DETERMINANTS OF CREDIT RISK MANAGEMENT PRACTICES: THE CASE OF UNITED BANK SOUTHWEST DISTRICT

A Thesis Submitted to the School of Graduate Studies of Jimma University in partial fulfillment of the requirements for the Award of the Degree of Master of Business Administration

BY:

GEREMEW TESFAYE

JIMMA UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS, DEPARTMENT OF MANAGEMENT

JANUARY 2023

JIMMA, ETHIOPIA

Determinants of Credit Risk Management Practices: The Case of United Bank Southwest District

BY:

GEREMEW TESFAYE

Under the Guidance of

Aregu Asmare (Assit. Prof.)

And

Mohammed Yasin (MSc)

A Thesis Submitted to the School of Graduate Studies of Jimma University in partial fulfillment of the requirements for the Award of the Degree of Master of Business Administration

JIMMA UNIVERSITY

JANUARY, 2023

JIMMA, ETHIOPIA

APPROVAL SHEET

Submitted By:

____________________	____________________	________________
Name of Student	**Signature**	**Date**

Approved by:

1. ____________________	____________________	________________
Name of Major Advisor	**Signature**	**Date**
2. ____________________	____________________	________________
Name of Co-Advisor	**Signature**	**Date**

Table of Contents

APPROVAL SHEET………………………………………………………… iii
TABLE OF CONTENTS ………………………………………………… iv
LIST OF TABLES…………………………………………………………… vi
LIST OF FIGURES ……………………………………………………... vii
ACRONYMS/ABBREVIATIONS………………………………………… viii
ABSTRACT…………………………………………………………………. 1
CHAPTER ONE……………………………………………………………. 2
1. **INTRODUCTION ……………………………………………………... 2**
1.1 Background of the Study ………………………………………… 2
1.2 Statement of the Problem………………………………………… 4
1.3 Research Questions………………………………………………. 7
1.4 Objectives……………………………………………………………… 8
1.4.1 General Objective……………………………………………….. 8
1.4.2 Specific Objectives……………………………………………… 8
1.5 Research Hypothesis……………………………………………… 8
1.6 Significance of the Study………………………………………… 9
1.7 Scope of the Study……………………………………………….. 9
1.8 Limitation of the Study…………………………………………... 10
1.9 Organization of the Paper……………………………………….. 10
CHAPTER TWO…………………………………………………………… 11
2. REVIEW OF RELATED LITERATURE……………………………... 11
2.1 Theoretical Review………………………………………………… 11
2.1.1 Definitions and Concepts of Credit Risk Management............................. 11
2.1.2 Modern Portfolio Theory (MPT)……………………………………. 12
2.1.3 Agency Theory…………………………………………………… 13
2.1.4 Liquidity Preference Theory…………………………………….. 13
2.1.5 Credit Risk Theory………………………………………………. 14
2.2 Credit Risk Management Process……………………………….. 15
2.3 Review of Empirical Studies……………………………………. 17
2.4 Knowledge Gaps………………………………………………… 23
2.5 Conceptual Framework of the Study…………………………. 24
CHAPTER THREE……………………………………………………… 28
3. RESEARCH DESIGN AND METHODOLOGY……………………… 28
3.1 Research Design……………………………………………………….. 28
3.2 Research Approach……………………………………………………. 28
3.3 Type and Source of Data…………………………………………… 28
3.4 Target Population…………………………………………………… 29
3.5 Method of Data Collection……………………………………… 30
3.6 Variable Definition and Model Specification……………………… 30

3.6.1 Variables of the Study………………………………………………………… 30
3.6.2 Model Specification……………………………………………………….. 31
3.7 Methods of Data Analysis………………………………………………………... 32
3.8 Reliability and Validity of Data ………………………………………………. 32
3.9 Ethical Consideration………………………………………………………… 33
CHAPTER FOUR……………………………………………………………… 34
4. RESULTS AND DISCUSSIONS………………………………………………… 34
4.1 Data Reliability and Validity ………………………………………………… 35
4.2 Respondents' Demographic Characteristics ………………………………… 37
4.3 Presentation and Discussion of the Findings of the Study …………………. 38
4.3.1 Assessing the current state of credit risk management in the bank ………. 38
4.3.1.1 Establishing appropriate credit risk environment…………………….… 39
4.3.1.2 Operating under a sound credit granting process………………………. 41
4.3.1.3 Maintaining an appropriate credit administration and monitoring process 42
4.3.1.4 Adequate control over credit risk……………………………………… 43
4.3.1.5 Credit risk management practice……………………………………… 43
4.3.2 Correlation analysis among variables……………………………………….. 44
4.3.3 Assessing the impact of credit risk management dimension on effectiveness of credit risk management practice…………………………………………...... 45
4.3.3.1 Testing the basic assumptions of a multiple regression model ………… 46
4.3.3.2 Analysis and interpretation of regression coefficients………………….. 49
4.3.4 Analysis of interview…………………………………………………….. 52
4.3.5 Proper collection and follow-up of loans………………………………… 54
CHAPTER FIVE………………………………………………………………… **56**
5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS…………... **56**
5.1 Summary of major findings ………………………………………………….. 56
5.2 Conclusions …………………………………………………………………... 57
5.3 Recommendations……………………………………………………………….. 58
5.3 Future Research Directions……………………………………………………… 58
REFERENCES…………………………………………………………………….. **59**
APPENDIX………………………………………………………………………. **63**

List of Tables

Page

Table 1 Summary of reliability test results………………………………………………….. 35

Table 2 Respondents' background information…………………………………………... 36

Table 3 Respondents view on establishing appropriate credit risk environment by the bank……………………………………………………………………………………….. 39

Table 4 Respondents view on credit granting process of the bank……………………….. 40

Table 5 Respondents view on maintaining an appropriate credit administration, measurement and monitoring process…………………………………………………….. 41

Table 6 Respondents view on adequate control over credit risk by the bank…………….. 43

Table 7 Respondents view on effectiveness of credit risk management practice of the bank………………………………………………………………………………………… 44

Table 8 Correlation matrix between the dependent and independent variables…………… 45

Table 9 Multicollinearity test of independent variables…………………………………… 46

Table 10 Analysis of Variance (ANOVA) based on the REG Procedure…………………. 48

Table 11 Model summary results from multiple regression analysis……………………… 49

Table 12 multiple regression analysis between determinants of credit risk management and effective credit risk management practice…………………………………………….. 50

Table 13 Summary of total loan given & total amount of NPL in the year 2020 up to 2022………………………………………………………………………………………… 55

List of Figures

Page

Figure 1 Conceptual framework for the study…………………………………………… 24

Figure 2 Homoscedasticity assumptions of multiple regressions………………………... 47

Figure 3 Histogram showing the distribution the regression standardized residuals……. 48

ACRONYMS/ABBREVIATIONS

CRM	Credit Risk Management
NBE	National Bank of Ethiopia
NPLS	Non-Performing Loans
SPSS	Statistical Package for Social Scientist

ABSTRACT

Sound credit management is a prerequisite for a financial institutions stability and continuing profitability, while deteriorating credit quality is the most frequent cause of poor financial performance. The main objective of this study was to assess credit risk management system and practices in selected branches of United bank of Southwest district. Selection of branches for the study was done based on mainly amount of deposits, foreign exchange and loan performance made by the banks. Five branches out of thirty-three were selected based on their performances as of the financial year 2021/2022. In this study, census survey was used in order to target participants of the study. For the purpose of this study, both primary and secondary data were used. Primary data were collected through questionnaires distributed to respondents that involved professional working in the banks such as managers and officers working on loan processing. The data were analyzed using descriptive and regression statistics by using SPSS software version 21. The finding of the study showed that the current level of credit risk management of the bank is moderate. The results also indicated that credit risk environment (CRE), credit granting process (CGP), credit administration, measurement and monitoring process (CAMMP), and control over credit risk (CCR) were statistically significant in predicting effectiveness of credit risk management practices of the bank. The results additionally indicate that the bank has been exposed to credit risk which directly contributes to the increment of NPL. Thus, it is recommended that the bank should develop independent risk management policy and procedure from credit policy and procedure to overcome those problems and to take measures on the spot.

Keywords*: Credit Risk, Credit Risk Management, Credit Monitoring, United Bank*

CHAPTER ONE

1. INTRODUCTION

This chapter provides the general overview of the study. Section one presents background of the study. Section two presents statement of the problem. Section three provides a brief description of the research questions. Section four presents the general and specific objectives of the study. Section five provides the research hypotheses. Section six, seven and eight presents the significance, scope and limitation of the study, respectively. The last section briefly describes the organization of the paper from chapter one to three.

1.1 Background of the Study

Economic growth in any country is not possible without a sound financial sector (Rajaraman and Visishtha, 2017). Good performance of these financial institutions is the symbol of prosperity and economic growth in any country or region and poor performance of these institutions not only hamper the economic growth and structure of the particular region but also affects the whole world (Khan and Senhadji, 2001). Commercial banks in most of the world economies are dominant type of financial institution that provide installment, facilitates internal and external trades and the movement of money and capital when compared to any other financial institution (Salas and Saurina, 2018)

Banks play a very important role in manufacturing industries and for the overall economic development of every nation. They have control over a large part of the supply of money circulation and stimulus for the economic progress of a country. The financial sectors contribution to growth lies in the central role, they play in mobilizing savings and allocating the resources efficiently to the most productive uses and investments in the real sector (Joseph et al., 2017). The traditional role of a bank is lending and loans make up the bulk of their assets (Njanike, 2019). According to Havrilesky and Boorman (2020), interest on loans contributes significantly to interest income of commercial banks. Saunders and Cornett (2021) pointed out that traditionally 85 percent of commercial

banks' income is contributed by interest on loans, and hence loans represent the majority of a bank's asserts. However, lending is not an easy task for banks because it creates a big problem which is called non-performing loans (Chhimpa, 2012). Due to the nature of their business, private commercial banks also expose themselves to the risks of default from borrowers. Credit management frameworks therefore become imperative tools in decision- making that relates to loan-pricing, delegating lending powers, mitigating or migrating as well as managing incidences of credit risk on bank portfolio.

The key principles in credit risk management are establishment of a clear structure, allocation of responsibility and accountability, processes have to be prioritized and disciplined, responsibilities should be clearly communicated and accountability assigned thereto. Organizing and managing the lending function in a highly professional manner and doing so pro-actively can minimize whatever the degree of risk assumed losses. Banks can tap increasingly sophisticated measuring techniques in approaching risk management issues with the advancements of technology (Yang, 2020).

According to Poudel (2012) poor risk management lead to the accumulation of nonperforming loans (NPLs) under which the generated profit were not only eroded through loan provision but also soundness, safety and stability of bank while effective credit risk management improve credit performance through establishing appropriate credit risk environment, maintaining credit limit at acceptable level, undertaking sound credit granting process, proper monitoring and controlling credit risk. Nevertheless, Ethiopian private commercial banks including United bank are suffering from serious financial fragility manifested by high proportion of NPLs (Mehari, 2018). Recently, the NPLs of Ethiopian private commercial banks have shown a substantial improvement and lowered to an average of 5 % (National Bank of Ethiopia, 2019). However, NPLs are still high as compared to the other developing countries such as Namibia, Mozambique and Uganda (Fofack, 2018). Hence, Ethiopian private commercial banks are still expected to reduce their NPLs as low as possible in order to achieve their optimal profit and ultimately improve the soundness of the financial system

In light of the above points, limited empirical studies have been done on this problem and at large and there is a limited work in United bank non-performing loan in particular. Therefore it is important to examine level of credit risk management system and practice of United bank to initiate top level management and regulatory bodies to take policy measure toward maintaining adverse effect of their credit function.

The purpose of this research was to investigate the level of credit risk management systems and practices of United Bank, Southwest district and identify the types of risks and risk identification method through descriptive research approach. This will provide the United Bank managements and executives with applied knowledge on the management of identified variables that will create a better understanding of credit risk management and loan quality improvement in the banks.

1.2 Statement of the Problem

Ethiopian private commercial banks provide credit for establishment and expansion of manufacturing production, agricultural, industrial and other services with the objective of economic development in the country. In line with the above point, the loan extended to various sectors of the economy must be recovered in full, if the objective of circulating more and more financial resources to meet the increase demands for credit and to keep the bank in sound financial health (Boudriga, 2019).

At the same time non-performing loans (NPLs) or uncollectable loans or bad loans are reducing the profitability of the United bank (United bank annual report, 2019). This NPL are highly ties huge amount of capital that can be used for productive purpose by giving loans and advance to various economic sectors and profitable business and investments in different sectors. At present from the total loans and advance disbursed amount 111,435,273,000.00 birr which is Birr 1,987,873,000.00 or 1.78% is under the category of NPL in United bank as of June 2018. Even-if the NPL ratio is below the required level of NBE it is increasing in the past five consecutive years from 293,370,000.00 birr in year 2016 to 1,987,873,000.00 birr in year 2020 (United bank annual report, 2019). The accumulation of nonperforming loans caused by lack of proper credit risk management would have substantial adverse impact on the performance of the

bank in particular and on the overall economy in general. In turn this affects the government by reducing its tax income and banks by imposing dawn ward pressure on their respective profits and per share value of their stock price.

