



Addis Ababa University
College of Business and Economics
Department of Public Administration and Development Management

**Factors Affecting Credit Risk Management of Development Bank of
Ethiopia, Addis Ababa**

By: Mignot Getachew Muluneh

October, 2019
Addis Ababa

**Factors Affecting Credit Risk Management of Development Bank of
Ethiopia, Addis Ababa**

By: Mignot Getachew Muluneh

**A Thesis Submitted to the College of Business and Economics for the
Partial Fulfillment of the Requirement of MBA Degree in Public
Management**

Advisor: Filmon Hadaro (PhD)

October, 2019

Addis Ababa

Statement of Certification

This is to certify that Mignot Getachew has carried out this research work on the topic entitled “*Factors affecting credit risk management of the case of development bank of Ethiopia*” under my supervision. This work is original in nature and it is sufficient for submission for the partial fulfillment for the award of Master of Art (MA) in public management and policy analysis.

Advisor: Filmon Hadero (PhD)

Signature: _____

Date: _____

Statement of Declaration

This is to certify that, the thesis is prepared by Migot Getachew, entitled: *Factor Affecting Credit Risk Management Practice of Development Bank of Ethiopia*. The study submitted in partial fulfillment of the requirements for the degree of Master of public management and policy analysis complies with the regulations of the University and meets the accepted standards with respect to originality and quality. All information in this document has been obtained and presented in accordance with academic rules and ethical conduct. The study has not been submitted to any Degree or Diploma in any college or university.

Approved by Board of Examiners

_____ Signature_____ Date_____

Advisor

_____ Signature_____ Date_____

Internal Examiner

_____ Signature_____ Date_____

External Examiner

Chair of Department or graduate Program Coordination

Acknowledgment

First and foremost, I would like to thank the Almighty God who gave me the courage through his endless love and blessings that helped in accomplishment of the study. I would like also to express deep gratitude to my advisor Dr. Filimon Hadero for his constructive comment and advice. I would like also to express my gratitude to my families and friends. Finally, I would like to thank all people involved directly or indirectly for the accomplishment my work.

Table of Contents

Contents	Pages
Acknowledgment	I
Table of Contents	II
List of Tables	V
List of Acronyms	VI
Abstract	VII
CHAPTER ONE: INTRODUCTION	1
1.1. Background of the Study	1
1.2 Background of the Organization	3
1.3 Statement of the Problem	4
1.4 Research Questions	5
1.5 Research Objectives	6
1.6 Significance of the Study	6
1.7 Delimitation of the Study	7
1.9 Organization of the Study	8
CHAPTER TWO: REVIEW LITERATURE	9
2.1 Main Source of Poor Credit Management.....	9
2.2 Credit Management	11
2.3 Credit Management Practice	13
2.4 Assessment of Borrowers Credit Worthiness.....	15
2.5 Credit Management Policy.....	17
2.6 Concept of Credit Risk Management	18
2.7 Credit Risk Management.....	19

2.8 Risks Associated with Credit Management	20
2.9 Establishing an Appropriate Credit Risk Environment.....	21
2.10 Operating under a sound Credit Granting Process	21
2.11 Common Sources of Major Credit Problems	22
2.12 Maintaining Appropriate Credit Administration through Measurement and Monitoring Process	25
2.13 Empirical Literature	26
2.14 Conceptual Frame Work	30
CHAPTER THREE: RESEARCH METHODOLOGY	32
3.1 Introduction	32
3.2 Research Design and Approach	32
3.3 Target Population	32
3.4 Sampling Techniques	32
3.5 Data Collection.....	33
3.6. Data Analysis and Interpretation.....	34
3.7 Data Validity and Reliability.....	34
CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION	35
4.1 Introductions.....	35
4.2 Respondents' Profile	35
4.2 Credit Processing and Appraisal	37
4.3 Credit Monitoring and Control.....	39
4.4 The Effect of Credit Risk Management	42
4.5 Operational Efficiency Analysis	44
4.6 Discussions.....	46

CHAPTER FIVE: MAJOR FINDINGS CONCLUSIONS AND	
RECOMMEDATIONS	47
5.1 Major Finding.....	47
5.2 Conclusion of the Study	48
5.3 Recommendation.....	49
REFERENCES	51
APPENDIX.....	56

List of Tables

	Pages
Table 3.1 Sample Size.....	33
Table 4.1 Age category of respondents.....	35
Table 4.2 Academic background of respondents.....	36
Table 4.3 Years of service in credit area.....	36
Table 4.4 Current position of respondents.....	37
Table 4.5 Credit Processing /Appraisal	38
Table 4.6 Monitoring and Control of Credits	40
Table 4.7 Credit Operational Tools	41
Table 4.8 Respondent view on the effect of the bank on credit risk management	43
Table 4.9 Respondents view on the effect of operational efficiency on the effectiveness of credit risk management	44

List of Acronyms

BOM	Board of Management
CP	Credit Process
DBE	Development Bank of Ethiopia
EMC	Executive management committee
GDP	Gross Domestic Product
LPM	Loan Portfolio Management
NBE	National Bank of Ethiopia
NPL	Non-Performing Loans
RCMP	Risk & Compliance Management Process

Abstract

The study assessed factors that affect credit risk management in developmental bank of Ethiopia of (DBE). The research was carried out by analyzing the process of accessing Administration and monitoring, Operational efficiency, Credit granting process and Marketing risk analysis. The descriptive survey method was used for the study qualitative and quantitative approach. Sample size of 30 members of staff was drawn from the development head and Credit department staff. Primary and secondary sources of data were used for the study. Questionnaires were used as the main instrument to collect the primary data. Among the major findings of the study are; credit administration and monitoring process, the study implied that, appropriate Credit administration, measurement and monitoring process are maintained somewhat in line with guideline of developmental bank of Ethiopia. A major recommendation of the study was Hence, improving performance require to institute a strong credit risk management system that can efficiently identify bank able borrowers and a system that can monitor their performance after the loan is granted. The overall credit risk management activity of the bank is needs improvement in devising a strong follow-up unit, devising an office that can control the condition and sanctions at each approval document, establishing coordination among work units.

Key terms: credit risk management, monitoring, credit grant, operational efficiency.

CHAPTER ONE: INTRODUCTION

1.1. Background of the Study

The word credit comes from the Latin word “Credo” meaning “I believe”. It is a lender’s trust in a person’s /firm’s/ or company’s ability or potential ability and intention to repay. In other words, credit is the ability to command goods or services of another in return for promise to pay such goods or services at some specified time in the future. For a bank, it is the main source of profit and on the other hand, the wrong use of credit would bring disaster not only for the bank but also for the economy as a whole (Edwards ,2004). However,the financial sector plays an important role in the development of the economy and growth in any country. Specially, the banking sector is considered as an important source of financing and supporting sector for most business sectors (Davide and Thangavel, 2008).

Credit management means the total process of lending starting from inquiring potential borrowers up to recovering the amount granted. In the sense of banking sector, credit management is concerned with activities such as accepting application, loan appraisal, loan approval, monitoring, recovery of non-performing loans, etc (Shekhar, 1985). Charles Mensah (1999) stressed the importance of credit management as follows; Credit management process deserves special emphasis because proper credit management greatly influences the success or failure of financial institutions. This indicates that credit provision should be accompanied by appropriate and attractive credit and financing policies and procedures that enhance performance of credit management and protects the banking industry from failure.

A strong financial system is very important for a country to develop (BirukDejene, 2015). The economic progress of a nation and development of banking are invariably interrelated. The banking sector is an indispensable financial service sector supporting development plans through channeling funds and credit for productive purposes and supporting financial and economic policies of the country (Rajaraman and Vasishtha,

2002). Credit provision is the main product which banks provide to potential business entrepreneurs as a main source of generating income.

While providing credit as a main source of generating income, banks take into account many considerations as a factor of financing policy and credit management which helps them to minimize the risk of default that results in financial distress and liquidation. This is due to the reason that while banks providing credit they are exposed to risk of default (risk of interest and principal repayment) which need to be managed effectively to acquire the required level of loan growth and performance.

According to Edward (2006) credit 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.

The types and degree of credit risks management to which banks are exposed depends upon a number of factors such as its size, complexity of the business activities, volume, etc. It is believed that generally banks face credit, market, liquidity, operational, compliance (legal) regulatory and reputation risks among which credit risk is known to have the adverse impact on profitability and growth. Hence, the success of most commercial banks lies on the achievements in credit management justifying risk to the acceptable level (Hagos, 2010).

These factors may explain among others the loan repayment behavior of borrowers and lending behavior of the Bank. This has an impact on the sustainable provision of credit to the potential investors and existence of the bank as a financial institution (DBE Annual Report, 2015). Most of all, especially in recent years, service associated with the banks credit management system and loan repayment are increasing and many people believe the banks credit management system is weak and corrupted. This is why I believe DBE is a good study area than other banks for my thesis.

Knowing these factors will assist the Bank in its continuous efforts to recover its existing loans and to set ideals for forthcoming ones. Therefore credit management is considered as a crucial factor affecting the liquidity and profitability of the bank.

Banks as financial intermediaries are very significant in the economy of every nation. Currently, in Ethiopia the banking system dominates the financial system. At the close of April 2013, the financial system comprises of one central bank (National Bank of Ethiopia), eighteen commercial banks (of which two are owned by government), one development bank (Development Bank of Ethiopia), 19 micro-finance institutions (MFIs), fifteen insurance companies (of which one is government owned).

Thus, this study will attempt to identify factors that affect the credit management of DBE focused on head office. I strongly believe that identifying the factors strongly affecting credit management would enable the bank's management to tackle and minimize the problems and consequently will enhance its credit management performance and profitability.

