CREDIT RISK MANAGEMENT AND ITS EFFECT ON THE PERFORMANCE OF BANK OF ABYSSINIA THE CASE OF WEST ADDIS ABABA DISTRICT

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A THESIS SUBMITTED TO ST. MARRY UNIVERSITY, FOR THE PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE MASTER OF ARTS IN BUSINESS ADMINISTRATION

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JUNE 2024
ADDIS ABABA, ETHIOPIA

DECLARATION

I, MELESE NIGATU declare that the work which is being presented in this thesis entitled **"**Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis Ababa district" is original work of my own, any other research or academic sources used here in this thesis have been duly acknowledged. I have carried out the present study independently with the guidance and support of the research advisor.

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APPROVAL

This is to approve that Mr. MELESE NIGATU has conducted this research work on the topic entitled **"**Credit risk management and its effect on performance of bank of Abyssinia the case of west Addis Ababa district**"** under my supervision. This work is original in nature and is fit for submission for the award of the degree of Master of Arts in Business Administration.

CHALLA DECHASSA (PHD)

Signature:  Date: June 13,2024

ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

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ACKNOWLEDGEMENTS

First, I am really honored to acknowledge my advisor a CHALLA DECHASSA (PHD) for his guidance, valuable comments and his dedication to support this research work be completed. I also want to thank all my coworkers for their advice and expertise comments in the questionnaire design and the data analysis. Finally, I need to thank all participants of the research study. All of them gave me their valued time in responding to the questionnaire. The administration of *Bank of Abyssinia* was cooperative while I present my request to undertake a research study in their firm.

ACRONYMS

ATM- Automated Teller Machine

BOA –Bank of Abyssinia

CRM – Credit risk management

GDP- Growth Domestic Product

NIM- Net interest margins

ROA- Return on assets

ROI- Return on investment

CONTNTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

The main objective of the study was to investigate Credit risk management on performance of bank of Abyssinia the case of west Addis district. This study is used to identify the capital adequacy of bank of Abyssinia in credit risk management practice in case of west Addis district, to investigate asset quality on bank of Abyssinia credit risk management practice, to examine the management quality of BOA in credit risk management practice in case of west Addis district, to assess the earning efficiency of BOA In credit risk management practice in case of west Addis district, to examine the liquidity ratio of BOA In credit risk management practice in case of west Addis district. This study used a descriptive and explanatory research design. The target population of the study was 150 employees in BOA. Primary data was collected using questionnaires and administered using by the researcher. The data was then analyzed using both quantitative and qualitative techniques. The study concluded that bank considers risk identification as a process in credit risk management, that the bank focuses in interest rate risks in the risk identification map and that the bank focuses in foreign exchange risks and in view of risk analysis as a credit risk management practice in the bank the application of modern approaches to risk measurement, particularly for credit and overall risks is important for BOA and that risk analysis helps the bank management to discover mistake at early stages and that risk monitoring can be used to make sure that risk management practices are in line with proper risk monitoring. The study recommended that BOA management should understand how they can edge themselves against the eminent dangers of over exposure to credit risks

KEY WORDS: - Credit, risk management, performance

CHAPTER ONE

INTRODUCTION

Credit Risk Management has become the most important issue among financial institutions in Ethiopia, Ethio Business & Finance (2012). One of the objectives of financial institutions is to maximize profits. Credit Risk Management is the process of eradicating, reducing, and managing risks to circumvent certain mishaps like financial losses in firms, Kalapodas and Thomson (2005). Banks use credit risk management procedures to protect against the possibility of a borrower defaulting on a loan, Scott S. (2012). Credit risk management in a financial institution starts with the establishment of sound lending principles and an efficient framework for managing risk. Policies, industry specific standards and guidelines, together with risk concentration limits are designed under the supervision of risk management committee. These policies, standards and procedures also govern how credit risk is measured, monitored, reported and controlled. As market conditions change rapidly, adequacy and effectiveness of internal controls should be reviewed at least quarterly.

The diversity of the business and economic conditions has led to the development of highly sophisticated tools and models to measure the exposure of a financial institution to credit risk. In case of an individual loan portfolio, the probability of default, loss given default or credit rationing are the most used ones to measure the exposure to credit risk. The invention of various credit scoring models that use observed loan applicants' characteristics either to calculate a score representing the applicant's probability of default or to sort borrowers into different risk classes bring the ability to address credit risk on a new level.