As stated by Rekha (2015), "Better and effective strategic credit risk management process is a better way to manage portfolio credit risk." The process provides a framework to ensure consistency between strategy and implementation that reduces potential volatility in earnings and maximize shareholders wealth. Beyond and over riding the specifics of risk modeling issues, the challenge is moving towards improved credit risk management lies in addressing banks' willingness and openness to accept change to a more transparent system, to rapidly changing markets, to more effective and efficient ways of operating and to meet market requirements and increased answerability to stake holders. The rational to analyze the efficiency of CRM frameworks is particularly acute in a developing nation like Ethiopia accordingly; there is a need to assess Credit Risk Management (CRM) practice in United bank, particularly in view of NPLs level

In Ethiopia, to the knowledge of the researcher, few researches were conducted in this area of credit risk management practices. Tesfaye (2014) investigated factors influencing credit risk in the Ethiopian commercial banks, Yalemzewd (2013) assessed credit management practice of Bunna International Bank S.C and analyzed the process of accessing credit, credit control process and credit collection strategy against non-performing loan of the bank, Tibebu (2021) examined the impact of credit risk management towards the profitability of selected commercial banks in Ethiopia and reported that credit risk management has significant impact on profitability of banks. Hagos (2016) in his study of credit management of Wegagen Bank Share Company in Tigray region attempted to indicate the importance of credit management in financial institutions such as commercial banks, micro finances and others, Solomon (2018) assessed credit risk management practice of Nib International Bank S.C and found out that risk which emanates from credit is due to high degree of credit concentration in few

sectors and borrowers, the use of collateral as number one technique to alleviate credit risk and absence of proper evaluation model.

In United bank few researches were also conducted in this area of credit risk management. For instance, the study undertaken by Hable (2018) assessed the credit management practice and identified the possible factors that influence the credit management activity of selected branches of United bank, Addis Ababa district. The findings of this study showed that lack of credit follow up, lack of information system to support the credit risk grading system, lack of appropriate credit policy and procedure when making decision on lending limit are among the major factors affecting the attainment of successful credit management at united bank. Another study conducted by Mohammed (2018) focused to part of credit management aspect such as performance, profitability, and credit exposures for assessing the overall credit risk management practices of eight selected branches of United bank in Addis Ababa city. This study indicated that poor credit assessment ascribing to capacity limitation of credit operators, institutional capacity drawbacks and failure to setting-up sound terms and conditions with borrowers are the major causes for the occurrences of loan default in the bank. Although these studies generated some useful information that is relevant to credit risk management of the banks, they were either not comprehensive or not conducted using the Basel Committee (2000) standards and/or bank risk management guidelines set by the National Bank of Ethiopia (NBE). As a result, detailed information on key variables or component of standardized credit risk management tools, while indispensible is lacking in the banking sector in general and in the United bank in particular.

Therefore, this study is different from the prior studies because it incorporates the major credit risk management indicators/standards set by the Basel Committee on Banking Supervision (2000), and the NBE (2010) revised Bank Risk Management Guidelines. This NBE revised document, consistent with international standards and best practices, provided credit risk management (risk identification, measurement, monitoring and control) standards for all banks operating in the country. To this end, this study attempts to fill some knowledge gap associated with the implementation of credit risk management pillars by producing the status of credit risk management practices following the core

principles of credit risk management. The recommendation "*Principles for the Management of Credit Risk"*, issued by the Basel Committee in September 2000, states that, although specific credit risk management may differ among credit institutions depending on the scale and type of their activities, the four major activities of managing credit risk: 1) establishing an appropriate credit risk environment 2) operating under sound credit granting process 3) maintain appropriate credit administration, measurement and monitoring process, and 4) adequate control overall credit risk should be included in a comprehensive assessment of credit risk management practices. Thus, the present study sought to address the above gap by incorporating these key credit risk management indicators as independent variables for assessing the current state of credit risk management practices in the United bank, and suggests possible options for filling the gaps. Moreover, it should be noted that efforts to achieve generalization of the causal relationship between the components of standardized credit risk management and performance calls for empirical validation in diverse social, cultural and economic environments

1.3 Research Questions

The following basic research questions were formulated in order to achieve the broad objective of the research:

RQ1: Does the bank established appropriate credit risk environment?

RQ2. Does the bank undertake sound credit granting process?

RQ3. Does the bank maintain appropriate credit administration, measurement and monitoring system?

RQ4. Does the bank ensure adequate control over credit risk?

RQ5. Does the bank implement effective credit risk management system and practice?

1.4 Objectives

1.4.1 General Objective

The general objective of the study was to investigate the determinants of credit risk management practices in United bank, Southwest district

1.4.2 Specific Objectives

- To evaluate the current state of credit risk management practice of United bank.
- To investigate the relationship between credit risk environment and credit risk management practice of United bank.
- To investigate the relationship between credits granting process and credit risk management practice of United bank.
- To investigate the relationship between credit administration, measurement and monitoring process, and credit risk management practice of United bank.
- To investigate the relationship between adequate control over credit risk and credit risk management practice of United bank.
- To determine the level of non-performing loans (NPLs) in the bank, and identify bottleneck areas that could be addressed by the bank.

1.5 Research Hypothesis

One of the main purposes of this study was to examine the relationship between credit risk management practice and four aspects of the Basel's credit risk management standard (2000). Thus in an attempt to achieve this objective, the researcher developed the following hypotheses

- **H_1**: Appropriate credit risk environment has a significant positive effect on effectiveness of credit risk management practice.

- **H_2**: Sound credit granting process has a significant positive effect on effectiveness of credit risk management practice
- **H_3**: Credit administration, measurement and monitoring process has a significant positive effect on effectiveness of credit risk management practice
- **H_4**: Adequate control over credit risk has a significant positive effect on effectiveness of credit risk management practice

1.6 Significance of the Study

This study is considered important to provide insights for developing regulatory standards regarding the lending policies of different commercial banks in the industry. The study is believed to contribute for a better understanding of the role of the variables in credit risk management, which will help the bank manager and other concerned officials to concentrate on the quality of loans and remedial. Results of this study are also expected to be useful for investors who may want to factors that determine credit risk and to predict benefits expected from their investment. Finally, this study also contribute to the existing body of knowledge regarding credit risk management, and could serve as a starting point for further studies that may focus on issues related to credit risk determinant in the banking industry. Overall, the study also opens the issue under study for further and detail investigations for academic scholars as well as for policy makers as the sector continues to leap forward.

1.7 Scope of the Study

Since the term risk is a broad area of study, the study focuses on only assessing credit risk management practices such as appropriate credit risk environment, sound credit granting process, credit administration, measurement and monitoring process and adequate control over credit risk. Although credit risk management is a concern of all banks operating in the country, it is challenging to conduct the study across all banks in terms of time, finance, and research manageability. Therefore, the scope of this study was restricted to United bank with the rationale that the bank has been operating long enough to give academic insights on what the study seek to offer. In addition, the scope of this study

covered only the current state of credit risk management aspects of the bank (i.e., for the period 2021-2022). Since the researcher also aims to investigate the extent and pattern of non-performing loans (NPLs) as a supplementary variable, secondary data were collected from the bank's financial statements for the period from 2017-2021.

1.8 Limitation of the Study

The study only covered United bank branches of Southwest district among several of the banks in the country. Hence, the study is limited spatially as well as focuses only on the current credit risk management practices. Since Ethiopian banks have a wide range of institutional capacities, economic and environmental conditions, the result of the current study may have limitations to make generalizations and make them applicable to the country's banking industry as a whole. In addition, access to data may pose a great challenge to the research. An interview appointment with the Head of credit of the district may not be easily successful because of the tight schedule of the respondent. Feedback from staff respondents would also be another constraint due to lack of time, resulting in the case of unanswered and semi-answered questionnaires. Most of the respondents might interrupt their work in order to provide answers to the questionnaires making it a challenge. To overcome these limitations, and improve the reliability and validity of the study, the researcher contacted the concerned staff in advance and arranges a sound plan for interview based on their convenience.

1.9 Organization of the Paper

The paper is organized into three chapters. The first chapter deals with introductory part consisting of introduction/background of the study, statement of the problem, objectives of the study, scope of the study and its significance. The second chapter reviews literatures related to the study. In this chapter various theoretical concepts and empirical literatures that relates with credit risk and credit administration is discussed. And in the third chapter research design and methodology employed is presented. In Chapter 4, both descriptive and inferential results are presented and discussed in detail. Chapter 5 presents the main conclusions, recommendations and suggestions for further studies.

CHAPTER TWO

2 REVIEW OF RELATED LITERATURE

This chapter reviews the literature on credit risk management practices. It discusses issues on credit risk management from different perspectives and with the view of giving a theoretical foundation to the study. It starts with an exposition on credit risk management, followed by reviews of literature based on empirical studies done on the topic.

2.1 Theoretical Review

There are several theoretical studies on credit risk and determinant of credit risk. A credit default represents the financial failure of an entity (a person or a company). A theory of credit default should therefore represent a systematic understanding of the causes which directly lead to the effects which are associated with credit defaults. Majority of this theoretical frameworks relating to credit risk emphasize on risk concept, macroeconomic policies as well as structural and governance failures. Highlighted below are theories that support credit risk of firms.

2.1.1 Definitions and Concepts of Credit Risk Management

The principal goal of credit risk management was to decrease the effects of risks, related to an influence accepted by the public (Brigham et al., 2016). Usually, loans were the prime and most apparent source of credit risk of banks. However, there were other sources of credit risk which exist throughout the bank activities; including in the banking book and trading book that could appear on and off the balance sheet. Nowadays, commercial banks were increasingly prone to reasonably higher credit risk levels (Olson and Zoubi, 2017). These financial mechanisms include foreign exchange transactions, interbank transactions, bonds, trade financing, equities, swaps etc. In 2017, Brink (2017), Falkner (2017) and (Harper et al. 2017) demonstrated that risks were several types of threats caused by humans, technology, organizations, environment and politics. Conversely, risk management

involves all means available for person, staff, and organization to minimize or avoid a potential peril McIlwraith (2016). It was the duty of management to set up a credit supervision team to ensure that credit was properly maintained and administered. Procedures for measuring a firm's overall exposure to credit risk as well as stringent internal rating system should be adequate (Kalunda et al., 2012).

2.1.2 Modern Portfolio Theory (MPT)

The history of modern portfolio management (also known as modern portfolio theory (MPT)), originates with the seminal academic work of Markowitz (1952, 1959). MPT introduced the concepts of the risk return trade-off, correlations in returns of different assets, portfolio selection and investment optimization. Using these concepts it is a prescriptive theory which provides solution for investors by showing what is the best combination of available assets in a portfolio in order to maximize the total expected return for a given amount of risk, or, alternatively, in order to minimize the portfolio risk, for a given level of expected return (Mehdi and James, 2011).

The modern portfolio theory indicates that investors would theoretically be able to maximize their expected return while minimizing the variability of returns by investing in a diversified portfolio of assets that had different price movements in a given market. Modern portfolio theory classified risk into two parts: systematic risk and unsystematic risk. Systematic risk is the risk inherent in the market while unsystematic risk is the individual risk that exists with the investment of a particular security. An important conclusion of modern portfolio theory is that one can minimize the unsystematic risk through diversification. According to modern portfolio theory, whether credit risk is diversifiable or not, it's all depends with its determinants (Isaac, 2013).

The MPT concludes that the overall risk of a portfolio depends on the risk of each asset in the portfolio, the proportion of the portfolio in those assets and the correlations among different assets in the portfolio when considering the pattern of returns (Mehdi and James, 2011). This implies that governance structure of

commercial banks cannot eliminate credit risk determined by macroeconomic factors by diversification. However, risk caused by the unsystematic factors can be minimized through diversification through sector lending.

2.1.3 Agency Theory

Agency theory referred to as principal-agent theory explains the conflict of interest the shareholders hereby referred to as the principals and the managers and debt holders here referred to as the agents (as Maxwell & Agness (2016) cited as Jensen and Mecling, 2011). The theory defines agency relationship as a contract that the principal engages the agent to perform some duties on their behalf; similarly, the principal from time to time may delegate some duties to the agent

In these models the informed agent may reveal his private information through the signal which he sends to the principal On this basis of the agency theory, principal agent conflict may arise because the agent in executing the duties of the principal may also affected by his own welfare interest which impair him from acting at the best interest of the principal. Once banks managers are well remunerated by the shareholders, they are left in loft and do not seek any diligence since they have gotten all that was need to have them work prudently. They may engage in activities that depart from shareholder value maximization. To ensure their social power, loans approvals are done without proper selection and credit analysis. It's for this reason they may approve projects with negative NPV (Isaac, 2013)

2.1.4 Liquidity Preference Theory

This theory suggests that the premium demanded for parting with cash raises as the term forgetting the cash decreases. The rate in the increase of this premium amount slows down with the increase term. In financial trading, this theory is expressed as forward rates should exceed the future spot rates. This concept was first expressed by John Maynard Keynes (1989), this theory is also known as liquidity preference hypothesis. Liquidity preference theory intimates the idea that investors demand a premium for securities with longer maturities, which entail greater risk, because

they would prefer to hold cash, which entails less risk. The more liquid an investment, the easier it is to sell quickly for its full value (Maxwell & Agness, 2016). The analogy of Keynes theory in imperative on the assets and liabilities functions of a commercial bank. The theory explains why banks will undertake to compensate for liabilities and also provides essence of why banks will seek compensation for their assets. This compensation describes the interest rate factor which is a risk factor affecting credit risk in commercial banks. Therefore, banks will charge higher interest rates where possibility of default is higher hence liquidity preference theory (Isaac, 2013).