1.2 Background of the Organization

The Development Bank of Ethiopia (DBE) is a specialized development finance institution, operating since 1909 under various names. The Development Bank of Ethiopia is mandated with the provision of development credit to priority projects. I.e.: Commercial Agriculture projects; Agro-processing industries; Manufacturing and extractive industries; and Lease Financing Service for Small and Medium Enterprises.

Board of Management (BoM) consisting of seven senior government officials administers the Bank. BoM is responsible for issuing major policies of the Bank, approval of its strategic and operational plans as well as the close and regular monitoring of the Bank's operations.

The top Executive Management Committee (EMC), which consists of the President and Six Vice Presidents, is responsible for the overall operations of the Bank. The President acts as an official representative of the Bank, chairs the Executive Management

Committee (EMC) and is ex-office member of the Board of Management. The day-to-day operational activities of the Bank is entrusted to fifty two management officers at headquarter and branch offices.

The bank is headquartered in Addis Ababa with 13 district offices and 110 branches across the country. As of June 30, 2016, the paid-up capital of the Bank stood at birr 7.5 billion. Whereas the total number of employees were 2,059.

1.3 Statement of the Problem

Based on strategic objective of the government, term loan projects financed by the Bank has long loan repayment period which extends up to twenty years including maximum five years of grace period. Moreover, low interest rate than commercial banks, which is 8.5% for priority area projects and 9.5% is for non-priority area projects, and suitable rehabilitation mechanism makes the bank different from other lending institutions (DBE Loan Manual, 2015).

However, provision of credit alone does not support the economic development of the country unless it is accompanied by the effective credit management for efficient utilization of the fund in order to repay the loan in accordance with the agreement Tekeste Gebrekidan (2016).

The sustainability of the bank depends not only on domestic and foreign source of fund but also on its better credit management and loan recovery rate too. The credit management performance of its loan should be effective so that the bank will be sustainable as a bank and will have a bankable asset quality. One of the measurements by which bank's asset quality can be measured is the nonperforming loan ratio (NPLs ratio). Hence, in order to get soft loan from its lenders, DBE's asset quality has to be regularly monitored and assessed whether it is within the acceptable standard or not that is 15% of the total outstanding loan which is set by Association of African Development Finance Institutions (Arega Seyoum, Hanna Nigussie and TadeleTesfay, 2016).

Accordingly, when looking at the asset quality of DBE, the average NPLs ratio for the last five years covering from 2013/2014 up to 2017/2018 was more than 30% (DBE Annual Report, 2018).As National Bank of Ethiopia (2019) report, financial institutions in Ethiopia are in better positions except DBE which lost 344 million birr in the last eight months and had more than 39% of unrecovered loan in the last five years.

The rationale for undertaking this study is that, to the best of the researcher's knowledge it appears that adequate researches have not been made that comprehensively assess the factors that affect credit management, especially in DBE. Some studies have been done which are not focused on credit management rather focused on factors affecting loan repayment. Factors affecting loan repayment performance of floriculture industries to the development bank of Ethiopia (Muluken Tariku, 2014),Factors affecting Non-performing loans of Development Bank of Ethiopia, Central Region (Arega Seyoum, Hanna Nigussie and TadeleTesfay, 2016), Determinants of successful loan repayment performance of private borrowers in Development Bank of Ethiopia North Region (Kibrom Tadesse, 2010)are some studies done on DBE associated mainly with customer specific factors and loan repayment but not credit management.

However, in the previous empirical analysis no study has been conducted on bank-specific factors influencing credit management. Moreover, in the recent past, there have been many changes in the country that hugely influenced the economic environment as well as the business climate. Apart from the economic growth and environmental changes registered by the country within the last few years, the Bank has also undergone changes in its lending procedures, lending limit, credit policies and organizational structure. Therefore, the current study tried to narrow the research gaps through focusing on factors affecting credit management of DBE at head office and attempts to provide answers for the following basic research questions:

1.4 Research Questions

1. What are the major administrations factors affecting credit management performance of DBE?

2. How credit granting and appraisal processes affect the banks credit risk management practice?
3. How credit measurement and monitoring process affect credit risk management practice?
4. How operational efficiency affect credit risk management of the banks?

1.5 Research Objectives

In general, the objective of this research is to identify and evaluate the major factors that affect credit management of DBE.

Specifically, the study attempted to achieve the following specific objectives:

- 1) To identify major administration factors that affect the credit management of DBE
- 2) To evaluate how granting and appraisal processes affect the banks credit risk management practice of the bank
- 3) To assess how credit measurement and monitoring process affect credit risk management practice of the bank
- 4) To evaluate how operational efficiency affect the credit risk management practice of the banks?

1.6 Significance of the Study

Credit management is known to be the main stay of all commercial banks. The study will show management and other interested parties, the major factors playing great role in hindering credit management of DBE, and will help the bank to enhance the efficiency and effectiveness of credit administration operation. In light of the present challenges facing banks in the management of credit, to ensure minimal loan loss through maintenance of a good risk assessment and control, this study will significantly assist the

bank in setting a clear credit management system and implementation strategy. In reducing bad debts to the barest minimum by assessing the capacity of bank risk assessment and credit control procedures to provide for close analysis and monitoring of banks credit administration.

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.

1.7 Delimitation of the Study

The thesis concentrated on developmental bank branches found in Addis Ababa district with the title factors affect credit management. The study covered credit policies, procedures, and credit operations of the Bank. It assessed whether the loan growth and performance is to the required level of the bank or not. In addition, the study is concerned with identifying the major factors affecting of credit management, loan growth, and causes of loan default if any in the district. Since the lending rules and procedures of the bank is the same in all its branches, the result obtained taking case study of this specific district is assumed to reflect the situation of all branches of the bank in the city under normal circumstance.

1.8 Limitation of the study

Though studying at full-fledged level of the bank would have better result, due to the time and finance constraints the researcher is limited to undertake the study in developmental bank of Ethiopia Kasanchis head quarter Addis Ababa. To be reduce the limitation the process of distributing and collecting questionnaire did with the help of additional human resource. The sample size is limited but taking more may give deep understanding on the effect of credit risk management on the performance of commercial banks.

1.9 Organization of the Study

This thesis was organized into five chapters. The first chapter contains the background, statement of the problem, research questions, objective, significance, delimitation and limitation of the study; chapter two deals with overview, review of both theoretical and empirical literatures chapter three describes research design and method, sample and sampling techniques, source and tool of data collection and methods of data analysis applied; chapter four deals with data analysis, presentation, interpretation and discussion of the result/findings of the study. And the last chapter (chapter five) includes summary of the research findings, conclusions and recommendations. In addition to the above chapters, list of reference materials and annexes would be added at the end of the thesis.

CHAPTER TWO: REVIEW LITERATURE

This chapter presents what other scholars have studied about the factors affecting credit management practice of financial institutions, 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 management and their determinates various authors.

2.1 Main Source of Poor Credit Management

The main source of poor credit management include, corruption, 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 ,limited branches ,lack of training, 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.

A healthy economy depends heavily on efficient transfer of funds from savers to individuals, businesses, and governments who need capital. Most transfers occur through specialized financial institutions, which serve as intermediaries between suppliers and users of funds (Arega Seyoum, Hanna Nigussie , Tadele Tesfay 2016).

Studies pointed out that borrowers and lenders may have differential access to information concerning a business risk, they may form different appraisal of the risk. What is clearly observed in credit market is asymmetric information where the borrower knows the expected return and risk of his/her business, whereas the lender such as bank knows only the expected return and risk of the average business in the economy.

The main microeconomic function of banks is the provision of facilities to collect deposits and invest these deposits as credits. Provision of a sound payment mechanism is also the other expected service from banks. Hence, the performance of banks is measured in terms of the above major roles of the banking business and relies on the provision of these functions.

Those who have developed entrepreneurial skill but running with a short of finance are ready to take loan. Since it is very difficult for the surplus and deficit units to meet each other due to asymmetric information (more sever in developing countries), there is a need to have an intermediary institution or Bank (Pilbeam, 2005). Therefore, the existence of a development finance institution like Development Bank of Ethiopia (DBE) in the economy is undeniably important.

2.2 Credit Management

Credit management is defined as the efficient control and co-ordination of loanable funds so as to keep credit and the investment in credit at optimal level (Hempel, 1994). Credit management is a term used to identify accounting functions usually conducted under the umbrella of Accounts Receivables (Wise-geek, 2012).

Credit Management, from a debtor's point of view, is managing finances especially debts so as not to have a tail of creditors lurking behind your back. Credit management is a responsibility that both the debtor and the creditor should seriously take (Hagos Mirach, 2010). When it functions efficiently, credit management serves as an excellent instrument for the business to remain financially stable Tekeste Gebrekidan (2016).

The significance of credit management has been highlighted by Mensha (1999) as follows: “credit management process deserves special emphasis since appropriate credit management greatly influences the success or failure of financial institutions”. Knowledge of a bank's credit risk management process offers a key indicator of the quality of a bank's loan portfolio.

The crucial elements of successful credit management therefore are well developed credit policies and procedures; strong portfolio management; effective credit controls and the most central of all a well-qualified staff capable of implementing the system (Endeshaw Hailu, 2018). In order to operate efficiently and make credit available to investors, financial institutions must maintain basic credit standards.

These standards include a thorough understanding of the borrowers' business by the officer in charge; reasonable debt equity ratio; marketability and viability of the investment project and other technical capabilities. Credit analysis, in general, is essential for the officer to judge about the credit worthiness of the borrower as well as the project to which the loan is injected.

The process of credit management begins with accurately assessing the credit - worthiness of the customer base. This is particularly important if the company chooses to

extend some type of credit line or revolving credit to certain customers. Proper credit management calls for setting specific criteria that a customer must meet before receiving this type of credit arrangement.

As part of the evaluation process, credit management also calls for determining the total credit line that will be extended to a given customer. Banks credit management processes can be summarized in three main stages. These stages are:

- i. Credit initiation
- ii. Documentation and disbursement
- iii. Credit administration

According to Agyeman, (1987) several factors are used as part of the credit management process to evaluate and qualify a customer for the receipt of some form of credits.

