordingly, below table 4.1 indicate demographic characteristics of respondents.

Table 4.1 Characteristic of respondents

Character	Category	Frequency	Percentage (%)
Gender	Male	65	66.3
	Female	33	33.7
	Total	98	100
Age	20-25 Years	13	13.3
	26-35 Years	24	24.5
	36 - 45 Years	44	44.9
	Above 46	17	17.3
	Total	98	100
Education	College diploma	20	20.4
	First Degree (BSc, BA)	66	67.3
	Second Degree (MSc, MA)	12	12.2
	Total	98	100
Experience	Less than 3 years	16	16.3
	3 - 6 years	40	40.8
	6 - 10 years	36	36.7
	Above 10 years	6	6.1
	Total	98	100.0
Authorized body to assess risk	Branch manager	15	15.3
	Senior manager	21	21.5
	Internal Auditor	10	10.7
	External Auditor	7	7.5
	Board of director	40	40.8
	Risk management department	5	5.3
	Total	98	100.0

Source Questionnaire 2017

Based on the above table from 98 total respondents who works related to risk management area of the banks 63.3% of them were male while the rest, 33.3% of them were female.

With regards to the age condition of the respondents, the distribution of frequency and percentage shows that, 13% of respondents found between the age groups of 25 – 28, about 14.5% of them found between the age groups of 26 - 35 on the other hand 49.5%) of them found between the age group of 36 – 45, the rest 17.3% were above 46 years. According the age distribution of the respondent's majority of them found at the adult age groups.

With regards to educational respondents of educational level, majority of the respondents accounted for 67.3% hold their first degree, while the rest 20.4 % and 12% of them hold College Diploma and master degree respectively. Regarding with the educational level the study implied that, as the area of risk management need well educated person, there is still a gap covering the area through advanced education.

Regarding with, respondent's service years most of the employee fall in the range service years of 3 – 6 years accounted for 40.8% and 6 – 10 years (36.7%) and the rest 16.3% and 6.1% respectively served less than 3 years and above 10 years.

For the Risk assessing body, the result in the above table shows highest percentage for board of director (40.8%) and senior manager (21.5%). Similarly, the NBE's risk management guideline of (2009) indicates that in all banks top management and board of directors have the authority to assess risk in their organization because the top-level management has the authority to establish risk management and decides the objectives and strategies for organizational risk management activities.

4.3 Risk Identification Methods

Credit Risk identification is the process of identifying an organization risks and vulnerabilities and raising awareness of these risks in the organization. It is the starting point for understanding and managing Credit risks – activities central to effective management of financial institutions. There are different types of techniques that can be applied to identify a credit risks identification technique, such as, financial statement analysis, Audit and physical inspection, inspection by the bank risk manager, and internal communication. Based on these respondents were asked optional

types of questions to indicate widely used techniques of credit risk identification in their banking business. Table 4.2 indicates the participant's response on Risk identification methods.

Table 4.2 Risk identification practice of the Banks

Basic Methods of Credit Risk identification	Frequency	Percent
Financial statement analysis	38	38.8
Audit and physical inspection	23	23.5
Inspection by the bank risk managers and other staffs	27	27.6
Internal communication	10	10.2
Total	98	100.0

Sources, Survey Data (2017)

It can be clearly seen from the table 4.2 that Financial Statement Analysis is the widely used method with total score of 38.8% and followed by Inspection by the bank risk managers and other staffs with the score 27.6 % and then audit and physical inspection total score of 23.5%. Overall, these results indicate that majority of the private banks used the above major three methods of risk identification (Financial Statement Analysis, audit and physical inspection and inspection by the risk manager as the most important and widely used method in Ethiopian private commercial banks.

4.4 Factor Affecting Credit Risk Handling Techniques

Its known that the biggest risk faced by the banks today remains to be the credit risk. As a result, the banks are now more equipped in handling credit risk, in the allocation of its on-going credit allocation activities. But, the analysis of credit risk was limited to reviews of individual loans, which the banks kept in their books to maturity. Similarly, as indicated in NBE's 2009 survey report, credit risk is the highest and most important risk than other type of risks in Ethiopian banks. It is known that for most banks, loans are the largest and most obvious sources of credit risk. Credit Risk can't be avoided but has to be managed by applying various risk mitigating processes. Banks can reduce its credit risk as it can get vital information of the inherent weaknesses of the accounted by applying a regular evaluation and rating system of all investment opportunities. With related to this ideas, the study were asked a respondents which credit handling system of their bank mostly affected the banks effective credit handling and assessment system such as, collateral risk, risk of payment collection or risk of credit rationing, accordingly, below in table 4.3 their respective response were presented as follow:

Table 4.3 Credit risk more affected the bank Credit risk handling techniques

Credit Risk Handling Techniques	Frequency	Percent
Collateral risk	51	52.0
Credit payment risk	26	26.5
Credit rationing risks	21	21.4
Total	98	100.0
Sources, Survey Data (2017)		

The above table indicates respondents view on credit handling techniques which frequently faced in their bank risk handling practice. Accordingly respondents implied that, the main reason for which the banks are taking Collateral is credit default reduction, especially during the time of the debt default. The above table shows that the average collateral risks faced by banks were very high as implied by 52% of the respondents.