Credit risk is an investor 's risk of loss arising from a borrower who does not make payments as promised. Such an event is called a default. Another term for credit risk is default risk. Investor losses include lost principal and interest, decreased cash flow, and increased collection costs, which arise in several circumstances: consumer does not make a payment due on a mortgage loan, credit card, line of credit, or other loan. The credit function of banks enhances the ability of investors to exploit desired profitable ventures. It's crystal clear that credit creation is the main income generating activity of banks. However, it exposes the banks to credit risk, Basel Accord, (2001) As stated by Basel Accord (2001) Credit risk is the risk that a borrower or counterparty will fail to meet obligations in accordance with agreed terms of a contract.

Credit risk arises from the potential that the borrower or counterparty is either unwilling to perform on an obligation or its ability to perform such an obligation is impaired resulting in accounting losses and economic exposures to the bank.

Recent studies indicate that larger banks with higher profitability and capital adequacy ratio tend to experience higher risk. Conversely, loan growth and currency rates show an inverse relationship with credit risk.

The Basel Committee on Banking Supervision (2001) defined credit risk as the possibility of losing the outstanding loan partially or totally, due to default risk. Credit risk is an internal determinant of bank performance. The higher the exposure of a bank to credit risk, the higher the tendency of the bank to experience financial crisis and vice versa. Among other risks faced by banks, credit risk plays an important role in banks' profitability since a large chunk of banks' revenue accrues from loans from which interest is derived. However, interest rate risk is directly linked to credit risk implying that high or increment in interest rate increases the chances of loan default. Increasing amount of non-performing loans in the credit portfolio is unfavorable to banks in achieving their objectives. Non-performing loan is the percentage of loan values that are not serviced for three months and above. Due to increasing of non-performing loans (NPL) and its attendant consequences, the Central Bank authorities entered into agreement in December 1987 known as Basel I and II Accord which emphasized on credit risk management practices. Compliance with the Accord means a sound approach to tackling credit risk has been taken and this ultimately improves bank performance.

Credit risk refers to the risk that a borrower will default on any type of debt by failing to make required payments. The risk is primarily to the lender and includes lost principal and interest, disruption to cash flows, and increased collection costs. The loss may be complete or partial and can arise in several circumstances. The risk management framework is important for commercial banks. The theory of asymmetric information argues that it may be impossible to distinguish good borrowers from bad borrowers, Auronen, (2003) which may result in adverse selection and moral hazards problems. Adverse selection and moral hazards have led to substantial accumulation of non-performing accounts in the commercial banks Bofondi and Gobbi (2003).

BCBS (2006) holds that risk management processes, require supervisors to be satisfied that the banks and their banking groups have in place a comprehensive risk management process. This would include the Board of senior management to identify, evaluate, monitor and control or mitigate all material risks and to assess their overall capital adequacy in relation to their risk profile. In addition, as suggested by Al-Tamimi (2002) in managing risk, commercial banks can

follow comprehensive risk management process which includes eight steps: exposure identification; data gathering and risk quantification; management objectives; product and control guidelines; risk management evaluation; strategy development; implementation; and performance evaluation Baldoni, (1998); Harrington and Niehaus (1999).

Banks as an intermediary serve as the backbone to the financial service sector which facility the proper utilization of the financial resources of a country. Banks around the globe have a primary function of channeling the surpluses arising in the economy into deficit units in the economy. This core function has been threatened for the past years in the country due to the rising level of loan defaults. A developing economy like Ethiopia cannot survive without a thriving banking system since the healthiness of the banking system in any country reflects the healthiness of the country's economy. Banks play a very predominant role in granting credit facilities, which help, propel the private sector that serves as the engine of growth. However, banks incurring losses resulting from non-payment of loans or other forms of credit keeps on increasing yearly due to inadequate credit risk management. According to Kargi (2011), the most significant credit risk confronting banking and financial institutions, in general, is the risk of customer or counterparty default. Measurement of bank performance has, therefore, become increasingly important due to the continuous worsening of the assets quality of the Ghanaian banking industry.