These factors include;

- ✓ Gathering data on the potential customer's current financial condition, including the current credit score.
- ✓ The current ratio between income and outstanding financial obligations will also be taken into consideration.
- ✓ Competent credit management seeks to not only protect the vendor/bank from possible losses, but also protect the customer from creating more debt obligations that cannot be settled in a timely manner.

A good credit management system helps to reduce the amount of capital tied up with debtors (people who owe money) and minimize the exposure to bad debts. Good credit management is vital to cash flow.

After establishing the credit limit for a customer, credit management focuses on providing the client with accurate and timely statements or invoices. The invoices must

be delivered to the customer in a reasonable amount of time before the due date, thus providing the customer with a reasonable period to comply with the purchase terms.

When the process of credit management functions becomes, efficient, everyone involved benefits from the effort. The vendor/bank has a reasonable amount of assurance that invoices issued to a client will be paid within terms, or that regular minimum payments will be received on credit account balances. Customers have the opportunity to build a strong rapport with the vendor and thus create a solid credit (Bank Negara Malaysia, 2001).

2.3 Credit Management Practice

Credit risk continues to remain the largest source of risk for banking institutions in the world (Credit Bank Negara Malaysia, 2001). Effective credit management is therefore vital to ensure that a banking institutions credit activities are conducted in a prudent manner and the risk of potential bank failures reduced. The success of banks (in the view of the researcher) hinges on their ability to manage their credit effectively. Even though there are no strictly laid down credit management practices, most financial institutions practice the following in order to maximize profit as well as to reduce credit risk.

Lending

Lending is one of the core pillars of financial intermediation and for that matter a significant activity in the operations of banks. It is at the same time highly risky. This is asserted by McNaughton (1992), who emphasized that risk taking is central to banking and banks are successful when the risk they take are reasonably controlled and within their financial reserves and credit competence.

In the area of credit delivery, Rouse (1989) has asserted that a lender lends money and does not give it away. The lender needs to look into the future and asks; will the customer repay by the agreed date? Rouse contends that, there will always be some risk that the customer will be unable to repay, and it is in assessing this risk that the lender needs to demonstrate both skill and judgment.

Lending is perceived as an art because it involves imagination and creativity (Rouse, 1989). It could be contended that credit management prescribes the guidelines to be followed and their religious adherence is very crucial for good credit management practices. The appropriate judgment depends on the skills, knowledge and foresight of the manager.

This should embrace skills and knowledge in financial analysis, the performance of the sector receiving credit, the overall macroeconomic condition, the psychology in determining the perceived and indirect intentions of the borrower, the type of soil and climatic pattern in terms of agricultural loans and the perceived impact of the credit on the performance of the lending institution. In this vein, lending operations encompass various disciplines of economics, finance, law, accounting, geography, science, psychology, and culture among others. The situation makes lending activity very challenging since substantial significant slip causes undesirable financial losses and for that matter threatens the very existence of the lending institution. In this respect, persons with the right attitude, knowledge and skills devoid of all egoistic sentiments, are needed to superintend lending activities.

In a liberalized and deregulated economy, banks dictate both borrowing and lending interest rates and determine the direction of credit to sectors which are considered less risky and more profitable.

Interest Rate

Stiglitz (1981) asserted that interest rates on lending would be higher if the probability of default is higher. In this regard ventures with high risk of success attract higher interest rates. The level of lending interest rates is also influenced by the availability of loanable funds and the competing ends.

In situations where Government needs to borrow substantially to support its business, high interest rates are offered to crowd out the private sector. This view was advocated by Cox (1988), when he indicated that, interest rates were influenced by supply and demand

for funds, risk premium, inflationary factors and amount of loan. Before the liberalization of the economy in 1990, National Bank of Ethiopia (NBE) regulated interest rates.

During the pre-liberalization period, interest rates were fixed by the Bank of NBE for the various sectors for which the banks were to comply. However, this system was abolished and banks were to determine their own interest rates according to the market forces and the dictates of the macroeconomic conditions. The Bank Rate of the NBE seemingly becomes the benchmark but it takes time for the banks to adjust appropriately to it especially when there is downward revision of the rate.

2.4 Assessment of Borrowers Credit Worthiness

The assessment of the credit worthiness involves the gathering, processing and analyzing of information on the loan applicant. An important aspect of information is by way of credit references and credit rating. Ethiopia is yet to have credit rating agencies, which will provide opinion on the credit standing of businesses in the system. The existence of such an agency would facilitate the credit decision process of banks. Rather banks are performing rating for their own credit customers.

According to Rose (1989) the question that must be dealt with before any other is whether or not the customer can service the loan – that is, pay out the credit when due, with a comfortable margin of interest. The factors underlying the assessment of pre-lending safeguards, in the opinion of Rose (1989) are; character, capacity, cash, collateral, conditions and control (i.e. the 6Cs).

In another context, Rose (1989) referred to mnemonics used as common checklist to review loan application as: CCCPPARTS (Character, Capital, Capability, Purpose, Person, Amount, Repayment, Terms and Security); PARSER (Person, Amount, Repayment, Security, Expediency, Remuneration); CAMPARI (Character, Ability, Margin, Purpose, Amount, Repayment, Insurance/Security). In another study Borrios (2013), defined as credit analysis is the method by which a financial institution calculates the creditworthiness of a business or organization.

While each lending situation a bank reviews is unique, most banks utilize some variation of "The Five C's of Credit" when making credit decisions - Character, Capital, Capacity, Collateral and Conditions.

The variation in the mnemonics relates to the basic principle of assessing the potential of having loans repaid. The dimension of each of the factors outlined by Rose (1989) is as follows:

Character: customers' past payment records; experience of other lenders with the customer; purpose of loan; customer's track record in forecasting business or personal income and credit rating.

Capacity: identity of customer and guarantors, description of history, legal structure owners, nature of operations, products and principal customers, suppliers for a business borrower and management quality.

Collateral: ownership of assets; vulnerability of assets to obsolescence and liquidation value of assets.

Conditions: Customers current position in industry and expected market share; competitive climate for customer products; sensitivity of customer and industry to business cycles and changes in technology.

Control: applicable banking laws and regulations regarding the character and quality of acceptable loans; adequate documentation for examiners who may review the loan.

Security: Securities for loans and overdrafts are to ensure recovery of the funds lent to the borrower in the event that the borrower becomes unwilling or incapable of meeting his commitments.

Dunkman (1996) outlined reasons for security as: safeguarding against some doubts about borrowers repayment ability, basis for increasing amount of loans over and above existing facilities, and as a last resort to recover loan in the face of default. Agyeman (1987) expressed the view that even though security is necessary, its requirement by bankers must be adopted cautiously otherwise it is capable of being counterproductive.

According to him, this can come about when bankable projects are funded solely because of availability of security. Agyemans (1987) view that security has the unintended tendency for causing skewness of loans in favor of property owners. The researcher shares the view that if security becomes dominant factor in credit decision, bankable projects, which lack securities as support, may be starved of credit while those with adequate security support but not financially viable may rather have access to credit. This then serves as draw back in using financial intermediation as focus for meaningful economic development and growth. Banks are often confronted by instituting legal action against loan defaulters to take possession of assets pledged as collateral for foreclosure. It should be also noted that the provision of security just provides secondary source of repayment and therefore to ensure sustained relations with customers in their business endeavors, it is pertinent to consider the viability of the project being financed to generate sufficient cash flows to liquidate the credit facility.

Furthermore the foreclosure of immovable property pledged as security goes through a long legal tussle, which could not easily bring prompt liquidity relief to a bank. It is therefore very essential for banks to lay much premium on the viability of a project as a paramount consideration for lending financial support.

2.5 Credit Management Policy

Credit management policies reviews and monitored on regular basis to take account of changing market conditions, company strategy, competition, and financial needs a carefully documented. Credit policy is a fundamental requirement to put into practiced sound credit management, and should serve at least the following purpose according to Beatrice A. (2012);

- ✓ To define the objective of credit extension in the context of corporate of strategy and organization structure
- ✓ To define the authority and responsibilities for credit granting, establishing and varying terms and the timing of collection actions

- ✓ To provide documented procedures in relation to the above that can be communicated to all staff
- ✓ To specify training policy for credit staff
- ✓ To specify performance targets and monitoring activities for credit staff
- ✓ To reinforce “one company-one customer” culture throughout the organization

The credit policy of a Bank should developed in accord with the strategic, marketing, financial, and organizational context of the business and be designed to contribute to the achievement of corporate objectives (Beatrice A., 2012).

2.6 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.

2.7 Credit Risk Management

According to Eastern Caribbean Central Bank (2009), credit risk management is the process of controlling the impact of credit risk-related events on the financial institution and involves the identification, understanding, and quantification of the degree of potential loss and the consequential implementation of appropriate measures to minimize the risk of loss to the financial institution. In order to maintain successful credit risk management, the lending institution should develop and implement all-inclusive credit risk management in line with its credit risk strategy.

The credit risk strategy should reflect the institution's tolerance for risk and the desired level of profitability for incurring various credit risks. A successful credit risk management encompasses the implementation of clearly defined credit policy and processes to facilitate the identification and quantification of risks inherent in an institution's lending and investment activities. The firm's credit policy should be officially established in writing and approved by the board of directors, and should clearly set out the parameters under which credit risk is to be controlled.

The aim of credit risk management is to capitalize on a bank's risk-adjusted rate of return by retaining credit risk exposure within acceptable limits. 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 successful management of credit risk is a crucial element of a holistic approach to risk management and essential to the long-term success of any bank. In general, loans

represent the largest and most apparent source of credit risk for most of the banks (Basel Committee, 1999).