The other type of credit risk that challenged credit risk handling practice of the banks was payment collection risk, as implied by 26.5 % respondents, this loss is generated from loss of principal from a borrower's failure to repay a loan or meet a contractual obligation. Finally, the above table indicate challenges of credit rationing risks as indicated by 21.4% respondent even though the challenging is lower than the collateral risk and credit payment risk but still the problem is faced on the banks credit risk handling process. To reduce one of the risk area the study asked respondents what methods where applied to reduce one of the challenges. Accordingly, respondents implied their respective answer below in fig 4.1

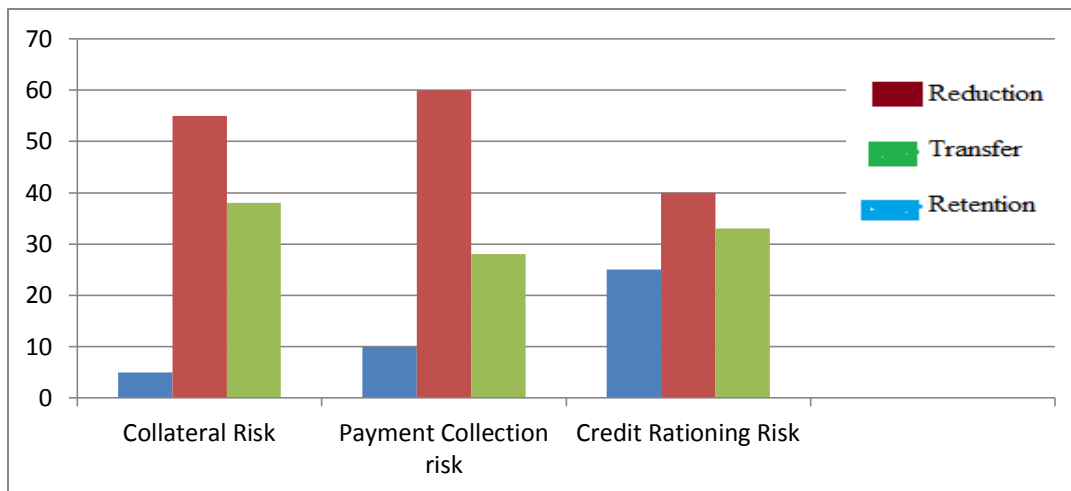


Figure 1: Credit risk handling techniques frequency and percentages Source: Questionnaire survey, 2017

To handle specifically each type of credit risk, different techniques have been used by the banks. For collateral risks, reduction is the most suggestible technique as 56% respondents suggested and followed by transfer 39 % of respondents retention indicated by 5% respondent. Similarly, for payment collection risk, risk reduction and retention is suggestible by respondents to handle it. 60% of the respondents respond that risk reduction is the suitable risk controlling tool for payment collection. While 29% of them said transfer payment collection risk is suitable and a small percentage suggests accounted for 10% refers retention. Respondent also indicate their view regarding to rationing credit risk minimization techniques, accordingly, 40% and 34% of them respectively indicated using reduction and transfer is available technique while the rest, 25% implied retention. The result of open ended question stated that there are a number of techniques banks used in the mitigation of credit risk. Among them the most commonly used are Collateral and guarantees. In credit risk, all collateral risks, payment collection risks and limiting borrower's risks are handled through risk reduction, since it is not possible for the banks to avoid businesses in this area and unprofitable to transfer all risks to another parties which takes premium. Next to reduction, accepting and financing credit risk is advisable depends on finding of this study. Generally, in order to reduce credit risk, Banks should assess the credit worthiness of the borrower before sanctioning loan and fix prudential limits on various aspects of credit. There should be maximum limit exposure for single/ group borrower.

As stated in NBE 2011 Annual report, in monitoring credit risk exposure, consideration is given to trading instruments with a positive fair value and to the volatility of the fair value of trading instruments. To manage the level of credit risk, the Group deals with counter-parties of good credit standing, enters into master agreements whenever possible, and when appropriate, obtains collateral. The Group also monitors concentrations of credit risk by industry and type of customer in relation to the Group loans and advances to customers by carrying a balanced portfolio. The Group has a significant exposure to individual customers or counter parties.

4.5 Descriptive Result using Mean and Standard Deviation

The descriptive part of this study were analyzed based on using a descriptive statistics of mean and standard deviation. Accordingly, the composite mean value shows the average of all respondents' perceptions on a certain related questions of credit risk determinate factors. While, standard deviation shows how diverse are the perceptions of respondents for a given questions.

For instance, high standard deviation means that the data are wide spread, which implies respondents give variety of opinion while, low standard deviation implies respondents closeness of opinions whether positively or negatively. Based on these, the result mean score value and standard deviation of the study represented referring rule of thumb that pertaining to the intervals for breaking the range in measuring variables that are captured with five point scale (that ranges from strongly disagree to strongly agree) is 0.8, which is actually found by dividing the difference between the maximum and minimum scores to the maximum score (Thumb, 2012). Hence, a calculated composite mean value that ranges from 1 to 1.80 implies strong disagreement, whereas the remaining ranges of 1.81 to 2.6, 2.61 to 3.4, 3.41 to 4.2 and 4.21 to 5.00 representing respondents' perceptions of disagreement, neutrality, agreement and strong agreement respectively. Therefore, composite scores of mean and standard deviation were calculated for each of the variables as follow:

4.5.1 Factor Affecting Establishment of Appropriate Credit Risk Environment

Establishing Appropriate Credit risk environment is preliminary activities of Credit risk management process. To assess the banks whether they established appropriate credit risk environment or not the study had develop a five scale Likert types of questions and respondents were invited to indicate their views for each of the questions. The results mean score value and standard deviation implied below in the table.

Table 4.4 Respondents View on establishing credit risk environment

Facilities to establish better credit risk environment	N	Mean	Std. Deviation
The existing organizational culture helps to know how to assess and handle risks	98	3.4286	1.20137
Risks are assessed regularly and its changes handled properly	98	2.9592	1.27561
The reported hazards been effectively controlled	98	3.0306	1.17932
There is an effective strategy established according to size of the bank	98	2.5551	1.30866
Adequate resources are allocated for assessing risk	98	2.1020	0.24759
Banks have strong group risk and internal audit functions which report directly to the Center	98	2.9388	1.22530
There is experienced staff, which recognizes potential problems, and brings them to the attention of their supervisors	98	2.1796	0.13046
Banks should assess the credit worthiness of the borrower before sanctioning loan	98	4.1327	0.18093
The bank offer training for employees on credit risk management	98	2.1469	1.25470

Sources, Survey Data (2017)

As indicated from the above table the study were asked whether the studied banks credit risk management practice affected by the existing organizational culture or not, hence, the majority of the respondents implied at a mean score value of 3.4286 with a standard deviation of 1.20137 there is a good organizational culture which helps to understand credit risks of the studied banks. In Ethiopian banking environment there is similar rules and guidelines developed at the Head Office for each bank, which helps to understand the risks that affect the bank. In addition, the interview held with branch managers state that the banks followed policies and guidelines of National Bank of Ethiopia (NBE), which may help to control risks, especially external risks like interest rate risk, foreign exchange risk, and risks come from countries economic and monetary policy.