2.1.5 Credit Risk Theory

Carol (2013) cited as Cantor and Frank (2000) conceives that credit risk theory is the first readily available portfolio model for evaluating credit risk. The credit risk approach enables a company to consolidate credit risk across its entire organization, and provides a statement of value-at-risk (VaR) due to credit caused by upgrades, downgrades, and defaults. Credit risk model is useful to all firms that are exposed to credit risk in the course of their business.

According to this theory, a firm should develop a methodology to quantify credit risk across a broad range of instruments, including traditional loans, commitments and letters of credit; fixed income instruments; commercial contracts such as trade credits and receivables; and market driven instruments such as swaps, forwards and other derivatives (Caroline, 2013 cited Padilla and Pagano 2000). Carol (2013) explains that credit risk statistical concepts like probability, means, and standard deviation, correlation, and concentrations were developed with three which include to develop a Value at Risk (VAR) framework applicable to all the institutions worldwide that carry the credit risks in the course of their businesses, develop a portfolio view showing the credit event correlation which can identify the costs of concentrations and the benefits of diversification in a mark to market framework and to apply it in making investment decisions and risk mitigating actions that is determining the risk based credit limits across the portfolio, and rational risk based

capital allocations.

2.2 Credit Risk Management Process

The process of management of credit risk in banking business tracks on the risk identification, measurement, assessment, monitoring and control. It involves identification of possible risk factors, evaluate their consequences, and monitor activities exposed to the identified risk factors and institute control measures to prevent or reduce the unwanted effects. Problem loans were at the end of the credit channel. Before a loan becomes bad, it needs to be granted. Moreover, as we referred to so far, the poor quality of a loan was sometimes due to factors not attributable to the lending bank such as adverse selection and moral hazard (Stiglitz and Weiss, 1981) or any other external shock that may alter the borrower's ability to repay the loan (Minsky, 1982 & 1985). Nevertheless, there were cases where the way banks grant and monitor credits can be responsible for the bad loan portfolio. In other terms, weak credit risk management systems could also be sources of problem loans (Nishimura et al, 2001).For these last reasons, it was essential to overview the credit risk management process of banks in order to capture the framework of the bad loans management. Significant details related to the credit management processes were revealed here. Banks credit management processes can be summarized in three main stages. These stages were: credit initiation, documentation and disbursement and credit administration.

Credit Initiation

According to Edwared (2004) the credit initiation was a process that starts from a market analysis and ends at the credit application approval. The steps involved in credit initiation processes are listed below:

Surveys and industry studies: Loan officers/ Customer relationship officers/branch managers scan the market and economic sectors to identify key players and potential business for the Bank. In the same vein, industries with high potential of growth that could be good business for the Bank are also listed with their expected

risks.

Prospect lists: some prospects (companies and individual customers) identified as the main role players were short listed in accordance with the industry studies and the minimum risk criteria. This prospect list was ranked in order of preference.
Customer solicitation: at that stage, although the primary source of target was the prospect list, the initiation of a credit comes either at the bank request in the frequent contact with existing customers or at the clients request if they have a need for financing.

Negotiation: the Loan officer /relationship officer / branch manager scan identifies the financing needs of the borrower and gathers background information such as the latest financial statements, project details, projections over the loan life. This information will allow the officer to check whether the risk is bearable by the bank and its compliance with the bank's targets.

Presentation: the conformity of information given with the market and industry analysis is the reliability of the information once again verified by consulting other sources.

Credit committee approval: a copy of that annex and loan approval form (LAF) was submitted to each member of the credit committee. The members review and approve or decide on the request.

Advice to customers: once the credit was approved, the customer was advised in writing with details concerning the terms and conditions and with the statement that the credit could be subject to review, modification or cancellation at the bank option or in line with the decision.

Documentation and Disbursement

The documentation and disbursement refers to the compliance of documents provided with the law applicable and the requirements of the bank's legal department. Documentation provided must satisfy the bank's legal department and

afford maximum protection to the bank. The documentation was periodically reviewed to keep them in fine with ever-changing legal systems and practices (Edwared, 2004).

The legal department was consulted before making any compromises with the customer. Any amendments were done in consultancy with the legal department. Once the credit application satisfies all these conditions, a thorough analysis was done and if the application complies with the bank's conditions, instruction was given to the credit administration for disbursement.

Credit Administration

The credit administration refers to the credit support, control systems and other practices necessary for the effective monitoring of credit risks taken by the bank. Some of the important points of the credit administration were: control of credit files, safekeeping of credit and documentation files, follow-ups for expirations of essential documents like insurance, control of credits and excesses over approved lines, monitoring of collateral inspections, site visits and customer calls, monitoring of repayments under term credits Edwared (2004). Reporting: the portfolio is periodically reviewed to make sure that the names tiered were still complying with the risk acceptance criteria.

2.3 Review of Empirical Studies

There are many studies that have been conducted so far in credit risk management of commercial banks. Their results have shown that, credit risk of commercial banks are associated with internal or external or both factors. Hence, the following section presents the empirical evidence on the credit risk management of commercial banks.

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

is of crucial importance that banks practice prudent credit risk management and safeguarding the assets of the banks and protect the investors, interests.

Richard et al. (2008) conduct research on the credit risk management system of Tanzanian commercial banks and found that checklist with the help of 5c (character, capacity, condition ,credit history, and collaterals) was used to assess borrower's creditworthiness. Researcher also found that the quantitative credit scoring model was not used as a result of poor record keeping and lack of effective data base system in different sectors with in the country. Researcher further noted the difficulty of using modern credit risk management model due to lack of information and other financial infrastructure in under developed country.

NBE conducted the first survey on risk management practices of Ethiopian commercial banks by taking sample of nine members of bank's board of directors (National Bank of Ethiopia, 2009). It was specially aimed to identify the status of risk management practice of commercial bank and to improve its strength further through providing fruitful recommendation on weakness. Inadequate risk management training, inefficient allocation of risk management budget, lack of up to date and relevant economic and business data for decision making, lack of documented risk management strategy and program, lack of reviewing risk management document regularly, and poor internal communication and lack of comprehensive risk limits system were identified as weakness of risk management system and practice of some Ethiopian commercial banks.

Sudhir et al. (2010) Credit risk management “. The purpose of this document is to provide directional guidelines to the banking sector that will improve the risk management culture, establish minimum standards for segregation of duties and responsibilities, and assist in the ongoing improvement of the banking sector in Bangladesh. Credit risk management is of utmost importance to Banks, and as such, policies and procedures should be endorsed and strictly enforced by the CEO and the board of the Bank.

Girma (2011) point out on his study credit risk management and its impact on performance in Ethiopian commercial banks that the default ratio of any bank in Ethiopia depends on credit risk management quality of the institution.

Tibebu (2011) "Credit risk management and profitability of commercial banks in Ethiopia" emphasized that Banks board of directors are responsible for each and every activities of the bank, so they need to conduct continues training for their employees particularly for credit risk management department managers and employees as well. Policy maker of banks (NBE) need to set policy, and guidelines which force banks to think over their credit policy, risk management policy, and other related things.

Akotey (2012) has examined the credit risk management of selected rural banks in Ghana, and has discovered that credit risk management plays a significant and dynamic role in the business of rural banking. The researcher find out sampled ruler commercial banks have poor credit risk management practices and hence the high levels of the non-performing loans in their loans portfolios. Despite the high levels of the NPLs, their profit levels keep rising as an indication of the transfer of the loan losses to other customers in the form of large interest margins. Therefore the findings indicate a significant positive relationship between non-performing loans and rural banks' profitability informative that, there are higher loan losses but banks still earn profit.

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

Wondimagegnehu, (2012) conducted a study with a purpose of identifying the determinants of non-performing loans the case of Ethiopian banks. The study

covered the period between 2005 up to 2010. The researcher identified deposit loans and total asset variables as affecting NPL of Ethiopian banks. Accordingly, the researcher found that there were no statistically significant relationship between all independent variables and NPL.

Klein (2013) conducted the study on NPLs in Central, Eastern and South- Eastern Europe (CESEE) in the period of 1998–2011 and used both the macroeconomic and bank specific variables. Macroeconomic variables consist of GDP growth, inflation, and unemployment. After applying the research technique it was revealed that ROA and ROE have negative impact on NPLs. While in the business cycle unemployment and increasing inflation rate had positive relation with NPLs.

Muasya (2013) investigated the relationship between credit risk management practices and loans losses a study on commercial banks in Kenya. Descriptive research design was utilized in this study as it aimed to see if there is a relationship between credit risk management practices and loan portfolio losses in commercial banks in Kenya. However, only thirty six (36) of the respondent commercial banks completed the questionnaire. It was concluded that credit risk management practices are common among most of the commercial banks in Kenya and that management of these commercial banks appreciated government legislation relating to credit risk management through the introduction of the credit sharing information Act, and that there is a significant negative relationship between credit risk management practices and loans losses in commercial banks in Kenya.

Solomon (2013) in his paper entitled “Credit risk management techniques and practice of NIB International Bank” has conclude that credit risk management system of commercial Banks should incorporate a check and balance for the extension of credit that integrate separation of credit risk management from credit sanction, credit processing/approval from credit administration and finally establishment of an independent credit audit and risk review function.

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

In addition, Alebachew (2014) in his paper entitled "Assessment of Credit Risk Management Policies and Practices in NIB International Bank" has conclude The Bank has to establish a clearly-established process in place for approving amendment, renewal and re-financing of existing credits and The Bank requires also to established a credit follow up system which control consistency of all credit approvals made as per the Bank's written guidelines and granted by appropriate organ level of the Bank's management.

Ntiamoah et al. (2014) determined the association of CRM strategies and performance of loans in micro-banking organizations in Ghana. It was revealed that CRM and performance of loan were positively associated. Further Thomas and Raphael (2014) determined impacts of credit policies on performance of Zenith Bank Plc in Nigeria. Data was collected using questionnaires. Zenith Bank adopted management of credit activities such as client appraisal hence reducing the rate of loan default.

Atkilti (2015) in his study find out that Credit risk, liquidity risk and operational risk are the three important types of risks the banks mostly facing. The three widely used Risk identification method were identified and ranked as Financial Statement Analysis firstly and followed by audit and physical inspection and then internal communication. The study further confirmed that four aspects of Basel's Credit risk management principles explain a significant level of variation on Credit risk management practice of Ethiopian commercial banks

Thiagarajan (2017) conducted an empirical study to predict the determinants of the credit risk in the commercial banking sector of Belize by using an econometric model. The model by utilizing a panel data from 2006 to 2012 at bank level for

the 5 private sector banks and has shown some unique determinants of the credit risk in the Belizean commercial banking sector. The results showed that the lagged nonperforming assets had a strong and statistically significant positive influence on the current non-performing assets and there is a significant inverse relationship between the current GDP and the credit risk. Lagged Inflation showed a positive and significant influence on the NPL. Generally the study revealed that both macroeconomic and bank specific factors play crucial role in determining the credit risk of the commercial banking sector.

Paulino (2019) studied the effect of credit risk management on the financial performance of commercial banks in Juba city, South Sudan. He concluded that risk monitoring and credit approval are the major factors significantly affecting financial performance of commercial banks.

Deje (2020) investigated the credit risk management practice and financial performance of micro finance institutions in Addis Ababa city. The findings from this study revealed that risk identification, risk assessment and analysis, managing credit risk and client appraisals are factors that affect credit risk management practice of selected micro financial institutions in Addis Ababa city.

Sharma (2021) conducted an assessment on credit risk management and its impact on profitability of Nepalese Commercial banks, and concluded that credit risk management practices of commercial banks show low impact on profitability.

Dereje and Joshi (2022) examined the effect of credit risk management on financial performance of commercial banks in Ethiopia over the period 2008-2020. The findings of this study showed that, capital adequacy, loan to deposit ratio and loan provision ratio have positive and statistically significant effect on profitability of selected commercial banks in Ethiopia.

2.4 Knowledge Gaps

The literature review that are discussed so far showed that, banks credit risk are determined by macroeconomic and industry specific factors. The most of the studies shows that, favorable macroeconomic conditions are tending to be associated with a better quality of bank loans. Most of The studies in general show that the association between real GDP growth, inflation, real interest rate, unemployment rate, financial sector development, and competition. On the other hand, bank specific factors like, bank size, financial performance, operational efficiency, rapid loan growth, ownership type, income diversification, risk assessment, capital adequacy, loan to deposit ratio and monitoring are found to be having significance on the occurrence of credit risk of banks. But most of the studies are failed to assess bank specific determinant of credit risk such as credit portfolios diversification, credit guarantee, credit follow up, credit collection strategies and non- performing loans

However, Most of the literatures are focused on studies that were conducted in counties far away from Ethiopia both in financially and economic structure and developed in their economies, (such as Spanish, Greek, Italian, Indian, Chinese, Malaysian, and Indonesia).Consequently, the Banking sectors in most developing economies like Ethiopia still received inadequate attention in the literature.

In addition, credit risk of different countries may not necessarily share identical factors. Apart from the data originated from, those literatures by themselves provided different conclusions because of different models and methodologies they used. Besides most of the studies conducted in abroad and also to in our country are based on empirical data and secondary source of data. Therefore, it is difficult to generalize the findings in the context of Ethiopia.