For Vigano (1993), credit risk appraisal is a complex process, which requires a careful examination of information regarding the borrower in order to estimate the probability that the loan will be regularly repaid. The probability of regular repayment depends on certain objective factors related to the borrower's operating environment, the borrower's personal attitude towards loan obligation, and the bank's ability to appraise these two issues through the information it has and to control credit risk specific contractual conditions. Accordingly, the key factors that influence credit risk are summarized by Vigano (1993) as follows: the borrower's ability and willingness to pay, existence of positive external conditions, quality of information and the lender's capacity to ensure the borrowers willingness to pay.

2.8 Risks Associated with Credit Management

Credit risk has the repercussion of liquidity risk, which in the extreme instance can lead a bank to severe financial crisis, resulting in erosion of capital, insolvency and could ruin the bank. To identify and address risk associated with credit management, the Basel Committee on Banking Supervision in its Publication No. 54 issued in September 2000 outlined the following measures:

- Establishing an appropriate credit risk environment
- Operating under a sound credit granting process
- Maintaining an appropriate credit administration, measurement and monitoring process;
- Ensuring adequate controls over credit risk
- The role of supervisors.

The highlights of the above issues raised by the Basel Committee on Banking Supervision (2000) are as follows

2.9 Establishing an Appropriate Credit Risk Environment

The Board of Directors should have responsibility for approving and periodically (at least annually) review the credit risk strategy and significant credit risk policies of the bank. The strategy should reflect the banks tolerance for risk and level of profitability the bank expects for incurring various credit risks.

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 banks activities and at both the individual credit and portfolio levels.

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

2.10 Operating under a sound Credit Granting Process

Banks must operate within sound, well-defined credit granting criteria. These criteria should include a clear indication of the banks largest market and a thorough undertaking of the borrower or counter-party, as well as purpose and structure of the credit, and its source of payment; Banks should establish overall credit limits at the level of individual borrowers and counter-parties, and groups of connected counter-parties that aggregate in comparable and meaningful manner different types of exposures, both in banking and trading book and on and off balance sheet; Banks should have a clearly established process in place for approving new credit as well as the amendment, renewal and re-financing of existing credits All extension of credit must be made on an arm-length basis. In particular, credit to related companies and individuals must be authorized on an exceptional basis, monitored with particular care and other appropriate steps taken to control or mitigate the risk of non-arm's length lending.

2.11 Common Sources of Major Credit Problems

1. Most major banking problems have been either explicitly or indirectly caused by weaknesses in credit management. In supervisors' experience, certain key problems tend to persist.

Severe credit losses in a banking system usually reflect simultaneous problems in several areas, such as concentrations, failures of due diligence and inadequate monitoring.

2. Concentrations are probably the single most important cause of major credit problems. Credit concentrations are viewed as any exposure where the potential losses are large relative to the bank's capital, its total assets or, where adequate measures exist, the bank's overall risk level.

3. Banking supervisors should have specific regulations limiting concentrations to one borrower or set of related borrowers, and, in fact, should also expect banks to set much lower limits on single-obligor exposure. Most credit managers in banks also monitor industry concentrations. Many banks are exploring techniques to identify concentrations based on common risk factors or correlations among factors. While small banks may find it difficult not to be at or near limits on concentrations, very large banking organizations must recognize that, because of their large capital base, their exposures to single obligors can reach imprudent levels while remaining within regulatory limits.

4. Many credit problems reveal basic weaknesses in the credit granting and monitoring processes. While shortcomings in underwriting and management of market-related credit exposures represent important sources of losses at banks, many credit problems would have been avoided or mitigated by a strong internal credit process.

5. Many banks find carrying out a thorough credit assessment (or basic due diligence) a substantial challenge. For traditional bank lending, competitive pressures and the growth of loan syndication techniques create time constraints that interfere with basic due diligence.

6. Some credit problems arise from subjective decision-making by senior management of the bank. This includes extending credits to companies they own or with which they are affiliated, to personal friends, to persons with a reputation for financial acumen or to meet a personal agenda, such as cultivating special relationships with celebrity.

7. Many banks that experienced asset quality problems in the 1990s lacked an effective credit review process (and indeed, many banks had no credit review function). Credit review at larger banks usually is a department made up of analysts, independent of the lending officers, who make an independent assessment of the quality of a credit or a credit relationship based on documentation such as financial statements, credit analysis provided by the account officer and collateral appraisals. At smaller banks, this function may be more limited and performed by internal or external auditors. The purpose of credit review is to provide appropriate checks and balances to ensure that credits are made in accordance with bank policy and to provide an independent judgment of asset quality, uninfluenced by relationships with the borrower. Effective credit review not only helps to detect poorly underwritten credits, it also helps prevent weak credits from being granted, since credit officers are likely to be more diligent if they know their work will be subject to review.

8. A common and very important problem among troubled banks in the early 1990s was their failure to monitor borrowers or collateral values. Many banks neglected to obtain periodic financial information from borrowers or real estate appraisals in order to evaluate the quality of loans on their books and the adequacy of collateral. As a result, many banks failed to recognize early signs that asset quality was deteriorating and missed opportunities to work with borrowers to stem their financial deterioration and to protect the bank's position.

This lack of monitoring led to a costly process by senior management to determine the dimension and severity of the problem loans and resulted in large losses.

9. In some cases, the failure to perform adequate due diligence and financial analysis and to monitor the borrower can result in a breakdown of controls to detect credit related fraud. For example, banks experiencing fraud-related losses have neglected to inspect

collateral, such as goods in a warehouse or on a showroom floor, have not authenticated or valued financial assets presented as collateral, or have not required audited financial statements and carefully analyzed them. An effective credit review department and independent collateral appraisals are important protective measures, especially to ensure that credit officers and other insiders are not colluding with borrowers.

10. In addition to shortcomings in due diligence and credit analysis, bank credit problems reflect other recurring problems in credit-granting decisions. Some banks analyze credits and decide on appropriate non-price credit terms, but do not use risk-sensitive pricing. Banks that lack a sound pricing methodology and the discipline to follow consistently such a methodology will tend to attract a disproportionate share of under-priced risks. These banks will be increasingly disadvantaged relative to banks that have superior pricing skills.

11. Many banks have experienced credit losses because of the failure to use sufficient caution with certain leveraged credit arrangements. As noted above, credit extended to highly leveraged borrowers is likely to have large losses in default. Similarly, leveraged structures such as some buyout or debt restructuring strategies, or structures involving Customer-written options generally introduce concentrated credit risks into the bank's credit portfolio and should only be used with financially strong customers.

Often, however, such structures are most appealing to weaker borrowers because the financing enables a substantial upside gain if all goes well, while the borrower's losses are limited to its net worth.

12. Many banks' credit activities involve lending against non-financial assets. In such lending, many banks have failed to make an adequate assessment of the correlation between the financial condition of the borrower and the price changes and liquidity of the market for the collateral assets.

Much asset-based business lending (i.e. commercial finance, equipment leasing, and factoring) and commercial real estate lending appear to involve a relatively high correlation between borrower creditworthiness and asset values. Since the borrower's

income, the principal source of repayment is generally tied to the assets in question, deterioration in the borrower's income stream, if due to industry or regional economic problems may be accompanied by declines in asset values for the collateral. Some asset based consumer lending (i.e. home equity loans, auto financing) exhibits a similar, if weaker, relationship between the financial health of consumers and the markets for consumer assets.

13. A related problem is that many banks do not take sufficient account of business cycle effects in lending. As income prospects and asset values rise in the ascending portion of the business cycle, credit analysis may incorporate overly optimistic assumptions. Effective stress testing which takes account of business or product cycle effects is one approach to incorporating into credit decisions a fuller understanding of a borrower's credit risk.

14. More generally, many underwriting problems reflect the absence of a thoughtful consideration of downside scenarios. In addition to the business cycle, borrowers may be vulnerable to changes in risk factors such as specific commodity prices, in the competitive landscape and the uncertainty of success in business strategy or management direction. Many lenders fail to "stress test" or analyze the credit using sufficiently adverse assumptions and thus fail to detect vulnerabilities.

2.12 Maintaining Appropriate Credit Administration through Measurement and Monitoring Process

According to Theodore N. (1962), this process entails the following:

- Banks should have in place a system for the ongoing administration of their various credit risk bearing portfolios and a system for monitoring conditions of inadequate credits, including determining the adequacy of provisions and reserves.
- Banks are encouraged to develop and utilize an internal risk rating system in managing credit.

- The rating system should be consistent with the nature, size and complexity of a banks activity.
- Banks must have information system and analytical techniques that enable management to measure the credit risk inherent in all on-and-off balance sheet activities. The management information should provide adequate information on the composition of the credit portfolio, including identification of any concentration of risk;
- Banks must have in place a system for monitoring the overall composition and quality of the credit portfolios and take into consideration potential future changes in economic conditions when assessing individual credits and their stressful conditions.

2.13 Empirical Literature

There are many researches regarding credit management and financing policy locally as well as internationally. This section presents evidence which identify the major factors affecting credit management. Many researchers have conducted a lot of study on determinants of credit management due to its significance for the bank's failure.

Credit approving that has not properly considered the credit terms would potentially lead to occurrence of loan default. As per the study by Jimenez & Saurina (2005) on the Spanish banking sector from 1984 to 2003 nonperforming loans (NPLs) are determined by lenient credit terms. The authors indicated that the causes for the leniency were attributed to disaster myopia, herd behavior, moral hazard and agency problems that may entice bank managers to take risk and lend excessively during boom periods. This has been supported by Rajiv & Dhal (2003) who found that terms of credit determines occurrence of non-performing loans.

On the other hand, banks that charge high interest rate would relatively incur a higher default rate. In this regard, a study by Sinkey & Greenwalt (1991) on large commercial

Banks in US revealed that a high interest rate charged by banks is associated with loan defaults.