With related to the question assessed whether credit risks assessed regularly and its changes handled properly or not, respondents implied, at a mean score 2.9592 and Std. Deviation 1.27561 frequent assessment of risks were not done regularly and the risks handled properly.

Similarly, the study were assessed whether the observed hazards of risk controlled effectively or not, respondents implied at a mean score value of 3.0306 indicates the banks tried to tackle the observed hazards of risks, however, the result implied by a respondents at a standard deviation at 1.17932 implied still there is some challenges in effectively tackling the reported hazards. The interview result also indicates that the risks found and reported to the center have been controlled by head office Board of Directors (BoD) and senior management by informing branches through reports, meeting and direct contacts.

Regarding with the bank size the study was assessed the size of the Bank in terms of its asset position. Large Banks are expected to have low credit risk that emanate from their capacity to establish sound credit risk management framework. In this regard the result mean value and Std. Deviation at 2.2245 and 1.30866 respectively implied respondent's negative response on the challenge of the bank size in managing or controlling the credit risk easily.

With regard to allocation of resources for assessing credit risk, the mean score is lowest indicated at 2.1020 with a Standard deviation 0.24759 this show respondents disagreement or the studied banks have a problem with allocating adequate resources to handle risks effectively. Therefore,

from the result the study can deduced that, lack of budget to assesses credit risk of the banks are one of the major cause that affect credit risk management practice of private banks.

With related to whether banks have strong group risk and internal audit functions which report directly to the Center or not, the study implied at average mean score value of 2.9388 indicated that there were moderate group risk and internal audit functions which are directly report to the Head Office because internal auditors of banks do not independently review effectiveness of banks' risk management functions and also the authority to deal with risk management is given to risk management department at the Head Office.

The result presented regarding employee potentials and experience in identifying potential credit risks of their respective banks respondents at lowest means core value of 2.1796 shows that for the variable of there is no that much experienced staff, which recognizes potential problems and brings them to the attention of their supervisors in the studied banks. In Ethiopia the banking sector is one of the institutions with experienced and educated staff, however, most of the competent employee, after they serve some years, leave to other organizations such as local and international NGOs and other well paid organization.

Finally, the study were assessed whether the banks provide their employee credit risk training or not, however the mean score value of the respondent at 2.1469 implied there was no adequate training program for employee.

Generally, the study analyzed that, 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 banks may cause inconsistent interpretation and application of Credit policy and procedures across the banks and finally lead to lack of common code of conducting Credit risk management activities. In this regard some of the challenges observed in providing and implementing the appropriate policy, procedures, and other necessary facilities that can reduced the problems were affected by some of the problems such as, inadequate allocation of budget, lack of employee training on the areas and lack of well experienced employee. However, the studied banks also effective in some areas were asked.

4.5.2 Credit Granting Process of the Study Area

Operating under a Sound Credit granting process is the Basis for an effective Credit risk management process under which feasible and creditworthy client is identified. In this regards the study provided related questions to assess credit granting processes of the study area. In this regard below the table indicated credit granting process of the study banks.

Table 4.5 Respondents View on Credit granting Process

Credit Granting and Management related questions	N	Mean	Std. Deviation
The Bank uses well defined Credit-granting Criteria for assessing credibility of each loan applicants.	98	3.3163	1.18057
Banks should assess the credit worthiness of the borrower before sanctioning loan	98	3.5007	0.26817
Adequacy, marketability and enforceability of collateral requirement is properly evaluated and measured by professional personnel or expertise	98	2.2796	0.25163
The bank critically follows Sound Credit granting process for approving new credits as well as amending, renewing and re-financing existing credits	98	2.9592	1.21772
The bank has established comprehensive Credit limit for the main categories of risk factors in all types of credit facilities	98	2.3163	1.17181

Sources, Survey Data (2017)

As indicated on the above table the study respondents forward their view for each of the questions asked, accordingly, the mean score value 3.3163 implied respondents response was neutral whether their bank uses well defined Credit-granting Criteria for assessing credibility of each loan applicants or not, this implied that, still respondents are not confident on their banks criteria credibility in providing loan for each applicant. Based on the banks credit criteria the study were forwarded a question whether the bank assess credit worthiness of borrower or not before sanctioning loan; in this regard respondents implied their agreement at a mean score value of 3.5007 with smaller variation of std. deviation at 0.26817 which implies commercial banks assess credit worthiness of borrower before sanctioning of a loan.

Regarding with adequacy, marketability and enforceability of collateral requirement, evaluation practice the study were forwarded a questions for the selected respondents of each banks accordingly, respondents implied their disagreement at a mean value of 2.2796 with smaller indicated std. deviation 0.25163. in this regard some of the employee implied that, the banks

asked borrowers equivalent collateral for the money they lend, however, collaterals marketability were not studied in detailed.

Regarding the questions asked whether the bank critically follows Sound Credit granting process for approving new credits as well as amending, renewing and re-financing, respondents implied at a mean score vale of 2.9592 and Std. 1.21772 there is some challenges specially, new borrowers are not treated based on several encouraging criteria.

Finally the study were assessed whether the bank has established comprehensive Credit limit for the main categories of risk factors in all types of credit facilities or not in this regarding the mean value of 2.3161 with a std. deviation value of 1.17181 implied their disagreement which means the banks didn't established well organized and comprehensive credit limit for main categories of risk factors.