In the context of Ethiopia, the related study conducted by Wondimagegnehu, (2012) investigated the deposit loans and total asset variables as affecting credit risk of Ethiopian commercial banks by ignorance of all industry and macroeconomic factors such as financial sector development, competition, government regulation

and bank specific factor such as credit guarantee, credit follow up, credit collection strategies and the likes. Hence, the purpose of this study is to assess the credit risk management practice of United Bank, Southwest district by utilizing descriptive statistical tools with the help of SPSS Software.

2.5 Conceptual Framework

Based on a general overview of the relevant literatures, especially the work of Gedefaw (2019), the researcher developed the following conceptual framework, which standardizes this case study:

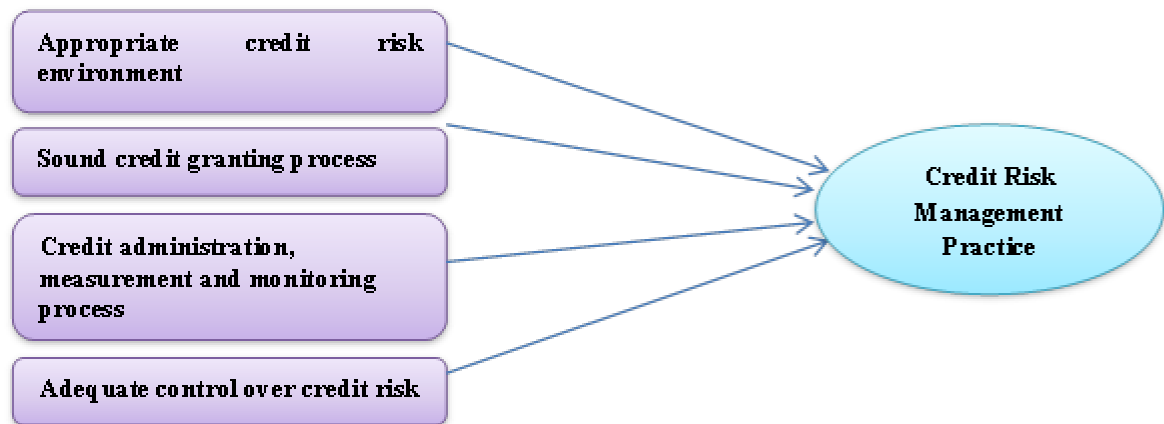

Figure 1 Conceptual framework for the study (Source: adopted from Basel, 2000).

Establishing an Appropriate Credit Risk Environment

Principle 1: The board of directors should have responsibility for approving and periodically (at least annually) reviewing the credit risk strategy and significant credit risk policies of the bank. The strategy should reflect the bank's tolerance for risk and the level of profitability the bank expects to achieve for incurring various credit risks (Basel, 2000).

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

policies and procedures should address credit risk in all of the bank's activities and at both the individual credit and portfolio levels (Basel, 2000).

Principle 3: Banks should identify and manage credit risk inherent in all products and activities. Banks should ensure that the risks of products and activities new to them are subject to adequate risk management procedures and controls before being introduced or undertaken, and approved in advance by the board of directors or its appropriate committee (Basel, 2000).

Operating under a sound Credit granting process

Principle 4: Banks must operate within sound, well-defined credit-granting criteria. These criteria should include a clear indication of the bank's target market and a thorough understanding of the borrower or counterparty, as well as the purpose and structure of the credit, and its source of repayment (Basel, 2000).

Principle 5: Banks should establish overall credit limits at the level of individual borrowers and counterparties, and groups of connected counterparties that aggregate in a comparable and meaningful manner different types of exposures, both in the banking and trading book and on and off the balance sheet (Basel, 2000).

Principle 6: Banks should have a clearly-established process in place for approving new credits as well as the amendment, renewal and re-financing of existing credits (Basel, 2000).

Principle 7: All extensions of credit must be made on an arm's-length basis. In particular, credits to related companies and individuals must be authorized on an exception basis, monitored with particular care and other appropriate steps taken to control or mitigate the risks of non-arm's length lending (Basel, 2000).

Maintaining an Appropriate Credit Administration, Measurement and monitoring process

Principle 8: Banks should have in place a system for the ongoing administration of their various credit risk-bearing portfolios (Basel, 2000).

Principle 9: Banks must have in place a system for monitoring the condition of individual credits, including determining the adequacy of provisions and reserves (Basel, 2000).

Principle 10**:** Banks are encouraged to develop and utilize an internal risk rating system in managing credit risk. The rating system should be consistent with the nature, size and complexity of a bank's activities (Basel, 2000).

Principle 11: Banks must have information systems and analytical techniques that enable management to measure the credit risk inherent in all on- and off-balance sheet activities. The management information system should provide adequate information on the composition of the credit portfolio, including identification of any concentrations of risk (Basel, 2000).

Principle 12: Banks must have in place a system for monitoring the overall composition and quality of the credit portfolio (Basel, 2000).

Principle 13: Banks should take into consideration potential future changes in economic conditions when assessing individual credits and their credit portfolios, and should assess their credit risk exposures under stressful conditions (Basel, 2000).

Ensuring Adequate Controls over Credit Risk

Principle 14: Banks must establish a system of independent, ongoing assessment of the bank's credit risk management processes and the results of such reviews should be communicated directly to the board of directors and senior management (Basel, 2000).

Principle 15: Banks must ensure that the credit-granting function is being properly managed and that credit exposures are within levels consistent with prudential standards and internal limits. Banks should establish and enforce internal controls and other practices to ensure that exceptions to policies, procedures and limits are reported in a timely manner to the appropriate level of management for action (Basel, 2000).

Principle 16: Banks must have a system in place for early remedial action on deteriorating credits, managing problem credits and similar workout situations (Basel, 2000).

Principle 17: Supervisors should require that banks have an effective system in place to identify measure, monitor and control credit risk as part of an overall approach to risk management. Supervisors should conduct an independent evaluation of a bank's strategies, policies, procedures and practices related to the granting of credit and the ongoing management of the portfolio. Supervisors should consider setting prudential limits to restrict bank exposures to single borrowers or groups of connected counterparties (Basel, 2000). Researcher tried to define credit risk management practice as the process of reviewing and updating credit risk management documents and apply consistently in actual credit granting process, credit administration and monitoring and risk controlling process with appropriate credit risk environment, understanding and identification of risk so as to minimize the adverse effect of risk taking activities.

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

This chapter describes the research methodology adopted to serve the objectives of the study, and also deals about the research design, sampling and sampling techniques, data collection procedures and the method of data analysis. The methodology that was used to meet the requirement of data and analysis has been discussed in this chapter.

3.1 Research Design

To achieve the objectives of the study, the research used both descriptive and explanatory research designs. The main objective of the descriptive research design was to analyze the existing credit risk management practices of United bank, while the explanatory research design helps to see the relationships between the dependent and independent variables.

3.2 Research Approach

Broadly speaking, there are three main domains of research approaches frequently observed in the literature and these include qualitative, quantitative and mixed research approaches (Adams, 2007). In this study, the researcher used mixed approach (i. e. both qualitative and quantitative approaches). The overall goal of mixed research approach, of combining qualitative and quantitative research components, is to expand and strengthen a study's conclusions and, therefore, contribute to the published literature by generating knowledge and testing hypothesis with data collected during the study (Johnson and Christensen, 2017).

3.3 Type and Source of Data

According to Catherine (2007), data may be collected as either primary or secondary. In this study both primary and secondary sources of data were collected from the sources. The study used data on different variables that includes data on socio-economic background of the respondents, and variables of credit risk management practices. In this study, primary data were collected using standard self-administered and close ended

questionnaire. The primary sources of data for this study were professionals working in the banks such as district and branch managers, and officers working as credit manager, credit director, credit analyst, credit follow up, risk and compliance managers and risk experts were the major respondents. To get accurate information questionnaires were distributed and collected from the target group by the researcher himself.

Secondary data were also used for supporting the study and to get the findings of other researchers in the topic. Sources of secondary data included financial statements, annual reports, NBE directives, and bulletins of the banks.

3.4 Target Population

The target population is "the entire aggregation of items that meet the designated set of criteria" (Hair et al., 2010). Thus, the target population in this study constituted all branches of United bank in southwest district having financial statements for consecutive five years (2017-2021). As of December 2021 (United bank southwest district report, 2022), United bank southwest district has 33 branches, out of them only five branches (i. e., Jimma, Metu, Agaro, Mizan-Teferi and Gambella) and the district office met this inclusion criteria, and hence considered as target population for the study. The population size was determined based on the number of managers and professionals working on credit and credit related operations in the five selected branches, as well as in the credit and loan department at the district office. The idea behind was to concentrate on people who are directly involved in credit processing and administering because they would better assist with the relevant research data. Consequently, the targeted population for the study included 6 branch managers (i.e., one from each branch), 6 assistant branch managers, 63 officers from the five branches of Southwest district and 15 district office staff from three departments such as credit appraisal, credit customer relation and risk departments. This has instigated the need to determine 90 staff as a target population.

Considering the number of targeted population which is only 90 and to increase the accuracy of the results compared to previous studies on the same topic, population censes method or the whole population was considered for this study. According to Cooper and

Schindler (2006) a census is feasible when the target population is small and the institutions are easily accessible.

3.5 Methods of Data Collection

The primary data were collected using survey questionnaire. The researcher distributed a close-ended questionnaire to sample respondents as the measuring instrument. The standard questionnaire was developed based on the Basel's credit risk management principles/activities of 1999 and NBE's credit risk management guideline of 2009. It contains 41 closed ended questions with five Likert-type scaling method in a range of responses: 'Strongly Disagree', 'Disagree', 'Neutral', 'Agree', and 'Strongly Agree', with a numeric value of 1-5, respectively. This particular scaling method is widely used to assess the responses and measure the responses quantifiably.

In addition to this, the study interviewed managers/department heads at the district office to obtain responses on open ended questions. The interview questions were be prepared to obtain additional information about the practice of credit risk management at the bank.

3.6 Variable Definition and Model Specification

3.6.1 Variables of the Study

For this study, the researcher identified the following independent and dependent variables.

Independent Variables

Credit risk environment: establishing strategies that should reflect the bank's tolerance for risk and the level of profitability the bank expects to achieve for incurring various credit risks (Basel, 2000).

Credit granting process: establishing overall credit limits at the level of individual borrowers and counterparties, and groups of connected counterparties that aggregate in a comparable and meaningful manner (Basel, 2000).

Credit administration: it is a management information system that should provide adequate information on the composition of the credit portfolio, including identification of any concentrations of risk (Basel, 2000).

Controls over credit Risk: it is putting a system in place for early remedial action on deteriorating credits, managing problem credits and similar workout situations (Basel, 2000).

Dependent Variable

Credit risk management: it is the practice of mitigating losses by understanding the adequacy of the bank's capital and loan loss reserves at any given time (Basel, 2000).

3.6.2 Model Specification

For the purpose of investigating the cause-effect relationships, the researcher used a multiple regression analysis. Multiple regression analysis is a statistical technique used to test the influence of two or more independent variables on a dependent variable (Wooldridge, 2015); hence this particular type of regression was used for predicting the values of the dependent variable (i.e., effective credit risk management) given the set of the independent variables (i.e., determinants of credit risk management practices).

Therefore, the model which incorporates all of the variables to test the hypotheses of the study is specified as follows (Bender and Grouven, 1997)

$$\mathbf{Y_i = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e_i}$$

Where,

Y is the dependent variable (Credit risk management)
α is the constant (Y intercepts)
β is the coefficient corresponding to each of the independent variables (i.e., X_1 to X_4)
X_1: Credit risk environment, X_2: Credit granting process, X_3: Credit administration, measurement and monitoring process, and X_4: Control over credit risk.
e = error term

3.7 Methods of Data Analysis

The data obtained through questionnaire were first edited for their completeness, categorized, registered. The collected data were analyzed by using descriptive statistics. In this study descriptive analysis was chosen because of its simplicity and clarity to draw inferences. Averages, percentages, frequencies and tables were used for presentation of the results, which will assist to measure the bank‘s performance as well as judge the effectiveness of its credit risk management process. For the purpose of investigating the cause and effect relationship, the researcher used a multiple regression analysis as briefly described above. All the statistical analyses were carried out using the SPSS computer program (Statistical Package for Social Sciences version 21).

3.8 Reliability and Validity of Data

Validity according to Adams et al. (2007) refers to the strength of our conclusions, inferences or propositions. It involves the degree to which you are measuring what you are supposed to, more simply, the accuracy of your measurement. To raise the validity of the research, questionnaires were distributed and collected by the researcher himself in order to maintain its validity.

Reliability estimates the consistency of the measurement or more simply, the degree to which an instrument measures the same way each time it is used under the same conditions with the same subjects. Reliability is essentially about consistency. To make sure that the data collection methods were error free, and to minimize the instruments' biases the researcher undertook the following:

The researcher employed Cronbach's alpha test ensure the consistency of the questionnaire. Yfield (2009) suggested that Cronbach's α value of 0 .7 to 0.8 is acceptable and ensure the reliability of items while Pallant (2007) suggested that Cronbach's α value of above 0.8 is preferably to be considered reliable.

3.9 Ethical Consideration

The researcher obtained the consent of the selected branches for the study. Respondents were informed about the purpose of data collection, analysis and the covenant to maintain privacy of their responses.