Pyle (1997), in his study on bank risk management noted that banks and other financial institutions need to meet forth coming regulatory requirements for capital and risk measurement. However, meeting regulatory requirements is not the sole or most important reason for establishing a sound, scientific risk management system. Managers need reliable risk measures to direct capital to activities with the best risk/reward ratios.

They need estimate of the size of potential losses to stay within limits imposed by readily available liquidity by customers, creditors and regulators. They need mechanisms to monitor positions and create incentives for prudent risk taking by individuals and divisions.

Endale Kiflu (2015) has done a study on “Assessment of loan recovery performance in Development Bank of Ethiopia.” The study was based on primary data collected through questionnaires survey from 118 employees working in loaning unit of Bank. The study also uses secondary data collected from financial statements, quarterly reports, annual reports, credit policy, and procedure. Descriptive research methods have been employed to identify the loan recovery performance of the Bank.

The assessment result shows that the loan repayment period, assessment of customer credit history, collateral estimation, project follow up, monitoring and controlling system, delays to decide on nonperforming loans has affected the loan recovery performance of the Bank.

There have been mixes of approaches used by the literature to analyze factors that possibly influence credit risk management. Some of the research works are focused on internal variables only (Moses 2013, Ayni and Moki, 2012, Newaz 2012), others provide separate evaluation of external variables (including macro and industry factors) (Demirgüç-Kunt and Detrich 2011; Ravi 2013). The rest few also have consideration for both internal and external variables (David 2013, Grigori and Igor 2011, Pestova). In terms of findings, Kurawa observed that 50% of the studies reviewed by him depicted

negative relationship of poor credit risk management with profitability. The literature mostly has used model based evaluation of the determinant factors of credit risk factor for banks (Kurawa 2014).

Wondimagegnehu (2012) in his study “determinants of NPLs on commercial banks of Ethiopia” revealed that underdeveloped credit culture, poor credit assessment, aggressive lending, botched loan monitoring, lenient credit terms and conditions, compromised integrity, weak institutional capacity, unfair competition among banks, willful defaults by borrowers and their knowledge limitation, fund diversion for unexpected purposes and overdue financing has significant effect on NPLs. Conversely, the study indicated that interest rate has no significant impact on the level of commercial banks loan delinquencies in Ethiopia.

Similarly, Mitiku (2014) studied the “Determinants of Commercial Banks Lending: Evidence from Ethiopian Commercial Banks using panel data of eight commercial banks in the period from 2005 to 2011 with the objective of assessing the relationship between commercial bank lending and its determinants (bank size, credit risk, GDP, investment, deposit, interest rate, liquidity ratio and cash required reserve). Based on seven years financial statement data of eight purposively selected commercial banks and using Ordinary Least Square (OLS) technique, the study found that there was significant relationship between commercial bank lending and its size, credit risk, gross domestic product and liquidity ratio. While interest rate, deposit, investment, and cash reserve required do not affect Ethiopian commercial bank lending.

Abraham (2002) studied with the aim of identifying the major factors behind the loan default problems of Small Scale Enterprises, specifically borrowers of Development Bank of Ethiopia at Zeway Branches. The researcher used to bit models and came up with loan diversion is found to be one of the major determinants adversely affected the loan recovery rate.

Another study made by Adamu (2013) on similar topic, the researcher found out inefficient market knowledge of local entrepreneurs, lack of managerial skills, exchange

rate fluctuation, and inadequate follow up coverage ,overrun increases for project implementation are among determinants of failure of the project.

The research on loan repayment of micro finance using to bit modal indicated that, education, income, loan supervision, suitability of repayment period, availability of other credit source and livestock are important and significant factors that enhance the loan repayment performance (Jamal, 2003).

A couple of study made also on the determinants of loan repayment performances and found that educational level of the borrowers, repayment period of the loan, availability of other source of income, purpose of the loan and type of labor, managerial experience of the project managers, marital status of the borrower determine loan repayment of borrowers (Kibrom, 2010; Mulugeta ,2010, & Muluken, 2014).

Several African studies of loan repayment performance have estimated the determinants of loan performance with a binary loan outcome – defining borrowers as either current on their loan repayments or in default. Loan repayment was positively related to factors such as timeliness of loan disbursement, enterprise profitability, the number of supervisory visits by credit officers, having additional sources of income, established previous loan history, and lower client debt asset ratios (Kamajou & Baker 1980).

The study assessed credit management practices of Bunna International Bank S.C (BIB) (Yalemzewud Tadesse, 2004). The research was carried out by analyzing the process of accessing credits; credits control processes and credits collection strategies.

The research was done against the background that there was huge debts as a result of nonperforming loans affecting the financial status of the bank. Among the major findings of the study are; the main factors influencing access to credit are the stringent policy guidelines as well as the credit worthiness of the customers.

A study done by Mulken Tariku (2014) on factors affecting loan repayment performance of floriculture industries to the Development Bank of Ethiopia (DBE) showed that 52% of the borrowers were defaulters, whereas, the remaining 48% were non defaulters. Educational status, sustainable floriculture certification status and farming experience of

growers were statistically significant factors affecting repayment of floriculture loan of DBE.

A study aimed at identifying the major factors affecting Non-performing loans of Development Bank of Ethiopia (DBE), Central Region (Arega Seyoum , Hanna Nigussie, Tadele Tesfay ; 2016) was done. The result of the study shows that poor credit assessment and credit monitoring are the major causes for the occurrence of nonperforming loan (NPL) in DBE. Credit size (includes aggressive lending, compromised integrity in approval, rapid credit growth and bank's great risk appetite); high interest rate, poorly negotiated credit terms and lenient/lax credit terms, and elongated process of loan approval were bank specific causes for the occurrence of nonperforming loans. On the other hand, poor credit culture of customers, lack of knowledge of borrower for the business they engaged in, willful default, loan diversion, and project management problems were identified as the major customer specific causes of NPLs.

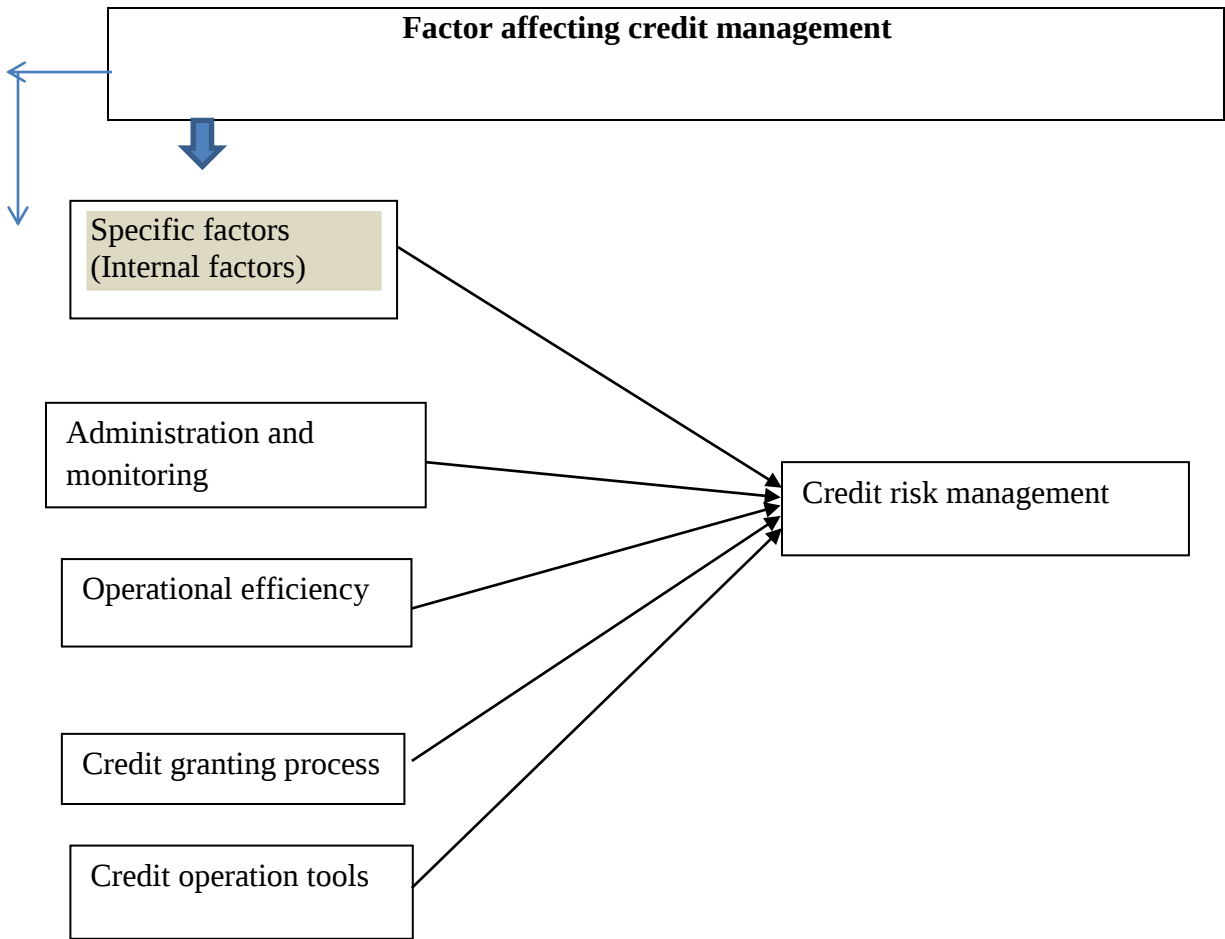
2.14 Conceptual Frame Work

The main objective of this study is to assess factor affecting credit management practice of Development Bank of Ethiopia (DBE). 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 management practice can be affected by banks specific factors or macroeconomic factors.

There are a lot of specific factors affecting banks credit management practice such as, operational efficiency; types of tools used to manage risk, bank size, loan rate, loan deposit, liquidity and leverage.