4.5.3 Maintaining an Appropriate Credit Administration, Measurement and Monitoring Process

Proper administration of Credit documentation as well as monitoring the status of borrowers, loan term and conditions and collateral coverage periodically as well as keeping Credit file up to date and repayments continuously are the basic post Credit approval activities of Credit risk management process that help to discover mistake at early stage while management information system and internal risk rating are the main ingredient for monitoring, reporting and controlling risks. With related to this questions the study were forwarded related questions for respondents to assess the study banks appropriateness in measuring, monitoring as well as documenting the credit file. The response indicated below in the table:

Table 4.6 Respondents View on crediting measurement and monitoring practice of the banks

Practice of credit measurement, monitoring related questions	N	Mean	Std. Deviation
The bank strictly monitors loan terms and conditions that have been stipulated at the time of loan approval	98	3.1531	1.25470
The bank regularly reviews and monitors the performance of Credit quality at individual and portfolio level	98	3.1327	1.24053
There is a complete, neatly organized and regularly updated credit file in our bank	98	2.6143	1.24354
The bank has developed its own internal risk rating system and applying in credit risk management process effectively	98	3.4673	1.12505

Sources, Survey Data (2017)

As indicated by respondents the bank strictness in monitoring loan terms that have been conditions stipulated at the time of loan approval the average mean score value of at 3.1531 implied respondents neutrality, which implies there is moderate strict monitoring of loan terms. Similarly the average mean score value 3.1327 with a std. 1.24053 implied that, even though the bank follow up and monitor the performance of credit quality at individual level, however, respondents response implied still the banks are not effectively assess individuals portfolio after granting credits.

The study were also asked respondents whether there is a complete, organized and regularly updated credit file in the studied banks or not, in this regard respondents at a lowest mean value of 2.6143 implied their negative response or disagreement which implies, still the banks are weak in providing updated credit file.

With regards to the banks internal risk rating system and applying in credit risk management process the highest mean value of 3.4673 implied positive response of employee which means the banks use their own internal credit risk rating system.

Generally, the studied banks, establishing effective management information system, Communication and reporting risk related data and quantifying credit risk both at individual and portfolio level are some issues that require great attention of top management and regulatory bodies respectively. It indicates that appropriate Credit administration, Measurement and Monitoring process are maintained somewhat in line with guideline of NBE and Basel (1999). However, there are challenges in continuously monitoring, measuring, filing and reporting credit risk on time.

4.5.4 The Effect of market Risk on Credit Risk Management

The study was assessed how the banks manage the marketing strategy and what is its effect on credit risk management practice. This is because, Poor reaction in the market leads to negative reactions from investors to the banks poor earnings declarations which rocked the Credit risk management practice. In this regard the study were provided a related questions and respondents were forwarded their respective view on the provided questions below in the table.

Table 4.7 Respondent view on the effect of market risk of the bank on credit risk management

Questions related to market strategy on credit risk	N	Mean	Std. Deviation
The bank applied an effective marketing reaction	98	2.4571	1.49914
There is lack of benchmarking against competitors	98	3.1837	1.47381
The bank critically assess commercial locations	98	3.5000	1.05762
The bank effectively work to fulfill customer demand and expectation	98	2.8469	1.25470
The bank manage interest rate instability	98	4.9694	1.27185

Sources, Survey Data (2017)

As the above table indicates, the studied banks didn't applied an effective marketing reaction this was implied by the lowest mean value at 2.4571 which indicates high risk of poor market reaction and high variation between respondents which implied at std. deviation 1.49914. The result of this study also showed, there is moderate exposure related to lack of benchmarking against competitors as indicated at a mean score value of 3.1837. The other credit risk which affects Ethiopian banks is declining of commercial location. As the above table shows, declining commercial location affects more private banks as its mean shows high risk of 3.5000.

The study also asked whether the banks effectively work to fulfill customer demand expectation or not; however the result mean value at 2.8469 implied the banks moderately fulfill customer expectation on the demand of loan.

Finally, in Ethiopia the interest rate risk did not bring high loss, since the interest rate is constant for a long period of time and no competition between Ethiopian banks in interest rate. In Ethiopia Bank deposits and lending held for a fixed interest rate, which is determined by national bank of Ethiopia. The benchmark interest rate in Ethiopia was last recorded at 7% percent. Similarly, regarding the result from the above table the risks of interest rate fluctuation shows less than the average amount of risks at a mean score value of 4.9694.

4.5.5 Operational Risk Analysis's

In modern flexible world there is no single working process continued ever. When banks change the existing process and implement the new one, they may face different risks. Currently Operational risk becomes another source of danger in managing and controlling credit risk, with

related to these activities the study were provided related assessment questions to assess the problems on the area. In this regard below in the table respondents implied their view as follow:

Table 4.8 Respondents view on the effect of operational risk on the effectiveness of credit risk management

Questions related to operational risk	N	Mean	Std. Deviation
There is a problems when Risk of transition from the existing process to the new one	98	3.1531	1.15189
worker's skill, experience and training risk challenges frequently affect	98	3.9041	1.26784
There is frequent Systems failure	98	3.5918	1.04375
There is failure of transaction risk	98	3.2245	1.16239
Failure to communicate with each other	98	3.1939	1.19844
There is failure whether Internal or external risk reporting	98	3.0204	1.25984
There is failure an electronic transfer of payments	98	3.0510	1.26306

Sources, Survey Data (2017)

With related to the problem of financial transaction, respondents implied at a mean value score of 3.1531 even though the banks are well done and reduced credit risk of in the process of financial transaction, however, some of the respondents at a std. deviation of 1.15189 implied there are still problems, some of the interview related to this idea implied that, even if one side of transaction is settled however, the other may fail.

Lack of workers skill, experience and training are another exposure that leads bank to loss. The banks should improve the worker's skill by providing appropriate training through establishing best practices for professional development. In relation to this the above result indicated at highest mean value score of 3.9041 is with std. deviation of 1.26784 implied that, lack of skilled and experienced professionals on the operation of credit risk affect the bank effectiveness in reducing credit risk.