CHAPTER FOUR

4. RESULTS AND DISCUSSIONS

This chapter presents and discusses the major findings of the study. The first part describes the reliability and validity of the data, and the respondents' demographic profile. The second part deals with the current state of credit risk management practices, and their effect on the effectiveness of credit risk management in United bank, southwest district. The last part presents the major challenges and opportunities of credit risk management policies and practices in the bank. In this study, a total of 90 questionnaires were distributed to employees of the selected branches, and 86 (96%) questionnaires were returned. Therefore the analysis was done based on the data obtained from 86 respondents.

4.1 Data Reliability and Validity

Reliability estimates the consistency of the measurement or more simply, the degree to which an instrument measures the same way each time it is used under the same conditions with the same subjects. The most common technique used in literatures to assess the scale‘s reliability and stability is the use of the Cronbach Alpha Statistics (Sekaran, 2003). In this particular study, reliability of the independent and dependent variables was assessed using Cronbach‘s Alpha Statistics. According to Sakaran (2005) if Cronbach's Alpha is ≥ 0.70, it would be considered as reliable scale but any scale with Cronbach‘s Alpha less than this standard was eliminated and considered as unreliable.

In this study each of the 41 items was included in the above reliability statistics; these were the items included in the questionnaire from 1 to 41. The list of items included in the reliability statistics test are listed in the questionnaire table found in the appendix section.

As shown below in Table 1, the summary of Cronbach's Alpha coefficient value for the independent variables ranged from 0.78 to 0.96 which means that Cronbach's Alpha coefficient value is acceptable and reliable.

Table 1 Summary of reliability test results

Independent Variables	No. of items	Cronbach's Alpha
Credit risk environment	8	.83
Credit granting process	8	.84
Credit administration, measurement & monitoring process	8	.96
Control over credit risk	8	0.81
Dependent Variable		
Credit risk management	9	0.71
Overall	**41**	**0.83**

Validity according to Adams et al. (2007) refers to the strength of our conclusions, inferences or propositions. It involves the degree to which you are measuring what you are supposed to, more simply, the accuracy of your measurement. Validity of research tool has three components, such as construct validity, content validity and internal validity. Of all three types of validity, this study tested construct validity which deals with the consistency of the questions with the responses intended. This validity was assured by structuring the questionnaire according to the specific objectives. The critical requirement to achieve validity is to measure the constructed data to ensure free from measurement error (Mat Roni, 2014). Therefore, the constructed data in the questionnaire were valid that proved by the reliability test result, which was not significant (less than .3) measurement error. In addition, to raise the validity of the research, questionnaires were distributed and collected by the researcher himself in order to maintain its validity

4.2 Respondents' Demographic Characteristics

The demographic nature of the employee has a great contribution in the credit risk management systems as well as in understanding the credit management strategies, policies and procedures. Thus, in the following section, the demographic characteristics of respondents like gender, age, marital status, and educational level were assessed. To get information on these issues the respondents were asked questions regarding their demographic characteristics' and their responses are presented as follows.

As shown below (Table 2), 55.8% of the respondents are male and 44.2% are female. This could be due to the fact that the opportunity provided to work as loan officers was almost proportionally to both male and female employees.

Table 2 Respondents' background information

Variables	Variable categories	Number	Percentage (%)
Gender	Male	48	55.80
	Female	38	44.20
	Total	**86**	**100**
Age	20 - 25	5	5.81
	26 - 35	45	52.33
	36 – 45	19	22.09
	> 45	17	19.77
	Total	**86**	**100**
Marital status	Married	46	53.48
	Single	38	44.18
	Divorced	2	2.32
	Total	**86**	**100**
Educational level	Graduate	31	36.04
	Postgraduate	36	41.86
	Diploma	19	22.09
	Total	**86**	**100**

Source: Primary Data, 2022

The results in Table 2 also indicated that 5.81% of the respondents are in the age group between 20 to 25 years, 52.33% of the of the respondent indicated they are in the age group between 26 to 35 years, 22.09% were in the range of age between 36 to 45 and the remaining 19.77% were above 45 years age. This implies that the majorities of the

employees are in productive age, and hence expected to make their organization efficient and effective in the credit management process.

The findings presented in Table 2, further indicated that majority (53.48%) of the respondents are married, 44.18% are single and only 2.32% were divorced. Given the fact that the banking industry is highly exposed to credit risk and employees working in the sector should be socially responsible to enable them exert maximum professional experience for improving the bank's credit risk management practice, which leads to minimize credit risks. Therefore, the implications of the findings are in support of this argument, as large numbers of the employees working in credit processing area were found to be married.

Education is an important factor to be considered with respect to making business decision. As shown in the above table (Table 2), 41.86% of the respondents indicated their highest level of education as Master's Degree, and 36.04% indicated their highest level as Bachelor's Degree. This result shows that the vast majority of the employees who are currently working in the credit risk management department of the banks have Bachelor's Degree or above. This suggests that the respondents are academically well prepared to understand and respond to the questionnaire items as well as could make a great contribution for effective and efficient credit risk management practices of the banks.

4.3 Presentation and Discussion of the Findings of the Study

This study assessed the existing credit policies and guidelines, client appraisal and credit granting process, credit measurement and monitoring practices and the methods employed to control and mitigate credit risk at United Bank. As briefly described in the research methodology section, this study used the five Likert scale to measure the respondents' perception towards credit risk management practices in the bank. The data collected were analyzed by using descriptive statistics such as mean and standard deviation. The mean values from the Likert scale measures were evaluated according to the neutral (average) value which is 3. As a result, a value above 3 shows high, and a

value less than 3 shows below average. In addition to the descriptive statistics, results obtained from ordinal logistic regression analysis are incorporated to elaborate the effects of the determinants of credit risk management on the effectiveness of credit risk management practice of the bank. Finally, interview responses to questions are presented and analyzed briefly to get more information about credit risk management practices of the bank,

4.3.1 Assessing the current state of credit risk management in the bank

4.3.1.1 Establishing appropriate credit risk environment

Establishing appropriate credit risk environment is preliminary activities of credit risk management process (Basel, 1999). According to NBE risk management guideline (2010), eight items were included in the questionnaire to address the issue of establishing appropriate credit risk environment. As shown in Table 3, the mean values of the eight questions range from 3.61 to 4.08 which represent 'somewhat' positive response on measurement scale. The lowest mean value was 3.61 for the question under item 8 and followed by mean value of 3.83 for the question under item 7 which was also less than the grand mean value of 3.9. This clearly points out that both creating common understanding on risk management documents and identification of credit risk need adequate attention by the bank.

Understanding credit risk policy and procedures as well as identifying risks are the basis for credit risk management process. Lack of common understanding on credit risk policies and procedures may cause varying interpretation and application of credit policy and procedures across the banks, which eventually lead to lack of common code of conducting credit risk management activities among staff.

Table 3 Respondents view on establishing appropriate credit risk environment by the bank

Items	N	Mean	Std. Deviation
Bank's Credit risk strategies, policies and procedures are regularly reviewed and updated by the board of directors	86	4.08	0.60
Senior managements are responsible for implementing credit risk strategy approved by the board and for developing credit policies and procedures	86	3.94	0.53
Boards of Directors and Senior Managers closely monitor the major Credit Risk exposure of the Bank	86	3.97	0.51
Credit Risk management strategy, Policies and Procedures are consistently applied in all Credit product and activities of the bank.	86	4.00	0.68
The banks' staffs take the necessary precaution against default risk	86	3.94	0.63
Authority and Responsibility of Risk Management are clearly set out and understood throughout the bank.	86	3.83	0.61
There is proper identification of Credit Risk inherent in all products and activities of our Bank	86	3.83	0.65
There is common understanding about Credit Risk Management Strategy, Policy and Procedures across the Bank.	86	3.61	0.73
Overall mean value	86	**3.90**	**0.62**

Source: Primary Data, 2022

Overall, the grand mean value of 3.90 represents 'somewhat' positive response on measurement scale. Hence, the majority of the participants provided positive response on the establishment of appropriate credit risk environment in United bank, Southwest district

4.3.1.2 Operating under a sound credit granting process

Operating under a sound credit granting process is the heart for an effective credit risk management process under which viable and creditworthy client can be identified. As shown in Table 4 the mean values of eight questions range from 3.72 to 4.22. The lowest

mean value was 3.72 for the question under item 8 and followed by mean value of 3.92 for the questions under item 7, 6 and 5 representing somewhat positive level of response on measurement scale. This shows that the banks should further improve their credit granting process for approving new credit as well as amending, renewing and re-financing existing credit, credit limit system, and level of credit diversification. Lending business without gathering the necessary information is just like putting money in fire

Table 4 Respondent's view on credit granting process of the bank

Items	N	Mean	Std. Deviation
It is too risky to invest our bank's funds in one specific sector of the economy.	86	4.22	0.64
Adequacy, marketability and enforceability of collateral requirement is properly evaluated and measured by professional personnel or expertise.	86	4.00	0.53
The Bank conducts comprehensive credit worthiness analysis before granting loan	86	3.94	0.53
The Bank uses well defined credit-granting	86	4.00	0.63
The bank critically follows sound credit granting process for approving new credits as well as amending, renewing and refinancing existing credits	86	3.92	0.55
The bank has established comprehensive Credit limit for the main categories of risk factors in all types of credit facilities.	86	3.92	0.60
The Bank optimally diversifies its credit exposure to different economic sectors and geographical area.	86	3.72	0.74
The Bank undertakes Credit granting process based on a reliable and substantial amount of date related to macro-economic and borrower specific factors.	86	3.72	0.78
Overall mean value	**86**	**3.93**	**0.62**

Source: Primary Data, 2022

On the other hand, the mean value of the first question was 4.22 which represent strong level of positive response on measurement of scale and relatively indicates that bank's risk management staffs have better awareness and positive perception on portfolio diversification. The grand mean value was 3.93 which also indicate a strong positive

response on measurement scale. Overall, these results point out those branches of United bank in southwest district are operating under moderate credit granting process.

4.3.1.3 Maintaining an appropriate credit administration, measurement and monitoring process

Proper administration of credit documentation as well as monitoring the status of borrowers, loan term and conditions and collateral coverage are key steps in credit risk management process.

Table 5 Respondent's view on Maintaining an appropriate credit administration, measurement and monitoring process in the bank

Items	N	Mean	Std. Deviation
The bank strictly monitors loan terms and conditions that have been stipulated at the time of loan approval.	86	3.97	0.45
The bank regularly reviews and monitors the performance of Credit quality at individual and portfolio level.	86	3.81	0.40
There is a complete, neatly organized and regularly updated credit file in our bank.	86	3.86	0.54
The bank has developed its own internal risk rating system and applying in credit risk management process effectively.	86	3.89	0.46
There is effective Credit monitoring system and procedures.	86	3.92	0.44
The bank quantify its credit risk at individual and portfolio level	86	3.81	0.62
There is effective system and practice of reporting and Communicating risk data/ information among relevant staffs of our bank.	86	3.78	0.64
The bank's Credit risk management system and practice has been integrated with appropriate Management Information Systems.	86	3.58	0.60
Overall mean value	**86**	**3.83**	**0.52**

Source: Primary Data, 2022

In addition, regular keeping of credit files and repayments are the basic post credit approval activities of credit risk management process that help to discover mistake at early stage, while management information system and internal risk rating are the main ingredients for monitoring, reporting and controlling credit risks.

As shown above in Table 5, the first, fifth, fourth and third statements with the high mean value of 3.97, 3.92, 3.89 and 3.86, which were also greater than grand mean value of 3.83, represent positive response on measurement of scale. This implies that half of the respondents confirmed that the banks are monitoring loan term and conditions strictly; monitoring credit quality; updating credit file and applying internal risk rating system properly.

The lowest mean score was 3.58 for question number 8 and followed by a mean value of 3.78 and 3.81 for question number 7, 6 and 2, which were also less than grand mean value of 3.83, represent somewhat positive level of response on measurement scale. Hence, establishing effective management information system, communication and reporting risk related data, reviewing and quantifying credit risk both at individual and portfolio level were found to be some of the issues that require great attention by the top management and regulatory bodies respectively. Overall, the grand mean value of the eight statements was 3.83, which suggests that the banks have maintained appropriate credit administration, measurement and monitoring process in accordance with the guideline of the National Bank of Ethiopia (NBE)

4.3.1.4 Adequate control over credit risk

In this study, eight items were included in the questionnaire to address the issue of ensuring adequate control over credit risk. Table 6 shows descending orders of the eight items in terms of their mean values. Mean value of the eight questions range from 3.78 to 4.11. The lowest mean score is 3.78 for question number 6 and 4, followed by mean value of 3.86, 3.83 and 3.81 for question number 5, 8 and 7, respectively. This indicates that early identification of default sign; conducting independent credit quality review and monitoring risk profile are some issues that need adequate attention by the top level managements.

Table 6 Respondent's view on adequate control over credit risk in the bank

Items	N	Mean	Std. Deviation
The bank has appropriate policy, procedures and techniques for improving loan repayment and handling troubled loan.	86	4.11	0.57
Credit loss, Loan concentration, large exposure and level of NPL can be reduced if banks' Credit policy, Procedure and Techniques are implemented properly	86	4.00	0.59
The bank's top managements have strong commitment toward controlling default risk	86	4.06	0.58
Appropriate and timely policy measures have been taken for resolving loan recovery problem during the last five years.	86	3.78	0.54
The Bank keeps its Actual risk profile at or below its risk tolerance /appetite.	86	3.86	0.54
There is an appropriate level of Control over Credit Risk the bank faces.	86	3.78	0.76
The Bank carry out regular independent internal Credit quality reviews accurately.	86	3.81	0.75
There is an early identification of Credit default sign with immediate corrective action.	86	3.83	0.97
Overall mean value	**86**	**3.90**	**0.66**

Source: Primary Data, 2022

The mean values of the first, third and second questions were 4.11, 4.06 and 4.00, respectively which represent positive level of response on measurement scale. Generally, the grand mean value of 3.9 represents a positive level of response on measurement scale. This indicates that the participants have positive perception and strong beliefs towards risk management documents and strong commitment of the top management in controlling credit risk and proper implementation of credit policy, procedures and techniques.