In addition to this there are also macroeconomic factors which can affect credit management practice of DBE 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: RESEARCH METHODOLOGY

3.1 Introduction

This chapter was set out the various stages and phases that were followed in completing the study. Specifically the chapter contains research design, data collection instruments, and data collection procedures and data analysis.

3.2 Research Design and Approach

The study was used descriptive research design. According to Muranaga and Ohsawa (2002) descriptive research is used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to the conditions or variables in a situation. The technique was appropriate as it involved a careful in dept h study and analysis o f the impact of credit management on the financial performance of banks in Addis Ababa head quarter development bank.

This study is quantitative in its approach; the quantitative data research relies on the measurement and analysis of statistical data to produce quantifiable conclusions. Therefore, for this study quantitative research approach is used to see the factors of credit risk on management of development bank of Ethiopia.

3.3 Target Population

The essential step in developing of any sample design is to clearly define the set of objects, technically called the universe (population). For the purpose of this study the target population encompassed all staffs and officials in development bank of Ethiopia working in the head office. The population of study the consisted of all the 98 staff professional workers of the banks was address by the study.

3.4 Sampling Techniques

The sampling technique used for the purpose of this study is stratified random sampling the technique of stratification is often employed in the preparation of sample

designs because it generally provides increased accuracy in sample estimates without leading to substantial increases in costs.

Though in order to select relevant respondents stratified random sampling is employed thus the population is divided in to sub groups or strata based on head office departments and samples were selected from each stratum

Considering the objectives of the study to select the number of respondents from each stratum by which the researcher considered 5 departments. To this end the minimum numbers of staffs directly involved at a head level are two thus 30 employees were selected from head level as a sample.

Table 3.1 Sample Size

No.	Department	Population	Sample
1	Customer relationship management directorate I	29	9
2	Customer relationship management directorate II	20	6
3	Customer relationship management directorate III	25	8
4	Customer relationship management directorate IV	24	7
Total		98	30

3.5 Data Collection

Data collection instruments used included questionnaires, financial statements, annual reports on record and data from the financial market. Primary data was collected using questionnaires where all the concerns on the questionnaire were addressed. Secondary data was collected from annual reports and financial statements.

The secondary data from the financial statements was included after tax profit, written off debt, total assets and value of loans outstanding. The researcher administered the questionnaire to each respondent in the study. The questionnaire had both open and close ended questions. The closed ended questions was used to test the rating of various attributes and this helped to reduce the number of related

responses so as to obtain more varied responses. The open - ended questions provided additional information that was not having been captured in the close- ended questions.

3.6. Data Analysis and Interpretation

Once the study collected all the possible and relevant information through the methods that discussed above, it was started to analyze and interpret the data. Therefore, the data analysis procedures adopted: Primary data from the field will be edited first. Coding will be done to translate question responses into specific categories. Coding was expected to organize and reduce research data into manageable summaries. Both qualitative and quantitative data analysis technique will be used to analyze the data. Quantitative data collected were analyzed, presented and interpreted using both descriptive statistics while content analysis techniques was used to analyze qualitative data collected in through interview. The data that was collected through questionnaires was tabulated and analyzed using the Statistical Package for the Social Sciences (SPSS) software package which includes mean and standard deviations, frequencies and percentages will be used to describe the data. The analyzed data were presented in form of tables.

3.7 Data Validity and Reliability

The reliability of a research instrument concerns the extent to which the instrument yields consistent results. An instrument ought to reliably quantify what it is planned to gauge.

Despite the fact that trickiness is constantly present to a specific degree, a great arrangement of consistency in the aftereffects of a quality instrument can be guaranteed if information is accumulated at various times. The propensity toward consistency found in rehashed estimations is alluded to as dependability (Carmines and Zeller, 1979).

Cranach's alpha as calculated through SPSS and Mean Cronbach's value of 0.78375 was obtained. This result was greater than the threshold 0.7 and the items were therefore considered as reliable

CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION

4.1 Introductions

This chapter presents the findings and discussions of the study. It starts with the socio–demographic analysis of the respondents followed by the analysis of the subjects of the study.

As it is stated in the previous chapter, questionnaires were developed for respondents. A total of 32 questionnaires for employees head office were distributed. Of all the questionnaires distributed to employees 30 (94%) were filled and returned. Therefore, the data discussed in the subsequent sections of this report is a summarized.

4.2 Respondents' Profile

This section presents profile of respondents in relation to their age group, educational level, service year and current positions as well as exposure level in the credit area of the bank.

Table 4.1 Age category of respondents

Age Category	Frequency	Percentage
20-29 Years	8	26.66
30-39 Years	12	40
40-49 Years	6	20
50 and above	4	13.33
Total	30	100

Source: *Researcher's Survey result from Primary Data Sources*

As indicated in table 4.1 below, while 13.3 percent are in the age range 50 and above, 20 percent are between 40- 49 and 66.6 percent are in the age range of 20- 39. This implies the bank has energetic and matured staff.

Table 4.2 Academic background of respondents

Educational Level	Frequency	Percentage
Bachelor degree	20	66.66
Master degree	10	33.33
Total	30	100

Source: *Researcher's Survey result from Primary Data Sources*

The educational level of employees is an important factor with regard to making business decisions. Education improves the skill, capacity, communication and access to development endeavors.

As it can be reviewed from table 4.2, that 20(66.6%) of the respondents are BA degree holders and 10(33.3) percent of the respondents are MA holders. This denotes that the majority of the Bank's employees working in the loan first area well skilled. This enables the Bank to perform most and become competitive in the industry.

Table 4.3 Years of service in credit area

Year of service in credit	Frequency	Percentage
0-5 years	10	33.33
6-10 years	9	30
11-15 years	6	20
16-20 years	4	13.33
21-25 years	1	3.33
Total	30	100

Source: *Researcher's Survey result from Primary Data Sources*

The above Table 4.3 shows the percentage of the years of experience the respondents had working in credit management. This question was asked because the researcher wanted to know how experienced the respondents were in the area of credit management. The results showed that 33.33% have 0-5 years' experience working in credit management area. Whereas, employees with credit management experience of 6-10, 11-15 and 16-20

years represented 30%, 20% and 13.33% respectively. Those with 21-25 years of experience represented 3.3%. This indicates half of the credit department staffs are well experienced in credit area that helps to accomplish their task as the bank mission.

Table 4.4 Current position of respondents

Credit Performing Employees	Frequency	Percentage
Credit Relationship Managers	2	6.66
Credit relationship Officers	12	40
Credit Analysts & Appraisal Experts	6	20
Credit Advisors and Approving Committee	6	20
Internal Credit Auditor	4	13.33
Total	30	100

Source: *Researcher's Survey result from Primary Data Sources*

According to Table 4.4 above all the respondents of the survey are currently credit performers at different levels and work in credit related jobs of the bank. Out of them more than 66 per cent of the positions are maintained by credit relationship managers, credit relationship officers and credit appraisal expert staff. This has helped to capture a good quality of data.

4.2 Credit Processing and Appraisal

Credit processing and lending function is the core product of all banks in general as it contributes the major shares of revenue to its profitability. In other words loans and advances are known to be the main stay of all banks. They occupy an important part in gross earnings and net profit of the banks. The share advances in the total asset of the banks forms a lion share and as such it is known as the back bone of banking sector. The strength and soundness of the banking system primarily depends upon health of the advances.

Table 4.5 Credit Processing /Appraisal

Description	Strongly agree		agree		Neutral		disagree		Disagree Strongly		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Q#1 The Bank Checks the borrower history before granting loans	12	40	10	33.3	3	10	3	10	2	6.6	30	100
Q#2 Crediting- granting approval process established accountability for decision taken	12	40	12	40	1	3.3	2	6.6	3	10	30	100
Q#3 The Bank properly assessed the customer ability to meet obligation	6	20	15	50	1	3.3	3	10	2	6.6	30	100
Q#4 The Bank properly assessed collateral of the customer i.e. There is fair collateral estimation	8	26.6	12	40	6	20	3	10	1	3.3	30	100
Q#5 The bank carried out credit processing activities independent of Appraisals	9	30	6	20	3	10	6	20	6	20	30	100

Source: *Researcher's Survey result from Primary Data Sources*

As indicated in table 4.5 item Q#1 respondents were asked whether the bank checks the borrower's history before granting loans or not. With this regard, 12(40%) of the respondents strongly agree on the issue while 10(30%) of employees agree that the bank checks the history of a borrower. On the other hand, 3(10%) respondents neutral on the issue, 3 (10%) of respondents disagrees and 2 (6.6%) strongly disagree. This denotes to increase the tendency of non-performing loan since the history of the client checked during assessment.

As can be seen from item Q#2 of table 4.5, 12(40%) of respondents agree that the credit granting process of the bank creates accountability for each decision making activity and 12 (40%) of respondents agree on the issue. Whereas 1 (3.3%) of respondents are neutral with the idea, 2 (6.6%) of respondents disagree, and the remaining 3(10%)

strongly disagree. This implies that the bank's each credit staffs are accountable and responsible for their decision making in the loan granting process.

In same table item Q#3 respondents were asked whether the bank properly assessed the customer ability to meet obligations. The majority of respondents 15(50%) agree with the idea. On the other hand, 6(20%) of respondents strongly agree, 1 (3.3%) of respondents neutral , 3 (10%) of respondents agree and 6(6.6%) respondents strongly disagree. This infers that the bank has properly assessed the customers' ability to meet its obligation in the credit granting process.

In item Q4 of table 4.3, respondents were asked whether there is fair collateral estimation. The majority of respondents, 12(40%) agree, 8(26.6%) strongly agree and accept there is fair collateral estimation. Specifically, 6(20%) respondents neither agree nor disagree, 3 (10%) of respondents disagree furthermore, the rest 1(3.3%) of respondents strongly disagree. Majority of the respondents agreed that there is fair collateral estimation this reveled the bank can collect the loan from defaulters.