The risk of system failure which includes, network failure, hardware failure, software failure, interdependency risk, and so on leads the banks to loss. The above table shows a mean and standard deviation of 3.5918 and 1.043753 respectively, implied that, the studied banks have a faced frequent system failure, as some of the respondents implied as the problem of system failing is countrywide. It is difficult to solve the challenges only in an efforts of private commercial banks.

Transaction risks such as execution error, booking error, settlement error, commodity delivery risk and etc. Have another exposure which leads banks to loss. Most of the banks do not relies entirely on external sources of information for transactional risks, but the smaller banks are more inclined to rely more heavily on such sources due to lack of resources. The result of this study on transactional risk shows a mean of mean 3.2245 and std. deviation of 1.16239 implied the problem is still affect the bank credit risk management practice.

Failure to communicate with each other brings risks related to misunderstanding of information. Accordingly the mean value at 3.1939 and std. deviation 1.19844the of the study banks implied even though the problem is not widely exposed the banks to loss, however, some of the problem relate to the area is still affect the banks performance.

Banks have internal and external reporting requirements regarding the different kinds of risks and impacts associated with its portfolio. There are some risks related to this Internal/external reporting which includes not reporting Overall exposure to banks and performance at the branch level. The values from the table indicate a mean and standard deviation of 3.0204 and 1.25984 respectively shows moderate risk are observed in the studied banks.

4.5.6 Legal Risk Analysis and Handling Techniques

The legal exposures of any particular bank which includes the risk of collateral damage, misinterpretation of law and whether the documentation is relatively easy to understand or difficult to understand were depends on the independence of judge and the sophistication of contract associated with risks. In this regard the study was provided a related question to assess the challenges of legality risk on credit risk management practice of the banks. Based on these the study were assessed the area, if misinterpretation of law and legislation problem faced in the banks, criminal activities as well as documentation process of the contracts. In this regard respondents forwarded their respected view below in the table.

Table 4.9 Respondents view on the effect of legality risk on the effectiveness of credit risk management

Questions related to legality risk	N	Mean	Std. Deviation
There is Misinterpretation of law and legislation problem faced in the bank	98	3.0000	1.18409
Criminal activities (fraud, theft, and property damage) affected the bank risk management practice	98	2.3878	1.17212
Documentation/contract risk affected the bank risk management practice	98	3.2653	1.23147

Sources, Survey Data (2017)

To analyze the result from the table above, the risks related to misinterpretation of law is moderate which was implied by 3.0000 and 1.18409 mean value and std. deviation respectively. This is because the laws and the legislation of the credit risk management program as a whole governed by NBE, policies and legislations; however, some specific rules mandate are given for individual's banks to develop internal rules and regulation to control their bank credit risk management.

As indicated by lowest mean value of 2.3878 criminal activist are rare case in commercial private banks of Ethiopia, so that the effect of Criminal activities (fraud, theft, and property damage) didn't that much affect the bank risk management practice.

Finally the study were assessed the studied banks contract documentation practices, accordingly, resulted at a mean value of 3.2653 implied still there is a moderate problem observed on the area, in this regards the NBE's survey report (2009), implied that majority of banks having strategies, policies, programs and procedures related to credit risk management, have also secured approvals on the documents from relevant authorities so that the problem on the area is less.

4.6 Correlation Analysis on the Determinants of Credit Risk

To find out the relationship the dependent and independent variables Pearson's correlation coefficient (r) which measures the strength and direction of a linear relationship between two variables were used. Values of Pearson's correlation coefficient are always between -1 and +1. A correlation coefficient of +1 indicates that two variables are perfectly related in a positive sense; a correlation coefficient of -1 indicates that two variables are perfectly related in a negative

sense, and a correlation coefficient of 0 indicates that there is no linear relationship between the two variables. A low correlation coefficient; 0.1 - 0.29 suggests that the relationship between two items is weak or non-existent. If r is between 0.3 and 0.49 the relationship is moderate. A high correlation coefficient i.e. >0.5 indicates a strong relationship between variables. The direction of the dependent variable's change depends on the sign of the coefficient. If the coefficient is a positive number, then the dependent variable will move in the same direction as the independent variable; if the coefficient is negative, then the dependent variable will move in the opposite direction of the independent variable. The table below presents the result of the correlation analysis.

Table 4.10. Correlation coefficient analysis respondents

		Correlations						
Variables		ACRE	SCGP	CAMMP	MRA	ORA	ALR	CR
	N	98	98	98	98	98	98	98
Pearson Correlation Sig. (2-tailed) N	ACRE	1	.303**	.900**	.904**	.876**	.797**	.922**
	SCGP		1	.454**	.358**	.525**	.597**	.726**
	CAMMP			1	.894**	.975**	.909**	.820**
	MRA				1	.902**	.778**	.799**
	ORA					1	.922**	.790**
	ALR						1	-.721
	CR							1

****Correlation is significant at the 0.01 level (2-tailed).**

***Correlation is significant at the 0.05 level (2-tailed).**

The result of correlation coefficient shows that all variables are statistically significant and positively correlated with the credit risk. Accordingly, the bank's credit risk management more affected by lack of establishing appropriate credit environment which represented by a sign (ACRE) at (r = 0.922), followed by challenges of credit administration, measurement and monitoring (CAMMP) at (r = .820**) , Lack of Market risk analyses (MRA), at (r = .799**), Operational risk (ORA) at (r = .790**) and challenges sound Credit granting process (SCGP) at (r = .726), however, Legality risk assessment has a negative relation with credit risk management at (r = - .721). The correlation between the dependent and independent variables implies that, change made in one of the independent variables can change organization performance and efficiency. Thus from this result the study confirmed that, all of the independent factors that are provided in the questioner affect credit risk management practice of the study private banks except little impact on the challenges of legality risk.