4.3.1.5 Credit risk management practice

The effectiveness of credit risk management process is highly dependent on proper application of sound risk management documents, staff quality, credit culture, and adequate training program, and suitable organizational structure, adequate level of

internal control and performance of intermediation functions (Basel, 2000; Colquitt, 2007). The study included nine questions to address credit risk management practice by taking those core aspects into account.

Once the banks develop comprehensive and sound risk management document, it should not be kept always on shelf instead it should be reviewed and updated so as to serve as important guideline in each activities of credit cycle.

Table 7 Respondent's view on effectiveness of credit risk management practice in the bank

Items	N	Mean	Std. Deviation
Establishing and Practicing effective Credit Risk Management system is one of the main objectives of my bank	86	4.06	0.53
Success and failure of any bank is mostly depends on the effectiveness of Credit Risk Management System and Practice.	86	3.94	0.53
The bank has well-documented Credit Risk Management Strategy, Policy and Procedures that guide the staffs in their daily activities of managing credit risks.	86	4.00	0.63
The bank has established Sound Credit Risk Management System in line with NBE's risk management guideline and directives.	86	3.94	0.58
There is suitable Organizational structure that enables me to undertake effective Risk Management System and practice	86	3.92	0.55
This Bank has adequate and qualified risk management staffs and expertise	86	3.89	0.75
There is adequate Deposit mobilization and fund utilization in this bank	86	3.78	0.48
The bank gives adequate and effective Risk Management training for staffs	86	3.69	0.62
Overall, I consider the level of Credit Risk Management system and Practices of the Bank is to be excellent	86	3.75	0.55
Overall mean value	**86**	**3.90**	**0.58**

Source: Primary Data, 2022

The above Table 7 shows mean values of the nine questions included under this topic. Mean value of the nine items range from 3.69 to 4.06. The first, third, second, fourth and fifth statements with the high mean values of 4.06, 4.00, 3.94, 3.94 and 3.92 respectively, represent positive response on measurement of scale. This indicates that there is suitable organizational structure, and credit risk management system/program, as well as created risk awareness in accordance with the directives and guidelines of NBE.

The lowest mean values is 3.69 for question number 8 and followed by mean value 3.75, 3.78 and 3.89 of question number 9, 7 and 6 respectively, which were also less than grand mean value of 3.9, represent somewhat positive response on measurement scale. This implies that proper attention for profile of risk management staffs, efficiency of intermediation process and risk management training should be given. Generally, the grand mean value of 3.9 represents somewhat positive response on measurement scale. Therefore, most of the participants gave somewhat positive response on the level of credit risk management practice in United bank, Southwest District.

4.3.2 Correlation analysis among variables

According to (Brooks, 2008), Correlation between two variables measures the degree of linear association between them. To find the association of the independent variables with the dependent variable Pearson product moment of correlation coefficient was used. Values of the correlation coefficient between two variables are always ranged from positive one to negative one. A correlation coefficient of positive one indicates that a perfect positive association between the two variables; while a correlation coefficient of negative one indicates that a perfect negative association between the two variables. A correlation coefficient of zero, on the other hand, indicates that there is no linear relationship between the two variables. The following table (Table 8) shows the result of correlation analysis to determine the relationship between the dependent (effective credit risk management, ECRM) and independent variables (Credit risk environment (CRE), Credit granting process (CGP), Credit administration, measurement and monitoring process (CAMMP), and Control over credit risk (CCR)).

Table 8 Correlation matrix between the dependent and independent variables

	ECRM	**CRE**	**CGP**	**CAMMP**	**CCR**
ECRM	1.00				
CRE	0.74	1.00			
CGP	0.66	0.77	1.00		
CAMMP	0.66	0.72	0.71	1.00	
CCR	0.62	0.61	0.68	0.69	1.00

Note: All variables are significant at 0.001 probability level.

Correlations coefficients between each pair of independent variables ranges from 0.648 to 0.724 (see Table 8) and all the four explanatory variables had significant positive relationship with each other and with effective credit risk management practice. This implies that, as the as the independent variables increase, the effectiveness of credit risk management moves to the same direction.

4.3.3 Assessing the impact of credit risk management dimensions on effectiveness of credit risk management practice

This section focused on regression analysis undertaken to test the relationship between the determinants of credit risk management and credit risk management practice of United bank. In this study, a multiple linear regression model was selected for analyzing the collected data using the explanatory variables associated with the dependent variable. Accordingly, Credit risk environment (CRE), Credit granting process (CGP), Credit administration, measurement and monitoring process (CAMMP), and Control over credit risk (CCR) were included in the model. Before reaching definitive conclusions from the results of the regression analysis, we sought to check the basic assumptions that must be met for a multiple regression model (i.e., linearity, multi-colinearity, homoscedasticity, normality and goodness of fit) were tested using appropriate test statistics to obtain unbiased and accurate estimates for the parameters.

4.3.3.1 Testing the basic assumptions of multiple linear regression model

The effect of credit risk management variables on the effectiveness of credit risk management of Unite bank was tested using a multiple regression analysis. Before the data were subjected to regression analysis, the classical assumptions of a multiple regression model (i.e., multi-colinearity, homoscedasticity, normality and goodness of fit) were tested using appropriate test statistics to obtain unbiased and accurate estimates for the parameters.

Multicollinearity test

Multicollinearity assumption states that independent variables should not be related to each other. A more precise approach to check whether or not a given explanatory variable has a strong relationship with the other explanatory variables (an issue of multicollinearity exist in the model), Tolerance and VIF (variance inflation factor) is the good indicators. For example, Tolerance less than .1 (10%) hint at multicollinearity, and VIF (variance inflation factor) > 10 also implies multicollinearity. The table below (Table 9) showed that both the tolerance and variance inflation factor (VIF) are greater than 10%, and below 10 respectively. This suggests there is no multi-collinearity problem since the VIF values obtained from the multicollinearity test results are less than 10 for all of the studied variables.

Table 9 Multicollinearity test of independent variables

Variables	Tolerance	VIF
Credit risk environment	.154	6.495
Credit granting process	.142	7.036
Credit administration, measurement and monitoring process	.117	8.531
Control over credit risk	.190	5.275

Homoscedasticity test

Homoscedasticity assumption elaborates that the variance of the residuals about the predicted dependent variables scores should be the same for all predicted scores. Error variance is assumed to be the same across all values of other variable. As it can be seen from graph, the dots which are scattered evenly could be the indication of a homogeneity assumption (Mat Roni, 2014).

It could be checked that residuals do not vary systematically with the predicted values by plotting the residuals against the values predicted by the regression model. In addition, looking for any evidence that residuals vary in a clear pattern. Look at the following figure (Figure 2), the data points appeared fairly randomly distributed with a fairly even spread of residuals at all predicted values.

Figure 2 Homoscedasticity assumptionsof multiple regressions

Normally test

The classical linear regression model assumes that the error term is normally distributed with the mean of error being zero as positive error will offset the negative error. This set of assumption can be examined simply by plotting the expected and actual distribution of p-values (a P-P plot). Alternatively, a histogram of the residuals (errors) in a model can

be used to check that the residuals are normally distributed about the predicted dependent variable scores. It is often good to tell if the distribution is normal from just a histogram,

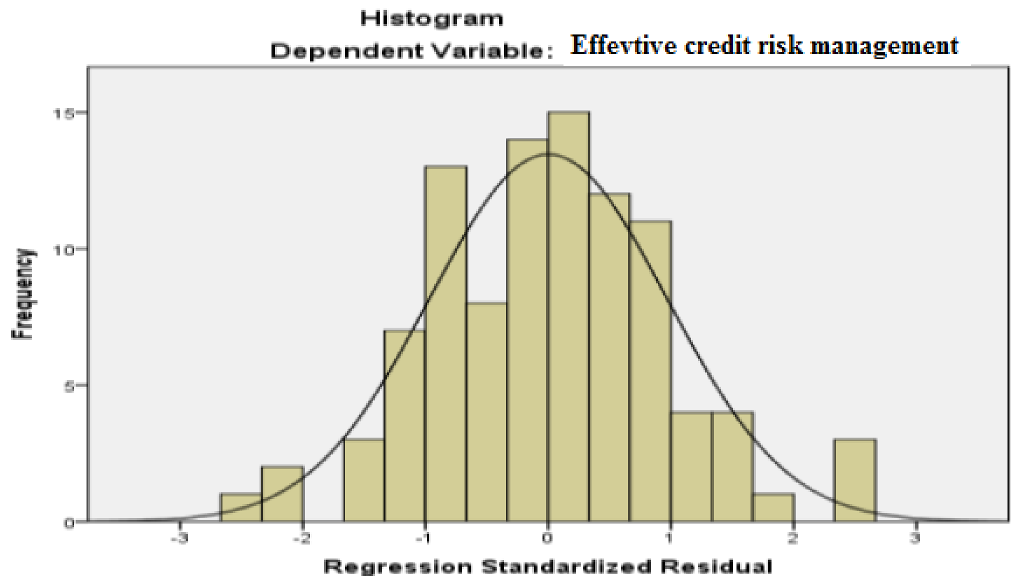

Figure 3 Histogram showing the distribution the regression standardized residuals

As it could have been seen from the above figure (Figure 3) the residuals are seamlessly normally distributed. So in this survey result, the assumption of normality is not violated. Hence, the null hypothesis that is the error term is normally distributed should not be rejected and the error term in all of the cases follows the normal distribution.

Goodness of fit

Table 10 Analysis of Variance (ANOVA) based on the REG Procedure

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	117.197	4	23.439	110.385	.000[b]
	Residual	75.169	81	.212		
	Total	192.367	85			

a. Dependent Variable: Effective credit risk management
b. Predictors: (Constant), Credit risk environment, Credit granting process, Credit administration, measurement and monitoring process, and Control over credit risk

A further test on the goodness of fit of the model was based on F-statistic showing a significant result from the analysis of variance performed on the dataset (Table 10). The last confirmatory test was made by looking at the adjusted R^2 value of the model summary which is 0.786, implying that the fitted model explained nearly 70% of the total variation in the dataset, and is appropriate (Table 11).

Table 11 Model summary results from multiple regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.790[a]	.720	.696	.11629	1.801

3 Predictors: (Constant), Credit risk environment, Credit granting process, Credit administration, measurement and monitoring process, and Control over credit risk
4 Dependent Variable: Effective credit risk management

All together, the model summary indicated that credit risk dimensions (Credit risk environment, Credit granting process, Credit administration, measurement and monitoring process, and Control over credit risk) explained 70% of the variations in effective credit risk management and the remaining 30% of the variations in effective credit risk management was not explained by the factors that are included in the model. Therefore, further studies should include other factors that are not considered in the present study, and investigate their effects on the effectiveness of credit risk management in the United bank of Ethiopia particularly in southwest district. Overall, all the above tests showed that the regression model used was fit for the study and results were then discussed accordingly.

4.3.3.2 Analysis and interpretation of multiple regression model coefficients

This section presents over all the empirical results of the regressions. The study utilized a multiple regression model to estimate the effect of determinants of credit risk management practices on the effectiveness of credit risk management in United bank, southwest district. The regression model was a good fit as shown in the above tests.

When the slope parameters (βs‟) in the model is used in the analysis of ordinal data, the regression coefficients of the explanatory variables in the model is tested against the null hypothesis that states the slope is not significantly different from zero. This means that estimates of this coefficients and corresponding p-value, can be easily found from the fitted model. The interpretation of parameters corresponding to different variables which are found significant in the final model is described in the following section.

Based on the results, the regression coefficient was positive (i.e., intercept = 1.569) and significant ($p < 0.05$; Table 12). Hence, there is a strong evidence to accept the alternative hypothesis, which implies that the four aspects of credit risk management practices have significant effect on the effectiveness of credit risk management of the bank.

Table 12 Multiple regression analysis between determinants of credit risk management and effective credit risk management practice.

Model		**Standardized Coefficients**		**t-value**	***p-value***
		Beta	**Std. Error**		
1	(Constant)	1.569	0.654	2.399	.019
	Credit risk environment (CRE)	3.052	1.498	2.037	0.0463*
	Credit granting process (CGP)	0.525	0.170	3.082	0.0032*
	Credit administration, measurement and monitoring process (CAMMP)	0.054	0.017	3.131	0.0028*
	Control over credit risk (CCR)	0.528	0.161	3.276	0.0018*

Dependent variable: Credit risk management practice

Independent variables: Determinants CRM (Credit risk environment, Credit granting process, Credit administration, measurement and monitoring process, and Control over credit risk)

The above results in Table 12 shows that all the four determinants of credit risk management (i. e., Credit risk environment (CRE), Credit granting process (CGP), Credit administration, measurement and monitoring process (CAMMP), and Control over credit risk (CCR)) are statistically significant factors at 5% and affecting the effectiveness of credit risk management practice of the bank.