As item Q#5 of table 4.6 shows, 9 (30%) of respondents strongly agree with the idea that the bank carried out credit processing independent of the appraisal, 6(22%) agree, 3(10%) neutral and the rest 6(20%) and 6(20%) respondents are agree and strongly disagree respectively. These revealed there is segregation of duty in the credit department.

4.3 Credit Monitoring and Control

Credit monitoring and follow up process guideline is included in the credit policy of the bank. Appropriate usage and implementation benefits the bank to arrest NPLs and have good relationship with clients.

Table 4.6 Monitoring and Control of Credits

Description	Strongly agree		agree		Neutral		Disagree		Disagree Strongly		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Q#1 The bank strictly implement the conditions and sanctions set by different approving organs	5	16.6	15	50	3	10	3	10	4	13.3	30	100
Q#2 Collateral coverage is regularly assessed and related to the borrower's financial positions	11	36.6	12	40	1	3.3	3	10	3	10	30	100
Q#3 The bank monitor the business of clients after granting credits on regular interval basis	6	20	12	40	2	6.6	6	20	4	13.3	30	100
Q#4 Customers are often given sufficient training on loan usage	4	13.3	6	20	6	20	9	30	6	20	30	100

Source: *Researcher's Survey result from Primary Data Sources*

As can be seen from item (Q#1) in table 4.6, 15(50%) of respondents agree and 5(16.6%)

of respondents strongly agree with the proposition that the bank strictly implement the conditions and sanctions set by different approving organs. 3(10%) of respondents neither agree nor disagree .It is also found that, 3(10%) of them disagree with the idea, 4(13.3%) of them strongly disagree. This is an implication that the bank has a better stand in implement the conditions and sanctions set by different approving organs that helps to monitor and control its loans provided to creditors.

In item (Q#2) of table 4.6, respondents were asked whether the collateral coverage is regularly assessed and related to the borrower's financial position. The majority of respondents 12(40%) agree, 11(36.6%) strongly agree. Whereas 1(3.3%) of respondents are neutral with the idea, 3 (10%) of respondents disagree, whereas the remaining 3(10%) strongly disagree this indicates that the bank uses assessing its Collateral coverage regularly to Monitoring and Control of Credits.

The result presented in item (Q#3) of table 4.6 indicates that 12(40%) agreed the bank monitors the business of clients after granting credits on regular interval basis, 6(20)% strongly disagree, 12(13,6%) of respondents neutral and also 2(6.6%) of respondents disagree whereas the remaining of the respondents 6 (20%) strongly disagree. As indicated this shows there is a monitoring on disbursed loans that help to mitigate increasing trend of NPLs.

It can be seen from item (Q#4) of table 4.6 that 6 (20%) of respondents have responded neutral whether the customers are given sufficient training on loan usage or not, 6(20%) are agree, 4(13.3%) of respondents strongly agree and 6(20%) of respondent strongly disagree whereas 9(30%) of them disagree. In this case clients have not taken training by the bank might lead to default and can be lead to default and loan diversion

Table 4.7 Credit Operational Tools

Description	Strongly agree		agree		Neutral		disagree		Disagree Strongly		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Q#1 The process of “Credit administration” is performed independently of individuals involved in the “business organization” of credit	10	33.3	11	36.6	6	20	1	3.3	2	6.6	30	100
Q#2 The Bank segregate the Workout activity from the area that originated the credit	3	10	15	50	5	16.6	4	13.3	3	10	30	100
Q#3 The bank has well-structured documentation tracking systems for credit and collateral files	9	30	8	26.6	7	23.3	3	10	3	10	30	100
Q#4 The bank has appropriate criteria for Credit classification and provisioning	8	26.6	14	46.6	6	20	1	3.3	1	3.3	30	100

Source: *Researcher’s Survey result from Primary Data Sources*

As we can see from table 4.7, item (Q#1), respondents were asked whether the process of credit administration is performed independently of individuals involved in the business origination of credit. With this regard 10(33.3%) of respondents strongly agree, 11(36.6%) agree, 6(20%) neither agree nor disagree, the rest 2(6.6%) of them strongly disagree. This shows the bank policy is implemented and embedded the accountability of credit staff to counter check by other staff.

In item (Q#2) respondents were asked whether the bank segregates the workout activity from the area that originated credit. Among the respondents 3(10%) strongly agree that the bank segregate the workout activities, 15(50%) agree, 5(16.6%) neutral 4(13.3%) disagree and the rest 3(10%) strongly disagree. This shows the segregation of duty for each loan processing and granting.

In item (Q#3) respondents were asked whether the bank has employed well-structured documentation tracking system for credit and collateral files, their response suggest that 9(30%) strongly agree, 8(26.6%) agree, 7(23.6%) neutral, 3(10%) disagree and the rest 3 (10%) disagree. This revealed the availability of tracking system on collateral files.

In same table item (Q#4) respondents were asked whether the bank has appropriate criteria for credit classification, provisioning and write-off. The majority of respondents 14(46.6%) agree with the idea. On the other hand, 8(26.6%) of respondents strongly agree, 1(3.3%) respondents neutral and 1(3.3%) of respondents disagree. It denotes that the bank has appropriate credit administration criteria that help to abide on its policy.

4.4 The Effect of 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 4.8 Respondent view on the effect of the bank on credit risk management

Credit Risk Management	Number	Mean	Standard deviation
The bank applied an effective marketing reaction	30	2.236	1.5026
There is lack of benchmarking against competitors	30	2.891	1.230
The bank critically assess commercial locations	30	3.105	1.591
The bank effectively work to fulfill customer demand and expectation	30	3.045	1.368
The bank manage interest rate instability	30	3.912	1.306

Source: *Researcher's Survey result from Primary Data Sources*

As the above table indicates, the studied banks didn't applied an effective marketing reaction this was implied by the lowest mean value at 2.236 which indicates high risk of poor market reaction and high variation between respondents which implied at std. deviation 1.5026. 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 2.891. 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 3.105. The study also asked whether the banks effectively work to fulfill customer demand expectation or not; however the result mean value at 3.045 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 3.912.

4.5 Operational Efficiency Analysis

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 4.9 Respondents view on the effect of operational efficiency on the effectiveness of credit risk management

Effect of operational effectiveness of credit risk management	number	Mean	Standard deviation
There is a problems when Risk of transition from the existing process to the new one	30	3.014	1.222
workers skill, experience and training risk challenges frequently affect	30	3.501	1.645
There is frequent Systems failure	30	3.612	1.4056
There is failure of transaction risk	30	3.101	1.252
Failure to communicate with each other	30	2.912	1.256
There is failure whether Internal or external risk reporting	30	3.010	1.321
there is failure an electronic transfer of payments	30	2.901	1.320

Source: *Researcher's Survey result from Primary Data Sources*

With related to the problem of financial transaction, respondents implied at a mean value score of 3.014 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 1.222 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 3.501is with std. deviation of 1.645implied 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 3.612 and 1.4056 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 effort 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 3.101 and std. deviation of 1.252implied 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 2.912and std. deviation 1.256 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 3.010 and 1.321respectivelyshows moderate risk are observed in the studied banks.

4.6 Discussions

Yuqi Li, (2010) the findings also show that the respondent developmental, 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 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 are 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 bank, 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, (2009), Jimenez & Saurina (2008), Thiagarajan, S., et al (2013), Ahmad & Bashir (2014) 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 credit risk management most of the similar studies such as Yong (2005) 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.

CHAPTER FIVE: MAJOR FINDINGS CONCLUSIONS AND RECOMMEDATIONS

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

5.1 Major Finding

- The bank checks the borrower history. The bank assesses customer ability to meet obligations. The credit granting process creates accountability. The bank is not in a position to monitor or visit the clients business on regular basis after disbursement that creates a huge amount of non-performing loan. No sufficient training is provided by the bank with regard to loan usage.
- The bank regularly assess the collateral coverage with the borrowers' financial position though most credit approval is collateral based.
- The workout activity is segregated from the area that the credit is originated – helps to reduce conflict of interest.
- 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 3.101 and std. deviation of 1.252implied the problem is still affect the bank credit risk management practice.

5.2 Conclusion of the Study

The study investigates factor affecting credit risk management of developmental bank of 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. To test the effect of such variables on banks profitability, the study used both descriptive and inferential statistics. Adoringly the major findings 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 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 developmental bank of Ethiopia 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 the bank 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.

5.3 Recommendation

- 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

REFERENCES

- Abdou, H. & Pointon, J. (2011). Credit scoring, statistical techniques and evaluation criteria: a review of the literature, *Intelligent Systems in Accounting, Finance & Management*, 18 (2-3), pp. 59-88.
- Abebaw Tadesse (2015). 'Assessment on the Performance of Project Financing in Ethiopian Private Commercial Banks' MA thesis, Unity University.
- Abrham Gebeyehu, (2002). Loan Repayment and its Determinants in Small-Scale Enterprises Financing in Ethiopia: Case of Private of Borrowers around Zeway Area. Unpublished MSc. Thesis, Addis Ababa University.
- Adamu Legesse (2013).Determinants of failure for Projects Financed by Development Bank of Ethiopia, Thesis, St. Mary's University School of Graduate Studies.
- Aevelyn Mureithi (2016). The Effect of Credit Management Techniques on the Financial Performance of Commercial Banks in Kenya.
- Ahmmed, M., Serajul, I., and Rahman, M.T. (2012). Analysis of Repayment Behavior in Banks Customer Perspective. Case of Bangladeshi Mercantile Limited Bank, *World Review of Business Research*, Volume 2.
- Amanuel, M. (2011). 'The Determinants of Capital Structure Evidence from Manufacturing Share Companies of Addis Ababa city', Master's thesis, Addis Ababa University.
- Anuj A. (2011). Credit Risk Management: Trends and Opportunities, Capgemini, Online available At: www.capgemini.com/risk
- Arega Seyoum, Hanna Nigussie, Tadele Tesfay (2016). Factors Affecting Non-Performing Loans: Case Study on Development Bank of Ethiopia, Central Region.