Banking industry in Ethiopia was dominated until very recently by the public owned commercial banks namely Commercial Bank of Ethiopia and Development Bank of Ethiopia. The sector was opened for private investors since the 90s. Since then, some 18 private banks have been established and have been a significant engine for the growing economy. Commercial banks in Ethiopia extend credit (loan) to different types of borrowers for many different purposes. For most customers, bank credit is the primary source of available debt financing and for banks good loans are the most profitable assets Mishkin (2004).

1.2 Statements of the problem

Weak credit risk management is the primary cause of many commercial banks' failures. Mc Menamin (1999) and Hempel et. al (1994) carried. Out studies of national banks that failed in the mid-1980s in the U.S.A and found out that the consistent element in the failures was the inadequacy of the bank's credit risk management system in the controlling of loan quality. Generally, institutions are expected to manage their credit risk to avoid exposing themselves to unnecessarily high-level risk and subsequently a decline in returns.

According to Bhattacharya (1993) the risks contained in a bank's principal activities, such as those involving its own balance sheet and its basic business of lending and borrowing, are not all

borne by the bank itself. In many instances the institution will eliminate or mitigate the financial risk associated with a transaction by proper business practices; in others, it will shift the risk to other parties through a combination of pricing and product design. The banking industry recognizes that an institution need not engage in business in a manner that unnecessarily imposes risk upon it; nor should it absorb risk that can be efficiently transferred to other participants. Rather, it should only manage risks at the firm level that are more efficiently managed there than by the market itself or by their owners in their own portfolios (Economist, 1993). Financial risks faced by businesses are defined by their operating environment; the operating environment is made up of the customer complexity, the infrastructure and the regulations. While credit risk emanates from customer composition, the complexity of the risk and its ability to manage it depends on the approach taken by the institution to ensure successful management. The aim of this study is to establish the relationship between credit risk management practices employed by Bank of Abyssinia and their performance. The study seeks to unearth the variable approaches to credit risk management.

Bank of Abyssinia faced a significant capital shortfall with some registering negative Capital Adequacy Ratio (CAR), capital deficits, rise in nonperforming loans rendering the banks insolvent and unable to meet daily liquidity obligations of their customers. The apparent reason for this was the lack of adequate credit risk management to control the situation (Ofosu-Hene & Amoh, 2016). According to Blanch (2011), sustainable growth in the banking sector is impossible without a proper formulation and implementation of innovative measures in managing credit risk. Added to this is a study by Hurka (2017) that, within the financial sector, the issue of credit management is very relevant, and no bank can thrive without effective credit risk management.

Having effective risk management is a crucial for banking business. Without a doubt, in present day's unpredictable and explosive atmosphere all banks are in front of enormous risks like credit risk, liquidity risk, operational risk, market risk, foreign exchange risk and interest rate risk, along with other risks, which may possibly affect the survival and successes of banks (Ali,Akhtar and Sadaqat,2011 and Al-Tamimi and Al-Mazrooei,2007). As stated by Zribi and Younes (2011), credit risk in emerging economy banks is higher than that in developed economies and that risk is formed by a larger number of bank-specific factors in emerging economies compared to their counterparts in developed economies.

Credit risk management mechanisms like screening and monitoring, long term customer relationship, collateral requirements and credit rationing are important for the success of banks. It determines its profitability, liquidity, solvency and amount of loan portfolio.

In the resent years, the urge of banks to advance unsecured loans has increased, has been fueled by the increase in completion among the financial sectors. Banks have been reporting growth in their financial performance for the last few years. The study is aimed to understanding how Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis district a since their main component of revenue is interest rate.

1.3 Objectives

1.3.1 General objective

The general objective of this study investigated credit risk management and its effect on performance of bank of Abyssinia the case of west Addis district

1.3.2 Specific objective

In line with the general objective the research paper will assess the following specific objectives

- To identify the capital adequacy of bank of Abyssinia in credit risk management practice in case of west Addis district
- To investigate asset quality on bank of Abyssinia credit risk management practice
- To examine the management quality of BOA in credit risk management practice in case of west Addis district
- To assess the earning efficiency of BOA In credit risk management practice in case of west Addis district
- To examine the liquidity ratio of BOA In credit risk management practice in case of west Addis district

1.4 Research questions

1. What is the effect of capital adequacy on Bank of Abyssinia in credit risk management practice in case of west Addis district?
2. How asset qualities on bank of Abyssinia affect its performance in credit risk management practice?
3. How does the management efficiency of BOA effect its performance in credit risk management practice in case of west Addis district?
4. What is the effect of earning efficiency on BOA In credit risk management practice in case of west Addis district?