4.7 Regression Analysis

Regression analysis was employed to examine the effect independent variable over the dependent one, the result also helps us to understand which variables more affect credit risk management practice of private commercial banks in Ethiopia. Based on these below the regression analysis of the study summarized as follow:

Table 4.11 Model Summary of the study

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936 ^a	.876	.868	.37891

a. Predictors: (Constant), ALR, SCGP, MRA, ACRE, CAMMP, ORA

As it can be depicted from the table there is a positive and statistically significant Relationship between the independent variables and the dependent variable. In overall, the results revealed that all independent variables accounted for 87.6% of the variance ($R^2 = 0.876$). Thus, 87.6 % of the study assessed the studied banks factors affecting credit risk management practice on the provided questionnaires, however, 12.4% unexplored or not addressed in this study.

Table 4.12 ANOVA Result of the study

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	92.608	6	15.435	107.503	.000 ^b
	Residual	13.065	91	.144		
	Total	105.673	97			

a. *Dependent Variable: CR*

b. *Predictors: (Constant), ALR, SCGP, MRA, ACRE, CAMMP, ORA*

The result in the ANOVA table confirmed the significance of the overall model by p- value of 0.000 which is below the alpha level, i.e. 0.05, which means, the independent variables taken together have statistically significant relationship with the dependent variable under study. Accordingly, among the major factors which affect credit risk management practice of private commercial banks were, establishment of credit environment, appropriate measurement and monitoring of credit, operational challenges, challenges of credit granting, market challenges as well as legality challenges are the most important factor that affect effective credit risk management of private banks.

Table 4.13 Coefficients Analysis of the study

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.146	.149		7.666	.000
	ACRE	.863	.090	.993	9.612	.000
	SCGP	.172	.046	.195	-3.776	.000
	CAMMP	.591	.160	.610	-.571	.569
	MRA	.154	.076	.222	-2.025	.046
	ORA	.693	.192	.713	1.003	.318
	ALR	.11	.097	-.43	1.150	.253

a. Dependent Variable: CR

In the table- above, coefficients indicated how much the dependent variable varies with an independent variable, when all other independent variables are held constant. The beta coefficients indicated that how and to what extent the independent variables influence the dependent variable. Accordingly the result coefficient value of regression analysis indicated that, ACRE, (beta = .993, t = 9.612, p = < .000), ORA (beta = .713, t =1.003, p = .318) and CAMMP (beta =.610, t= -571, p < .569) has the highest influence or significant impact on credit management practice of the studied private banks.

4.7 Discussion of the Results

According to Sullivan, & Drecnik (2002) commercial banks used several types of method to control credit risk such as, credit rationing, loan syndication, loan securitization, and collateral. However, the finding of this study indicated most of the studied private banks of Ethiopia used a tools to control credit risks that are collateral and credit rationing. Tools like covenants, collateral, credit rationing, loan securitization and loan syndication have been used by banks in developing world in controlling credit losses (Benveniste and Berger, 2001; Greenbaum and Thakor, 2000).

Yuqi Li , (2006) the findings also show that the respondent commercial banks undertook various activities with respect to monitoring borrowers. These included the following: Frequent contact with borrowers, creating an environment that the bank can be seen as a solver of problems and trusted advisor, development good organizational culture of the banks, Similarly this study also indicated that, management practice of the private banks in Ethiopia affected by the existing organizational culture this were indicated by the majority of respondents at a mean score value

of 3.4286 with a standard deviation of 1.20137 implied there is a good organizational culture which helps to understand credit risks of the studied banks. This is because in Ethiopia banking environment there is similar rules and guidelines developed at the Head Office for each bank, which helps to understand the risks that affect the banks credit risk.

The study finding also indicated that credit growth of the banks negatively affect credit risk management practices of the banks, this is because on the borrowers increases it need an experts that advised each borrowers frequently and it need follow ups of borrowers, however most of a similar studies implied a result in reverse to our study, such as a study results of Das & Ghosh, (2007), Jimenez & Saurina (2006), Thiagarajan, S., et al (2011), Ahmad & Bashir (2013) who found a positive influence of Credit growth on credit risk. This is due to the reason that the banks may develop the best experience of dealing with borrowers (build the capacity of solving the borrower's problem by giving consultant and other service to improve their loan repayment), developing strong credit risk culture as well as develop sound Credit risk management system whenever a problem loan arise due to credit growth .

Regarding with the banks size and credit risk management most of the similar studies such as Yong (2003) implied that, large banks are expected to developed better credit risk management practice than small size banks. It is due to the fact that large banks have ability to deal with credit risk by formulating sound and effective Credit risk management system, introducing modern risk management instruments and adopt new technology as well as a better portfolio diversification opportunity and gaining competitive advantage on economies of scale so that contribute for minimizing problem loan.

The result of correlation coefficient shows that all variables are statistically significant and positively correlated with the credit risk management practice of the studied banks. Accordingly, the bank's credit risk management more affected by lack of establishing appropriate credit environment which represented, followed by challenges of credit appraisal measurement and monitoring, Lack of Market risk analyses, Operational risk and challenges sound Credit granting process, however, Legality risk assessment has a negative relation with credit risk management.

CHAPTER FIVE

5. SAMMARY, CONCLUSIN AND RECOMENDATION

5.1 Summary of Findings

The study was analyzed in to two parts; in the first part the study was analyzed variables using descriptive approach and in the second part the study tried to analyze using inferential statistics such as, testing correlation between dependent and independent variables as well as regression analysis. Based on these, the study discusses major findings as follow:

With regards to the study area risk assessing body, the result, the finding implied that, in the highest percentage of risk assessing body were board of director (40.8%), followed by, senior manager (21.5%).

In relation to the banks credit risk identification processes the finding show that, most of the studied banks used Financial Statement Analysis method with total score of 38.8% and followed by Inspection by the bank risk managers and other staffs with the score 27.6 % and then audit and physical inspection total score of 23.5%.

With related to challenges of credit risk handling, collateral risks faced by banks were very high as implied by 52% of the respondents, followed by payment collection risk, this loss is generated from loss of principal from a borrower's failure to repay a loan or meet a contractual obligation.