- Asia S. & Zaidi F.B. (2012). Design and Development of Credit Scoring Model for the Commercial banks of Pakistan: Forecasting Creditworthiness of Individual Borrowers, international Journal of Business and Social Science Vol. 3 No. 17. Available online www.ijbssnet.com
- Atakelt H.A. (2015). Emphatically Study on Credit Risk Management Practice of Ethiopian Commercial Banks. Journal of Finance and Accounting, Vol.6, No.3. PP.134-147.
- Atakelt H.A. (2015). Empirical Study on Credit Risk Management Practice of Ethiopian commercial Banks. Journal of Finance and Accounting, Vol.6, No.3. PP.134-147.
- Basel Committee on Banking Supervision (1999). 'Principles for the Management of Credit Risk'. Consultative Paper, the Basel Committee on Banking Supervision.
- Basel Committee on Banking Supervision (2001). Principles for Management of Credit Risk.
- Beatrice A. Ogolls (2012). Debt Recovery as an Operational Strategy Used by NIC Bank to Manage Non Performing Loan Portfolio, School of Business University of Nairobi.
- Davide, N. and Thangavel, N. (2008). Risk Management in the Financial Services Industry, Academic open internet journal. vol. 22 (7).
- Deribie Workalemahu (2015). Credit Policy and Loan Collection Performance in the Development Bank of Ethiopia.
- Development Bank of Ethiopia (DBE) (2013).''Commodity Study on DBE Financed Flower projects''. Strategic Planning and Development Effectiveness Process, Addis Ababa.
- Development Bank of Ethiopia (DBE) (2014). Development Bank of Ethiopia, Loan Manual, June 2014.

- Development Bank of Ethiopia (DBE), Annual Report for the Year Ended June 30, 2015.
- Effects of Liquidity Management of Small Farm Borrowers. *American Journal of Agricultural Economics* 62(4):709-718.
- Endale Kiflu (2015). Assessment of Loan Recovery Performance in Development Bank of Ethiopia.
- Girma Abera (2010). Assessment on the tools used to minimize Credit risk on Ethiopian Commercial Banks, Unpublished Master's Thesis, Addis Ababa University.
- Hagos Mirach (2010). Credit Management (a Case Study of Wegagen Bank Share Company in Tigray Rregion).
- Hailu Endeshaw (2018). Factor Affecting Credit Risk Management Practice of Private Commercial Banks of Ethiopia.
- Hailu Endeshaw (2018). Factor Affecting Credit Risk Management Practice of Private Commercial Banks of Ethiopia.
- Hempel, G.H et al (1994). *Bank Management: Text and Case*. New York, USA: John Wiley & son.
- Hettihewa S., (1997). *Introduction to Financial Management*, Oxford University, UK.
- Jemal Abafita (2003). Microfinance and Loan Repayment performance: A Case Study of the Oromia Credit & Saving Share Company (OCSSCO) In Keyu, Addis Ababa University.
- Kairu, P. (2009). *Credit Management* 2nd Ed. Nairobi: Focus Publishers Ltd.
- Kamajou F and Baker C (1980). *Reforming Cameroon's government Credit Project*.
- Kapoor, J., Dlabay, L., Hughes, R., and Hoyt, W. (2007). *Business and Personal Finance*: USA: McGraw-Hill Company.

- Kibrom Tadesse (2010). Performance of Private Borrowers in Development Bank of Ethiopia, North Region.
- Mensha, C. (1999). Bank Credit Provision and Performance Measurement: the Experience of Rural Banking in Ghana.
- MS. Asha S. (2013). Credit Risk Management in Indian Commercial Banks, International Journal of Marketing, Financial Services & Management Research, Vol.2, No.7. Online available at www.indianresearchjournals.com
- Mulugeta Shiferaw (2010). The Determinants of Agricultural Loan Repayment Performance. Unpublished Master's Thesis, Haramaya University.
- Muluken Tariku (2014). Factors Affecting Loan Repayment Performance of Floriculture Industries to the Development Bank of Ethiopia.
- National Bank of Ethiopia (2010). Revised Risk Management Guidelines, Bank Supervision Directorate.
- National Bank of Ethiopia (NBE) (2010). Bank Risk Management Guidelines (Revised), Addis Ababa, Ethiopia.
- Pilbeam, K. (2005). Finance and Financial Markets: Palgrave Macmillan.
- Rajaraman, I. & Vasishtha, G. (2002). Non-Performing Loans of Banks, Some Panel Results, Economic and Political weekly, Vol. 37 (5), 2-8.
- Sanaders, & C.Ornett, (2005). Financial Markets and Institutions: An Introduction to the Risk Management approach. McGraw Hill Publication.
- Saunders, A and Lange, H. (2001). Financial Institutions Management, Irwin, Sydney, Shanmugan, B & Bourke, P. (2003). The Management of Financial Institutions: Selected Readings, Addison- Wesley Publishing, Reading, MA.
- Shekhar K. (1985). Banking Theory and Practices, New Delhi: Vikas Publishing House Pvt, Ltd.

- Solomon G. (2013). Credit Risk Management Practice on NIB International Bank, Unpublished Master's Thesis, St. Mary University.
- Tekeste Gebrekidan (2016). The Assessment of Credit Management Performance in Emerging Private Commercial Banks in Ethiopia: the Case of Berhan International Bank S.C.
- Tesfaye Borulelissa (2014). Factors Influencing the Level of Credit Risk in the Ethiopian Commercial Banks: The Credit Risk Matrix Conceptual Framework.
- Tibebu Ayalew (2011). Credit Risk Management and its impact of Commercial Banks in Ethiopia, Unpublished Master's Thesis, Addis Ababa University.
- Tseganesh T. (2012). Determinants of Banks Liquidity and their Impact on Financial Performance: empirical study on commercial Banks in Ethiopia.
- Ttekeste Gebrekidan (2016). The Assessment of Credit Management Performance in Emerging Private Commercial Banks in Ethiopia: The Case of Berhan International Bank S.C.
- Vigano Laura (1993). A Credit Scoring Model for Development Banks: An African Case Study, Savings and Development, Vol. XVII, No. 4, pp.441-482.
- W/michael Shibru (2015). Factors Affecting the Financing Policy of Commercial Banks in Ethiopia.
- Williams, C. A. J. and Heins, R. M. (1985). *Risk Management and Insurance*, McGraw-Hill, New York.
- Wise Seek (2012). *Credit Management*, <http://www.wisegeek.com/credit-management.htm>. Women's World Banking (2010). Accessed 20/07/2013 (<http://www.swwb.org>).
- Wondimagegnehu, Negera. (2012). Determinants of Non-Performing Loans: The case of Ethiopian Banks, Unpublished Master's Thesis.
- Yalemzewd Tadesse (2013). Exploring the Credit Management Practice of Bunna International Bank S.C.

APPENDIX

ADDIS ABABA UNIVERSITY

GRADUATE STUDIES

DEPARTMENT OF PUBLIC ADMINISTRATION AND DEVELOPMENT MANAGEMENT (QUESTIONNAIRE)

Dear respondents,

I'm a graduate student at Addis Ababa University in Department of Public Administration and Development Management. Currently, I'm conducting a research entitled "Factor Affecting Credit risk Management of Development Banks of Ethiopia (DBE)" 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.

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.

Therefore, Please put a tick mark (✓) on the space provided ☐ for questions that need further explanation please use the space provided under each question.

Part I. Back ground of respondent:

1. Age group:

20-29 ☐ 30-39 ☐ 40-49 ☐ Above50 ☐

2. Educational qualification

Diploma ☐ Degree ☐ Masters ☐

Other, Please Specify _____

3. Years of service in credit area?

0-5 Years ☐ 6-10 Years ☐ 10-15 Years ☐
16-20 Years ☐ 21-25 Years ☐ Above 25 Years ☐

4. Current position -----

Part II. Questions on Credit Management

Please provide your level of agreement using the following rates (Where 1= Strongly disagree, 2= Disagree, 3= Neutral, 4 = Agree , 5 = Strongly agree)

5.1 Credit Processing	1	2	3	4	5
The Bank Checks the borrower history before granting loans					
The Bank properly assessed the customer ability to meet obligation					
Crediting-granting approval process established accountability for decision taken					
There are times credit granting and monitoring process is overridden by Directors, senior management					
The bank carried out credit processing activities independent of appraisals					
5.2 Monitoring and Control of Credits					
The bank strictly implement the conditions and sanctions set by different approving organs					
Collateral coverage is regularly assessed and related to the borrower's financial positions					
The bank monitor the business of clients after granting credits on regular interval basis					
Customers are often given sufficient training on loan usage					
5.3 Credit Administration					
The process of “ Credit administration “ is performed independently of individuals involved in the “ business organization” of credit					
The Bank segregate the workout activity from the area that originated the credit					
The bank has well-structured documentation tracking systems for credit and collateral files					
The bank has appropriate criteria for Credit classification and provisioning					

5.4 market strategy on credit risk					
The bank applied an effective marketing reaction					
There is lack of benchmarking against competitors					
The bank critically assess commercial locations					
The bank effectively work to fulfill customer demand and expectation					
The bank manage interest rate instability					
5.5 Effect of operational risk on the effectiveness of credit risk management					
There is a problems when Risk of transition from the existing process to the new one					
workers skill, experience and training risk challenges frequently affect					
There is frequent Systems failure					
There is failure of transaction risk					
Failure to communicate with each other					
There is failure whether Internal or external risk reporting					
there is failure an electronic transfer of payments					

5. What strategies do you propose to the Bank so as to improve the quality of loans as high as possible and enhance the overall Credit risk Management of the Bank?

6. What are the significant challenges that you have faced credit risk management activities

7. Any comment

Thank you