5. How liquidity ratio on BOA effect its performance in credit risk management practice in case of west Addis district?

1.5 Significant of the of the study

1. **To organization**: this study will be both practical and theoretical significance for the bank of Abyssinia. To evaluate its financial performance and adjust/minimize some risk. It enables the institutions' management and higher responsible body to be aware about credit risk management and its effect on institutional income growth.
2. **To other researcher**: conductive effective study on to investigate Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis district and the experience will help the researcher in order to make other studies.
3. This study serves as an input for other interested people in related topic and to acquire broader knowledge about the subject matter under the study.

   This study, therefore, plays a role in filling the studier gap related to Credit risk management and its impact on performance of bank of Abyssinia

1.6 Scope of the Study

The scope of the research study embraced the effectiveness of credit risk management among financial institutions in the Bank of Abyssinia. Contextually, this study focused on credit risk management and its implication on the financial performance of banks. The study was limited to selected banks on the Ethiopia Specifically, the study targets bank of Abyssinia Limited. The study is limited to the number of banks used. Even though several banks exist in the Ethiopia this study was limited to bank of Abyssinia in case of west Addis district.

Sample respondents were selected from bank of Abyssinia customers and employees and different questioners provided to them. This study was conducted by descriptive types of research design and used to generate answers to research problems by collecting and analyzing data from customers and employees of the bank of Abyssinia. Simple random sampling used for group homogeneity. Geographically, the Bank of Abyssinia taken as an area for this study because of its convenience for the researcher to collect data easily. Regarding the time scope, the study will conduct for academically year 2016/2024

1.7 Limitations of the Study

This study would be limited to the Bank of Abyssinia in Addis Ababa. The results are very important for the Bank of Abyssinia; however, it is not without limitations. Since this study was conducted in Addis Ababa it will not cover other customers in rural areas. In Ethiopia majority

of the people's lives indifferent area, this study unable to cover such major customers and branches of the bank of Abyssinia. The research also fears on Confidentiality of information hindered the respondents from giving the needed information. The uncooperative spirit may also be shown by some customers of bank of Abyssinia do to varied reasons, either they don't care, being busy or whatsoever. To overcome this, the researcher will prepare a timetable that coped with their situation and be easy for them to participate/follow.

1.8 Definition of Terms

- **Credit Risk** means the possibility of losing the outstanding loan partially or totally, due to credit events (default risk) (BCBS, 2001).
- **Credit risk Exposure** means the total amount of credit extended to a borrower by a lender (Croatian National Bank, 2010). This definition is adopted for the purpose of this paper.
- **Credit risk management** means the process of risk identification, measurement, monitoring and control (NBE, 2010).
- **Loan and advances** mean any financial assets of a Bank arising from a commitment to advance funds by a Bank to a person that is conditioned on the obligation of the person to repay the funds, either on a specified date or dates or on demand, usually with interest (NBE, 2008).
- **Provision for loan and advances** means a balance sheet valuation account established through charges to provision expense in the income statement in respect of possible losses in the loans or advances portfolio (NBE, 2007).
- **Bank performance means** profitability. Gilbert (1984) in a survey of literatures argued that bank profit is an appropriate measure of bank performance

1.9 Organization of the Thesis

This research has five chapters. In the first chapter, background of the research, followed by the problem statement, objectives to be achieved and research questions, significance, scope and limitation of the study are presented. In chapter two, literature review related to the study and the conceptual and empirical review of a research will be discussed. The third chapter presents, and draws the methodological process of sampling, data collection and analysis. Chapter four presents a descriptive summary of the empirical data collected with detailed analysis, results and discussion. Finally, chapter five contains a conclusion and recommendation.

CHAPTER TWO
LITERATURE REVIEW

This chapter discusses other literary materials or work done on credit risk management tools. Furthermore, the chapter makes comparative analysis and attempts to evaluate the credit risk management system with respect to Ethiopia financial institutions in bank of Abyssinia. This literature review is important because it seeks to help answer questions the research paper attempts to answer. The performance of credit risk management tools will be evaluated as to whether it has helped curb credit risk among financial institutions in Ethiopia.