In relation to the study assessed whether there is regular assessment of the bank credit management system or not the study implied at average mean score 2.9592 and Std. Deviation 1.27561 that, even though some of the branch banks weak in proper assessment practice of credit risk and handled the assessed report properly, however, most of the studied banks were efficient in their practice. Similarly, the average score of the respondents with regard to controlling the reported hazards at a mean score 3.0306 indicates their agreement with little difference among some respondents of banks represented by 1.17932 St. Deviation is good.

Regarding the relation between the bank size and credit risk management practice, the study implied that, the banks size affect credit risk management, this is because large size banks need huge resources to control the banks credit effectively with related to credit granting process of the study, the mean score value 3.3163 implied respondents response was neutral whether their

bank uses well defined Credit-granting Criteria for assessing credibility of each loan applicants or not, the study assessment on credit worthiness of borrower before sanctioning loan respondents implied their agreement at a mean score value of 3.5007 with smaller variation of std. deviation at 0.26817 which means the banks assess creditor worthiness before credit. Similarly the studied banks also assess the collateral of the borrower marketability before granting the loan.

Regarding the banks Maintaining an appropriate Credit administration, Measurement and Monitoring process, the banks perform very well in some area, however there were also a challenges in some areas such as, bank strictness in monitoring loan terms that have been conditions stipulated at the time of loan approval the average mean score value of at 3.1531 implied respondents good. The average means score value 3.1327 with a std. 1.24053 implied the banks are not effectively assess individual's portfolio after granting credits.

With Related to Market Risk and credit risk of the study banks the result implied that, there is high exposure related to lack of benchmarking against competitors. The other credit risk which affects the studied banks was declining of commercial location. The average score mean value at 2.4571 implied that, the studied banks were not used an effective marketing reaction to minimize credit risk.

The banks credit risk management practice were also affected by operational challenges such as, risk transaction, frequent Systems failure, Failure to communicate with each other, failure whether Internal or external risk reporting and failure of electronic transfer.

The assessment of the study with the relation between legality risk and credit risk, the studied banks were not that much affected by a legality risks. This is because majority of banks having strategies, policies, programs and procedures related to credit risk management, have also secured approvals on the documents from relevant authorities so that the problem of legality was not significant.

In overall, the results of the correlation and regression revealed that, except tangibility all independent variables (service quality dimension) are significant with customer satisfaction at the level $p < .05$. Furthermore, multiple regressions identify the relative contribution of each

variable and determine the best predictor variables among a set of variables. The results in demonstrate that all variables contributed significantly to credit risk.

The result of correlation coefficient shows that all variables are statistically significant and positively correlated with the credit risk management practice of the studied banks. Accordingly, the bank's credit risk management more affected by lack of establishing appropriate credit environment which represented, followed by challenges of credit appraisal measurement and monitoring, Lack of Market risk analyses, Operational risk and challenges sound Credit granting process, however, Legality risk assessment has a negative relation and insignificant impact on credit risk management practices of the study banks.

The Result regression coefficients also implied that, to what extent the independent variables influence the dependent variables. Accordingly the result coefficient value of regression analysis indicated that, ACRE, (beta = .993, t = 9.612, p = < .000), ORA (beta = .713, t = 1.003, p = .318) and CAMMP (beta = .610, t = -571, p < .569) respectively and significantly affect credit risk management practice of the studied private banks.

5.2 Conclusion of the Study

The study investigates factor affecting credit risk management practice of selected private banks in Ethiopia, to assess the credit risk area of each banks the study were identified some of related areas that can affect the activities of the banks such as, banks establishment credit risk environment, credit granting process, credit monitoring process, market assessment, operational risk analysis's, legal risk analysis. To test the effect of such variables on banks profitability, the study used both descriptive and inferential statistics. Adoringly the major fining's of the study concluded as follow:

- Regarding Credit Risk Environment management of the study banks the result implied that, even though, the boards and higher officials of the banks tried to established an appropriate credit risk management producers based on NBE guidelines and others well developed principles, however, the criteria's and polices affected in each branches of the banks during their implementations. With related to this the finding implied that, the existing organizational culture helps to know how to assess and handle risks, however, when it implement at several level of the banks management there were a problems such as, lack of assessing risks regularly, lack of adequate resources allocation assessing credit risks, lack of experienced staff on the areas of credit risk, and lack of training and development program on credit risk handling and management program. Therefore, with related to effect of the establishment of credit risk environment on credit risk management practices, the study implied that, credit risk management practice of the studied banks were not affected by the establishment on the policies, procedures and criteria's, however, risk management of the banks were affected when the established rules implemented at deferent level of the bank management.
- With related to the banks credit granting process and the bank risk management practices the study found that, in some of the credit granting processes the banks perform well such as, the Banks use well defined Credit-granting Criteria for assessing credibility of each loan applicants, and banks assess the credit worthiness of the borrower before sanctioning loan, however, there were also a challenges in some of the areas that the banks were not performed well such as, lack of professionals evaluation and measurements of marketability collaterals, lack of renewing and re-financing existing credits, lack of

establishing comprehensive Credit limit for the main categories of risk factors in all types of credit facilities.

- Regarding with credit administration, Measurement and Monitoring process, the study implied that, appropriate Credit administration, Measurement and Monitoring process are maintained somewhat in line with guideline of NBE and Basel (1999). However, there are challenges in continuously monitoring, measuring, filing and reporting credit risk on time.
- The result of the finding also implied that, credit risk management practice of each banks were affected by operational challenges such as, risk transaction, frequent Systems failure, Failure to communicate with each other, failure whether Internal or external risk reporting and failure of electronic transfer.
- Finally the study implied that, effect of legality risk on credit risk of the studied banks were not that affect like the others variables. This is because majority of banks having strategies, policies, programs and procedures related to credit risk management, have also secured approvals on the documents from relevant authorities so that the problem of legality was not significant.