At a 5 percent level of significance, establishing appropriate credit risk environment was statistically significant (Table 12). This means the one unit CRE increased in the bank has a 3.05 unit change on bank's effectiveness in credit risk management to the same direction. This study supports Kithinji's (2010) assertion that risk control in commercial banks is centered on credit officers establishing appropriate credit risk environment before lending is approved.

The regression result of this study showed that Credit granting process (CGP) has positive and statistically significant effect on the effectiveness of credit risk management of bank ($\beta = 0.525$, $p < 0.05$; Table 12). Therefore, the researcher accepted H_2. This suggests that banks that adhere to set credit guidelines when granting loans are more likely to enhance their lending performance than banks that do not adhere to set credit guidelines. This is supported by the fact that there are credit-issuing policies and guidelines which must be followed at all times. This study concurs with Mumbi & Omwaga (2017), who found that credit policies had a significant impact on commercial bank financial performance and indicated that rigorous adherence to credit policies would save the commercial banks from non-performing loans and enhance lending performance. As such, strict adherence to adhere to all the lending requirements is a key for commercial banks in mitigating credit risk and enhancing lending.

Credit administration, measurement and monitoring process was also found to be statistically significant. We found that the one unit CAMMP increased in the bank has a 0.054 unit change on bank's effectiveness in credit risk management to the same direction (Table 12). This suggests that banks that consider appropriate Credit administration, measurement and monitoring process are more likely to increase their lending performance than banks that do not consider them. This study corresponds with

Muhamad &Basah (2016), who reported that Credit administration, measurement and monitoring process is the most effective in predicting the effectiveness of credit risk management

The findings of the predictive regression model also indicated that the most significant variable is control over credit risk with beta = 3.052 and p-value of 0.0463 (Table 12) indicating a low probability of default. This implies that banks should establish credit policies and standards that conform to regulatory requirements and the bank's overall objectives to further reduce the level of their credit risk exposure, thus commercial banks should also check their credit policy and practices. This research supports the findings of Richard, Chijoriga, and Kaijage (2010), who found that CRM, in terms of adequate control over credit risk, is a critical success element in credit risk management.

Overall, the study found that all the credit risk management practices had statistically significant effects on the effectiveness of credit risk management of the bank. This suggests that these CRM dimensions must be in the best attention of the organization to take a proactive role in the management of its credit and in establishing a strong position over its competitors and achieving its goals.

4.3.4 Analysis of interview

To obtain more information about credit risk management policies and practices in United bank s.co, interview questions were also forwarded to branch managers and directors of credit and appraisal departments, as well as CRM departments of the Bank. Accordingly the interviewee's responses to the questions are briefly summarized as under.

A. Summary of responses on the challenges administrating credit risk of the Bank

The fundamental goal of risk management is to improve the quality of business decision making at all levels of the firm and thereby to increase shareholder wealth. It achieves this responsibility through activities that elucidate the firm's exposure to all forms of risk to its future earnings and analyses them on a sound economic foundation. In this regard, United bank has faced with challenges diversion of loan funds, over presenting of project

costs by borrowers, lack of standard loan process from the client's initial enquiry to the final lending decision, and poor projects feasibility studies from the customer sides. Bank's clients started new businesses in which they had no experience, undated exchange of client's credit information among Banks, overvalued of collateralized properties and legal issue of transferability of collateral properties in case of defaults are among the major challenges mentioned by the respondents.

B. Summary of interviewed response on credit evaluation process of the Bank

Banks have appropriate credit risk assessment processes and effective internal controls to consistently determine provisions for loan losses in accordance with the bank's stated policies and procedures, and supervisory guidance. In this regard, banks should adopt a sound loan loss methodology, which addresses credit risk assessment policies, procedures and controls for assessing credit risk. In contrast, the results from the respondents showed that the bank's aggregate amount of individual and collectively assessed loan loss provisions is not adequate to absorb the estimated credit losses in the loan portfolio, the bank's current credit policies does not appropriately address validation of any internal credit risk assessment models.

C. Summary of interviewed response for factors that would contribute to intensifying credit risk in the Bank

Based on the response from the interview, the factor identified to have the highest contribution to credit risk is borrowers' company dissolution. The second factor was death of the borrower. The others factors which followed were, poor monitoring and control of loans by bank management and bankruptcy of the debtor. Diversion of funds by the borrower from the intended purpose had the least significant contribution in leading credit risk. The result also found out that the other factors exposing to credit risk were: failure by guarantors, company merger and interbank competition.

D. Summary of interviewed response for Bank's management role to control credit risk of the Bank

Banks should identify and properly manage the associated credit risks as required in the general Principles of Credit Risk Management of the Supervisory Policy Manual of its own. Supervisors should apply the same standards of prudence, credit assessment and approval criteria, and risk control limits as if they were originating the loans. Despite the well-established fact in most literatures, the results of this study have shown that the bank supervisors do not periodically evaluate the effectiveness of the bank's credit risk policies and practices for assessing loan quality. Hence, the bank should periodically assess the methods employed to calculate loan loss provisions and prudent measurement of estimated credit losses in the loan portfolio that are recognized in a timely manner. In addition, the bank supervisors should consider credit risk assessment and valuation policies and practices when assessing a bank's capital adequacy

E. Summary of interviewed response on procedure and measure that should the Bank takes to manage its problem loans

It is obvious that banks should seriously consider all the internal and external factors causing non-performing loans as well as the impact of non-performing loans on the bank's overall performance. In light of this, respondents provided their view on measures that must be taken by the bank so as to reduce problem loans. Management needs to ensure that on loan funds are being used for the intended purpose through enhanced credit monitoring. This can be achieved by adopting a relationship management approach which helps the management body to closely follow-up cash flow lending approach rather than focusing on collateral based lending, a detailed credit analysis and risk grading should also be made before loans are approved. In addition, they suggested that risky business sectors should be identified prior to granting loans so as to have a balanced loan portfolio management.

4.3.5 Proper collection and follow-up of loans

Banks should establish credit policies and standards that conform to regulatory requirements and the bank's overall objectives to further reduce the level of their credit

risk exposure, thus commercial banks should also check their credit policy and practices. Below is the amount of loan given and the amount of NPL over the past three years in each of the five selected branches of United bank, southwest district.

Table 13 Summary of total loan given & total amount of NPL in the year 2020 up to 2022

BRANCHES	YEAR	TOTAL AMOUNT OF LOAN GIVEN	TOTAL AMOUNT OF NPL /YEAR
AGARO	2020	90,786	Normal
	2021	5,906,276	2,317,426.30
	2022	15,707,541.15	Normal
GAMBELA	2020	188,250,661.76	1,729,894.91
	2021	68,947,457.40	66,722.74
	2022	41,402,741.45	Normal
JIMMA	2020	391,658,239.44	1,731,133.01
	2021	156,942,744.52	522,578.99
	2022	208,082,175.62	1,421,296.95
METU	2020	68,873,734.23	2,165,360.87
	2021	25,233,782	2,015,233
	2022	32,779,346	Normal
MIZAN TEFERI	2020	75,398,012.50	1,661,640.80
	2021	34,100,704.07	1,395,121.99
	2022	34,979,213.62	28,583,917.16

Source the banks' annual report (2020-2022)

Non- performing Loans to Total Loan Ratio is one of the most important criteria to assess the quality of loans or asset of any commercial bank. NPTL measures the percentage of gross loans which are doubtful in banks‟ portfolio. The lower the ratio of Non-performing loans to total loan ratio, the better is the performance with this in mind when we look at the NPTL ratio of the bank taken three years from 2020-2022 its shows the bank could not manage to keep the ratio below the threshold set by NBE which is 5% (Table 13), which suggests that the bank should pay more attention to reduce its NPLs through employing standard guidelines of credit risk management.

CHAPTER FIVE

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter provides the summary of major findings, conclusion of the study and recommendations. The other topic included here is suggestions for area of future research.

5.1 Summary of major findings

This study was conducted with the main objective of assessing the credit risk management practice of united bank. This study assessed existing credit policies and guidelines, client appraisal and credit granting process, credit measurement and monitoring practice and the methods employed control and mitigate credit risk at the bank. The study used both descriptive and explanatory research designs for collecting data through questionnaires from the employees at the branch and head offices. To gather the necessary data the study distributed 90 questionnaires to be filled by the sampled employees of the bank. Among the distributed questionnaires 86 were correctly filled and returned.

Based on the findings from the questionnaire results obtained, majority of the employees (74.1%) at credit and risk management department of united bank hold Bachelor's degree or above. Moreover, the information gathered using the questionnaires showed that most of the employees (89.8%) have above 5 years of work experience accumulated.

Descriptive analysis ascertain as there is moderately appropriate Credit risk environment and maintained appropriate Credit administration, Measurement and Monitoring process in Ethiopian commercial banks while it is operating under sound Credit granting process and ensuring adequate control over Credit risk.

Correlation coefficients between all pairs of variables are significantly positive. From the regression analysis result, the regression coefficient was positive (i.e., intercept = 1.56) and significant ($p < 0.05$). Hence, there is a strong evidence to accept the alternative hypothesis, which implies that all the four aspects of NBE and Basel's Credit risk

management principles and guidelines have significant effects on credit risk management practice of United bank, southwest district

5.2 Conclusions

Better credit risk management systems and practices results in better bank performance. Thus, it was very importance that banks practice prudent credit risk management practices and safeguarding the assets of the banks and protect the investor's interests. The following conclusions were drawn:

Majority of employees of the banks working in credit department are well educated and highly experienced which might this enables the bank to accelerate its service delivery and become effective in the growing stiff competitive banking industry in Ethiopia as qualified and experienced work force enhances competence and increase in operating results.

It can be concluded that the bank has appropriate credit risk environment and maintained appropriate credit administration, measurement and monitoring process in Ethiopian commercial banks while it was operating under sound credit granting process and ensuring adequate control over credit risk.

The effectiveness of credit risk management process was highly dependent on proper application of sound risk management documents, staff quality, credit culture, committed top management bodies, adequate training program, suitable organizational structure, loan repayment strategy, policy, and procedures, resolving loan recovery problems, adequate level of internal control and Performance of intermediation function.

The study concluded that the banks used different credit risk management tools, techniques and assessment models to manage their credit risk, and that they all have one main objective, i.e. to reduce the amount of loan default which was the principal cause of bank failures. The study also reveals that banks with good or sound credit risk management policies have lower loan default ratios (bad loans) and higher interest income (profitability)

5.3 Recommendations

Based on the findings and conclusions of the study, the following recommendations were forwarded which were aimed at improving the credit risk management systems and practices of the united bank.

Believing on the importance, attractiveness, and convenience of flexible credit policies and procedures as it assists for loan creation and growth, the bank's top management need to revise its credit policy and procedure incorporating the sayings of the respondents.

The bank's loan processing and approving procedure was conservative for few banks. This was highly retarding the loan growth of the branches in particular and the bank in general. Hence, the bank should follow creative way of loan processing and approving direction that assists to meet the loan demand of potential loan applicants and the required level of loan growth.

Establishing a good relationship with borrowers was found to be the most favorable strategy employed by banks in the effort of reducing non -performing loans. This would be done through assisting borrowers by advising them on how to solve their problems, attend some of borrowers business meetings, deliver good services and provide reasonable charges and also go further and other social events where banks invite their borrowers. These findings suggest that innovation on new ways of dealing with borrowers was necessary for banks to be able to recover their money. Commercial banks should further enhance credit limit system, level of credit diversification and obtaining sufficient and up-to-date data relatively.

Banks need to give attention that profile of risk management staffs, efficiency of intermediation process and risk management training. Early identification of default sign, conducting independent credit quality review and monitoring risk profile are some issues that banks need to give attention.

Banks need to establish effective management information system, communication and reporting risk related data, reviewing and quantifying credit risk both at individual and portfolio level are some issues that require great attention of banks.

Therefore, some of the branches studied need to strengthen their loan management process especially in monitoring their borrowers. Overall, in order to improve the efficiency of the bank, it is better to pay more attention to all aspects of credit risk management principles, with due emphasis to measures that minimize non-performing loans (NPLs). In addition, further research may be conducted to include borrowers in the sample thus enriches the body of knowledge.

5.4 Future Research Directions

The scope of the present study was geographically limited to branch office, Jimma; thus further studies should expand this scope by incorporating several of the branches in the united bank to make generalizations applicable to the country as a whole. The current study also relied primarily on a questionnaire to gather relevant information. This instrument is not bias-free; future studies can use other methods to fully explain the phenomenon under review. For instance, credit risk management can also be assessed by incorporating many variables including bank and industry specific factors to generate a more meaningful results from different perspectives.

REFERENCES

Alebchew F. (2014), Assessment of credit risk management policies and practice of Nib international Bank. S.C., Unpublished Master's Thesis, St Mary's University

Al-Saati, A.-R. (2018). The permissible Gharar (risk) in classical Islamic jurisprudence. Islamic Economics, 16(2), 3-19.

Atakelt H. & P. Veni (2015).Determinants Of Credit Risk In Ethiopian Private Commercial Banks, International Journal Of Accounting And Financial Management Research, Vol.5, Iss.3

Atikogullari, M., (2009).An Analysis Of The Northern Cyprus Banking Sector In The Post 2001 Period Through The CAMELS Approach. International Research Journal of Finance and Economics, 32, Pp. 212 – 229.