2.1 Conceptual literatures

2.1.1 Credit Risk Management

The credit risk is the present and prospective risk of income or assets resulting from the inability of a borrower to fulfill the conditions of any agreement with the bank or otherwise to carry out as agreeable (Muritala & Taiwo, 2016). In all operations, the credit risk relies on counterparty, issuer, and borrower performance. Credit risk is identified. It occurs when bank funds, whether reflected on or without the balance sheet, are expanded, engaged, invested, or otherwise exposed using real or implied contractual arrangements. Activities such as inability to pay due obligations and moratorium or changes in credit rating and restructuring are normally included (Mohamed, 2016). Credit incidents include occurrences such as bankruptcy. Alshatti (2015) noted that the credit risk refers to the risk in case of a default or the danger of a delay in repairing the loan, that an asset or loan will be irrecoverable. effective credit risk management needs the board and management to comprehend and regulate

the risk profile and loan culture of the bank. To accomplish this, they need a thorough knowledge of the portfolio's structure and its inherent risks. They must comprehend the product mix, levels of sector and geography, average risk ratings, and other aggregate features of the portfolio (Maino & Tintchev, 2012). They must be certain that the strategies, procedures, and procedures introduced to regulate the hazards of individual loans and portfolio sections are sound, and that loan staff adhere to them. Successful management of credit risk is dependent on the ability to measure it. The main challenge of this is how to precisely measure credit risk exposure and

portfolio level because as the level of credit risk rises, the realized rate of return on the loan portfolio is reduced and the required level of capital increases (Cole et al., 2012). Muhammad and Garba (2014) identify two important tools that can be used in assessing or measuring credit risk. These include Default ratio (DR) and Cost per loan advanced.

According to the Casu et al (2006:282), authors of Introduction to Banking, credit risk management is explained as a management tool which enables to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. The authors further explain that "the need for financial institutions like banks to manage credit risk arising from individual creditors, individual transactions and the risk inherent in their entire portfolio". The essential functions of credit risk management according to Raghavan (2003) are to "identify, measure, and more importantly monitor the profile of the bank". By this definition, credit risk management helps financial institutions be able to check, track and evaluate their various activities to prevent and correct credit risk. The author also describes risk management as a system which is "a proactive action in the present for the future".

Furthermore, Kalapodas et al (2005) describes credit risk management as a management tool which attempts to eradicate, reduce and manage risks, increase the benefits and avoid harm from taking risks. In effect credit risk management prevents financial institutions from credit risk and enables them to improve in terms of financial performance. Also, CRM is described by Gestel et al as primarily concerned with reducing earnings volatility and avoiding large losses in a firm. In a proper risk management process, one needs to identify the risk, measure and quantify the risk and develop strategies to manage the risk effectively.

Credit risk plays an important role on banks‟ profitability since a large chunk of banks‟ revenue accrues from loans from which interest is derived. However, credit risk may be a serious threat to the performance of banks. Therefore, various researchers have examined the impact of credit risk on banks in varying dimensions. The major studies related to the issue of credit risk and bank performance have reviewed as follows

The growth and survival of banks is becoming contingent on credit risk management Afriyie & Akotey, (2012). To Afriyie and Akotey, (2012, p.3) "credit risk management is an organized approach to the management of uncertainties". This is done through the assessment of risks, mapping out the best strategies to manage them and utilizing managerial skills and resources to ease the burden of occurrences. The strategies include risk transfers where other parties are contracted to share the burden of the risk in the event of its occurrence. Other strategies include total avoidance of the risk, "putting in place mechanisms to reduce the impact of the occurrence

of a risk" or accepting to accommodate all a risk's impact upon its occurrence Afriyie & Akotey, (2012, p.3)

2.1.2 Credit Risk

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

Credit risk is defined as the probability that some of a bank 's assets, especially its loans, will decline in value and possibly become worthless. Because banks hold little owners' capital relative to the aggregate value of their assets, only a small percentage of total loans need to go bad to push a bank to the brink of failure. Thus, management of credit risk is very important and central to the health of a bank and indeed the entire financial system. As banks make loans, they need to make provisions for loan losses in their books. The higher this provision becomes, relative to the size of total loans, the riskier a bank becomes. An increase in the value of the provision for loan losses relative to total loans is an indication that the bank 's assets are becoming more difficult to collect Tshore, Aboagy and Koyerhoah Coleman (2011).