5.3 Recommendation

- As indicated on the findings one of the major challenges faced by the studied banks were, implementing the established credit risk strategy provided by the higher officials of the banks, to solve and minimize these problem the study advised that, 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. In addition, 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.
- With related to credit granting criteria and process the banks were also affected in some areas, to minimize the challenges' the study suggest that, 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. There also need that, 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.
- There are risks which specifically faced by branch level, therefore the bank management should establish risk management department at branch level or regional level.
- Hence, improving performance require to institute a strong credit risk management system that can efficiently identify bankable borrowers and a system that can monitor their performance after the loan is granted.
- A well-structured internal risk rating system is a good means of differentiating the degree of credit risk in the different credit exposures of a bank. This will allow more accurate determination of the overall characteristics of the credit portfolio, concentrations, problem credits, and the adequacy of loan loss reserves. Thus, all banks are encouraged to develop and utilize an internal risk rating system to manage credit risk.

- The Bank's operational risk management includes defining, assessing, monitoring, mitigating and controlling risk. Every unit in the Bank is directly responsible for managing its operational risk and for establishing measures to mitigate and control risk to the designated level by allocating appropriate resources and establishing an organizational culture for managing operational risk.

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Appendices

QUESTIONNAIRE
ADDIS ABABA UNIVERSITY
GRADUATE STUDIES

DEPARTMENT OF ACCOUNTING AND FINANCIAL MANAGEMENT

Dear respondents,

I'm a graduate student at Addis Ababa University in Department of Accounting and financial management. Currently, I'm conducting a research entitled '**assess factor affecting credit risk management and its impact on financial performance of commercial banks of Ethiopia**' as a partial fulfillment of the requirements for the Degree of Master of Arts.

The purpose of this questionnaire is to gather data for the proposed study, and hence you are kindly requested to assist the successful completion of the study by providing the necessary information. Your participation is entirely voluntary and the questionnaire is completely anonymous. I confirm you that the information you share will stay confidential and only used for the aforementioned academic purpose. So, your genuine, frank and timely response is vital for the success of the study. I want to thank you in advance for your kind cooperation and dedication of your precious time to fill this questionnaire.

Sincerely,

Please Note:

- No need of writing your name.
- Indicate your answer with a check mark (√) on the appropriate block/cell for all questions.

Part One: Biographical Information (please use the right (√) mark to show your choice)

1. Indicate a bank name you belong _____
2. Gender Male Female
3. Age 25 or below 26 – 35 years 36 – 45 years ≥ 46 years
4. Educational Background Diploma B/A or BSc MA/MSc

If other Specify -----

5. Work Esperance

Less than 3 year 3 – 5 years 6 years – 10 years above 10 years

6. Authorized body to assess risk in the bank

Senior manager

Internal Auditor

External Auditor

Board of director

Risk management department

7. The following table hold risk identification practice of banks, based on the type of risk identification system of your bank indicate using (√) marks

Financial statement analysis	
Audit and physical inspection	
Inspection by the bank risk managers and other staffs	
Internal communication	
Survey analysis	
Others	

8. Which one of the following credit risk more affected your bank Credit risk handling techniques?

A. Collateral risk

B. Credit payment risk

C. Credit rationing risk

D. If any others please explain _____

9. Based on the question number 8 which one of the following techniques applied in your bank to reduced credit risk Handling

	Reduction	Transfer	Retention
Collateral risk			
Credit payment risk			
Credit rationing risk			

Section II: Main Questionnaire

Please indicate your choice by putting the tick mark (√) on the appropriate cell.

Where, 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

Please indicate the degree to which you agree with the following statements regarding the factor affecting credit risk management practice of your bank

S.N.	Statement	Score Values				
		Strongly Disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly Agree (5)
	Establishing Appropriate Credit risk environment					
1	The existing organizational culture helps to know how to assess and handle risks					
2	Risks are assessed regularly and its changes handled properly					
3	There is an effective strategy established according to size of the bank					
4	The reported hazards been effectively controlled					
5	Adequate resources are allocated for assessing risk					
6	Banks have strong group risk and internal audit functions which report directly to the Center					
7	There is experienced staff, which recognizes potential problems, and brings them to the attention of their supervisors					
8	Banks should assess the credit worthiness of the borrower before sanctioning loan					
9	The bank offer training for employees on credit risk management					
	Operating under a Sound Credit granting process					
1	The Bank uses well defined Credit-granting Criteria for assessing credibility of each loan applicants.					
2	Banks should assess the credit worthiness of the borrower before sanctioning loan					
3	Adequacy, marketability and enforceability of collateral requirement is properly evaluated and measured by professional personnel or expertise					
4	The Bank conducts comprehensive Credit worthiness analysis properly before granting loan.					
5	The bank critically follows Sound Credit granting process for approving new credits as well as amending, renewing and re-financing existing credits					
6	The bank has established comprehensive Credit limit for the main categories of risk factors in all types of credit facilities.					

	Maintaining an appropriate Credit administration, Measurement and Monitoring process					
1	The bank strictly monitors loan terms and conditions that have been stipulated at the time of loan approval					
2	The bank regularly reviews and monitors the performance of Credit quality at individual and portfolio level					
3	There is a complete, neatly organized and regularly updated credit file in our bank.					
4	The bank has developed its own internal risk rating system and applying in credit risk management process effectively					
	Market risk					
1	The bank applied an effective marketing reaction					
2	There is lack of benchmarking against competitors					
3	The bank critically assess commercial locations					
4	The bank effectively work to fulfill customer demand and expectation					
5	The bank manage interest rate instability					
	Operational Risk Analysis					
1	There is a problems when Risk of transition from the existing process to the new one					
2	worker's skill, experience and training risk challenges frequently affect					
3	There is frequent Systems failure					
4	There is failure of transaction risk					
5	Failure to communicate with each other					
6	There is failure whether Internal or external risk reporting					
7	There is failure an electronic transfer of payments					
	Legality risk					
1	There is Misinterpretation of law and legislation problem faced in the bank					
2	Criminal activities (fraud, theft, and property damage) affected the bank risk management practice					
3	Documentation/contract risk affected the bank risk management practice					