Badar Munib and Yasmin Atiya (2017): Impact of Macroeconomic Forces on Non-performing Loans: an Empirical Study of Commercial Banks in Pakistan; Journal of Transactions on Business and Economics: Issue 1, Volume 10.

Baldoni, R. J. (2019), A Best Practices Approach to Risk Management, TMA Journal, 33-56.

Bank for International Settlements, 2005. Sound Credit Risk Assessment and Valuation for Loans, Basel Committee on Banking Supervision, November 2005.

Basel Committee, (2000), Best Practices for Credit Risk Disclosure. Basel Committee On Banking Supervision, September, 2000.

Bhatti, I., & Misman, F. N. (2019).Risks Exposure in Islamic Banks: A Case Study of Bank Islam Malaysia Berhad (BIMB). Paper presented at the Australian Centre for Financial Studies-Finsia Banking and Finance Conference.

Carey, M., & Stulz, R. M. (2005). The risks of financial institutions: National Bureau of Economic Research.

Caroline.W. M. (2013).The Effect of Credit Risk on Corporate Liquidity of Deposit Taking Microfinance Institutions in Kenya

Chuke, N., & Chinedu, O. (2018).Impact of Credit Risk Management on the Performance of Selected Nigerian Banks. International Journal of Economics and Financial Issues, 2018, 8(2), 287-297.

Dr. Sk. Shahida, S., & Dr. CH. Venkata K. (2018). Credit risk management practices in the banking sector in Ethiopia. International Journal of Current Research, Vol. 10, Issue, 04, pp.68164-68174, April, 2018

Gadise Gezu (2014), Determinants of Nonperforming Loans: Empirical Study In Case Of Commercial Banks in Ethiopia

Girma M. (2011). Credit Risk Management and Its Impact on Ethiopian Commercial Banks, Unpublished Master's Thesis, Addis Ababa University.

González- Hermosillo, B. 2009. Determinants of ex-ante banking system distress: A macro empirical exploration of some recent episodes. IMF Working Paper, 33.Retrieved February 04, 2020, from http:// www.IMF.com.study

Hagos, M (2016). Credit management (A Case Study of Wegagen Bank Share Company in Tigray Region

Isaac G. M. (2013). The Determinants of Credit Risk in Commercial Banks in Kenya.Retrieved February 19, 2020, from http:// www.worldbook.com.study.

Karel Janda (2006) Agency Theory Approach to the Contracting between Lender and Borrower, Acta economical Pragensia, roè. 14, è. 3,

Ken Brown,.& Peter Moles,. (2016).Credit Risk Management, Edinburgh Business School: Heriot-Watt University,United Kingdom.

Keith P. (1992). Finance and Financial Markets, Macmillan Business, Retrieved February 19, 2020, from http:// www.worldbook.com.study.

Khan, T., & Ahmed, H. (2001). Risk management: an analysis of issues in Islamic financial industry: Islamic Development Bank, Islamic Research and Training Institute.

Maxwell S. & Agness K. (2016), An Analysis of the Factors Leading to Rising Credit Risk in the Zimbabwe Banking Sector, Economica, Vol 12, No 1

Mehdi Beyhaghi and James P. Hawley (2011), Modern Portfolio theory and risk management: Assumption and unintended consequence.

Million, G. T,. Mohammed, S. J,.& Haymanot, A. W,. (2019). Determinates of Credit Risk in Ethiopian Commercial Banks. Journal of Accounting, Finance and Auditing Studies 5/1 (2019) 196-212

Musay, P. (2013). Credit metrics-Technical Document. Available At: Http://212.59.24.64/Kredito%20rizika/Portfelio%2 0modeliai/Portf4.Pdf.

National Bank of Ethiopia (2009): Annual reports. NBE, Addis Ababa, Ethiopia

National Bank of Ethiopia (2019), Licensing and supervision of banking business Directive No.SBB/29/2002.Retrieved January 25,2020.fromhttp://www.nbe.gov.et/directives/bankingbusiness.

Olokoyo, F. O. Determinants of commercial banks‟ lending behaviour in Nigeria. International Journal of Financial Research. 2016; 2(2):61–72

Prakash , R., & Poudel, S. (2013). Macroeconomic Determinants of Credit Risk in Nepalese Banking Industry. International Business Research Conference (pp. 978-1- 922069-25-2). Toronto, Canada: Ryerson University.

Raghavan, R.S. (2003), Credit Risk Management in Banks. Retrieved January 22, 2020, from http://www.credit risk journal.com

Rahman, S., L.H. Tan, O.L. Hew and Y. S., Tan, (2004), Identifying Financial Distress Indicators Of Selected Banks In Asia, Journal of Asian Economics, 18, Pp. 45 – 57.

Rajan, R. (1995). The Effect of Credit Market Competition on Lending Relationships, The Quarterly Journal of Economics,1(2),1-5

Richard E. et.al (2008): Credit Risk Management System in Commercial Bank of Tanzania.

Saunders, A., and Cornett, M. M., (2006), Financial Institutions Management: A Risk Management Approach. London: McGraw Hill. Scheduled Commercial Banks in India; International Journal of Application or Innovation in Engineering &Management (IJAIEM); ISSN 2319 – 4847

Solomon Gosheme, (2013). Credit Risk Management Technique and Practice of NIB International Bank of Ethiopia, Unpublished Master's Thesis, St. Mary's University.

Solomon G. (2018).Assessment Of Credit Risk Management Practice At NIB International Bank S.C.Unpublished Master's Thesis. St Mary's University.

Sonja B. (2017) Analyzing and Managing Banking Risk. The World Bank. Stockholm.

Tabachnick, B.G. and Fidell, L.S., 2007. Using Multivariate Statistics.5th Ed. New York, USA: Allyn and Baco

Tesfay, G. (2012). Assessment of credit Risk Managemet Practices in Commercial Bank of Ethiopia.Unpublished Master's Thesis. St. Mary‟s University.

Tsegaye Nigatu, 2014, Credit Risk Analysis of Ethiopian Banks, British Journal of Applied Science & Technology, Article no.BJAST.23563

Tchankova, L. (2002), Risk Identification – basic stage in risk management, Environmental Management and Health, Vol 13, No. 3, pp 290-297

Thiagarajan, S., & Ramachandran, A. (2017), An Empirical Analysis and Comparative Study of Credit Risk Ratios between Public and Private Sector Commercial Banks in India. International Research Journal of Finance and Economics (65).

Tibebu Tefera, (2011). Credit Risk Management and Profitability of Commercial Banks. A Thesis paper submitted to Addis Ababa University.

Tibebu, R. (2021). Assessment of Liquidity Risk Managemet a case study in Bank of Abyssinia: Unpublished Master's Thesis. St. Mary‟s University.

Trieschmary, R. W. The Determinants of Credit Risk in Commercial Banks. International Journal of Banking and Finance. 2016; 9(4): 74–95.

Tsegaye & Nigatu, 2016, Credit Risk Analysis of Ethiopian Banks, British Journal of Applied Science & Technology, Article no.BJAST.23563

Wendimagegnehu (2012), Determinants of Non-Performing Loans The case of Ethiopian Banks‟ research report, University of South Africa www.nbe.gov.et, Searched On January11, 2020

Williams J. (2017) Introduction to Financial Management. Jacos Publishing House, Philadelphia.Wilson Sy (2016), A Causal Framework for Credit Default Theory, International Journal of Banking and Finance. 2007.

Yang W. (2013). Credit Risk Management in Rural Commercial Banks in China, Edinburgh Napier University.

Yang H.K. (2020). Credit Granting: A Comparative Analysis of Classification Procedures, The Journal of Finance, Vol.42, No.3. Online available at http://www.jstor.org/

APPENDIX

APPENDIX_I

Questionnaire

JIMMA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

Dear respondents

My name is **Geremew Tesfaye,** and I am conducting a study on **Determinants of Credit Risk Management Practices: The Case of United Bank Southwest District** for the partial fulfillment of master's degree in business administration in Jimma University, college of business and economics department of management. I would like to extend my deep appreciation to your willingness and cooperation in undertaking this valuable research. Taking part in this study you will contribute towards alleviating the problem of the banking industry in Ethiopia. I kindly request your cooperation to fill and respond truthfully for the asked Questions. Finally, I would like to appreciate and thank you in advance for your dedication, time and genuine response to the questions.

PART I: GENERAL INFORMATION THE OF RESPONDENTS

Please circle or provide your own answers where applicable.

1. Gender:

A. Male B. Female

2. Age:

A. 20-25 B. 26-35 C. 36-45 D. Above 46

3. Marital status

A. Single B. Married C. Divorced

4. Education

A. Diploma B. Graduate C. Postgraduate D. Others

Part II: Research related questions

Please provide your level of agreement using the following rates. **Key: Strongly agree (5), Agree (4), Neutral (3), Disagree (2), and strongly disagree (1).**

1. Establishing Appropriate Credit risk environment

No.	Description of items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1	Bank's Credit risk strategies, policies and procedures are regularly reviewed and updated by the board of directors					
2	Senior managements are responsible for implementing credit risk strategy approved by the board and for developing credit policies and procedures					
3	Boards of Directors and Senior Managers closely monitor the major Credit Risk exposure of the Bank					
4	Credit Risk management strategy, Policies and Procedures are consistently applied in all Credit product and activities of the bank.					
5	The banks' staffs take the necessary precaution against default risk					
6	Authority and Responsibility of Risk Management are clearly set out and understood throughout the bank.					
7	There is proper identification of Credit Risk inherent in all products and activities of our Bank					
8	There is common understanding about Credit Risk Management Strategy, Policy and Procedures across the Bank.					

2. Operating under a Sound Credit granting process

No.	Description of items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1	It is too risky to invest our bank's funds in one specific sector of the economy.					
2	Adequacy, marketability and enforceability of collateral requirement is properly evaluated and measured by professional personnel or expertise.					

3	The Bank conducts comprehensive credit worthiness analysis before granting loan					
4	The Bank uses well defined credit-granting					
5	The bank critically follows sound credit granting process for approving new credits as well as amending, renewing and refinancing existing credits					
6	The bank has established comprehensive Credit limit for the main categories of risk factors in all types of credit facilities.					
7	The Bank optimally diversifies its credit exposure to different economic sectors and geographical area.					
8	The Bank undertakes Credit granting process based on a reliable and substantial amount of date related to macro-economic and borrower specific factors.					

3. **Maintaining an appropriate credit administration, measurement and monitoring process**

No.	**Description of items**	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
		1	**2**	**3**	**4**	**5**
1	The bank strictly monitors loan terms and conditions that have been stipulated at the time of loan approval.					
2	The bank regularly reviews and monitors the performance of Credit quality at individual and portfolio level.					
3	There is a complete, neatly organized and regularly updated credit file in our bank.					
4	The bank has developed its own internal risk rating system and applying in credit risk management process effectively.					
5	There is effective Credit monitoring system and procedures.					
6	The bank quantify its credit risk at individual and portfolio level					
7	There is effective system and practice of reporting and Communicating risk data/ information among relevant staffs of our bank.					
8	The bank's Credit risk management system and practice has been integrated with appropriate Management Information Systems.					

4. Adequate control over Credit risk

No.	Description of items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1	The bank has appropriate policy, procedures and techniques for improving loan repayment and handling troubled loan.					
2	Credit loss, Loan concentration, large exposure and level of NPL can be reduced if banks' Credit policy, Procedure and Techniques are implemented properly					
3	The bank's top managements have strong commitment toward controlling default risk					
4	Appropriate and timely policy measures have been taken for resolving loan recovery problem during the last five years.					
5	The Bank keeps its Actual risk profile at or below its risk tolerance /appetite.					
6	There is an appropriate level of Control over Credit Risk the bank faces.					
7	The Bank carry out regular independent internal Credit quality reviews accurately.					
8	There is an early identification of Credit default sign with immediate corrective action.					

5. Credit risk management practice

No.	Description of items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1	Establishing and Practicing effective Credit Risk Management system is one of the main objectives of my bank					
2	Success and failure of any bank is mostly depends on the effectiveness of Credit Risk Management System and Practice.					
3	The bank has well-documented Credit Risk Management Strategy, Policy and Procedures that guide the staffs in their daily activities of managing credit risks.					
4	The bank has established Sound Credit Risk					

	Management System in line with NBE's risk management guideline and directives.					
5	There is suitable Organizational structure that enables me to undertake effective Risk Management System and practice					
6	This Bank has adequate and qualified risk management staffs and expertise					
7	There is adequate Deposit mobilization and fund utilization in this bank					
8	The bank gives adequate and effective Risk Management training for staffs					
9	Overall, I consider the level of Credit Risk Management system and Practices of the Bank is to be excellent					

- **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 Banks?**

………………………………………………………………………………………………

………………………………………………………………………………………………

- **Please give any experience, comment or opinion about Credit Risk Management practices which is not applicable at your organization.**

………………………………………………………………………………………………

Thank you for your time and Response

Questionnaire

JIMMA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

Dear respondents

The objective of this interview is to gather and analyze relevant and in-depth information that will provide insights about credit risk management policies and practice of United Bank Southwest District. This study is undertaken as a partial requirement for the completion of Masters in Business Administration.

1) What are the challenges of administrating credit risk?

2) How do you evaluate credit evaluation process of the Bank?

3) What factors do you think would contribute intensifying of credit risk in the Bank?

4) How do you evaluate the Bank's management role to control credit risk of the Bank?

5) What procedures and measures should the Bank employ to manage its problem loans?