Credit risk is the risk of a loss resulting from the debtor's failure to meet its obligations to the Bank in full when due under the terms agreed Raghavan (2003).

Credit risk is a financial exposure resulting from a Bank's dependence on another party (counterparty) to perform an obligation as agreed (National Bank of Ethiopia 2010). Credit risk, as defined by the Basel Committee on Banking Supervision (2001), is also the possibility of losing the outstanding loan partially or totally, due to credit events (default risk). It can also be defined as the potential that a contractual party will fail to meet its obligations in accordance with the agreed terms. Credit risk is also variously referred to as default risk, performance risk or counterparty risk Brown and Moles, (2012).

A Bank exists not only to accept deposits but also to grant credit facilities, therefore inevitably exposed to credit risk. Credit risk is by far the most significant risk faced by Banks and the

success of their business depends on accurate measurement and efficient management of this risk to a greater extent than any other risks Gieseche, (2004).

According to Chen and Pan (2012), credit risk is the degree of value fluctuations in debt instruments and derivatives due to changes in the underlying credit quality of borrowers and counterparties. Coyle (2000) defines credit risk as losses from the refusal or inability of credit customers to pay what is owed in full and on time. Credit risk is the exposure faced by Banks when a borrower (customer) defaults in honoring debt obligations on due date or at maturity. This risk interchangeably called 'counterparty risk' can put the Bank in distress if not adequately managed.

Credit risk management maximizes a Bank's risk adjusted rate of return by maintaining credit risk exposure within acceptable limits in order to provide framework for understanding the impact of credit risk management on Banks' profitability (Kargi,2011).

The main source of credit risk include, limited institutional capacity, inappropriate credit policies, volatile interest rates, poor management, inappropriate laws, low capital and liquidity levels, direct lending, massive licensing of Banks, poor loan underwriting, laxity in credit assessment, poor lending practices, government interference and inadequate supervision by the central Bank Kithinji, (2010).Credit risk is critical since the default of a small number of important customers can cause large losses, which can lead to insolvency Bessis, (2002).

An increase in Bank credit risk gradually leads to liquidity and solvency problems. Credit risk may increase if the Bank lends to borrowers, it does not have adequate knowledge about. Robert and Gary (1994) state that the most obvious characteristic of failed Banks is not poor operating efficiency, however, but an increased volume of nonperforming loans.

2.1.3 Credit Risk Mechanisms in Banking Industry

Banks make a profit from the spread between the interest rate they charge to borrowers and the interest rate they pay to depositors. Lending has always been the primary function of banks, and accurately assessing a borrower 's credit worthiness has always been the only method of lending successfully Fight, (2004:219). As identified by Mishkin (2004:126), to ensure reasonable profit, banks attempt to make loans that will be fully repaid with interest on due date.

Therefore, banks are directly concerned about borrowers repaying their loans on a timely basis so that the value of the banks can be maximized. If banks don't manage credit risks effectively, they won't be profitable and won't be in business very long. Banks can reduce their exposure to credit risk on different loans by applying major credit risk management principles. Mishkin (2004:126) also outlined the following credit risk management mechanisms.

- **Screening and monitoring**: Adverse selection in loan market requires the lenders screen out the bad credit from the good ones so that loans are profitable to them. Once a loan has been made, the bank ‘s has to monitor or follow up the borrowers’ activities.
- **Long-term Customer Relationship**: if the borrower has borrowed previously from the bank, the bank has a record of the loan payments. This reduces the costs of information collection and makes it easier to screen out bad credit risks. Long-term relationship enables banks to deal with even unanticipated moral hazard contingencies.
- **Collateral Requirements**: is an important credit risk management tool. Collateral, which is properly promised to the lender as compensation if the borrower defaults, it lessens the lender ‘s losses in the case of a loan default.
- **Credit Rationing**: is one way of credit risk management that refers to refusing to make loans even though borrowers are willing to pay the stated interest rate or even a higher rate.

2.1.4 Measurements of Bank Performance

According to Nimmo (2003:227), banking performance refers the ability of banks in provision of quality banking services to customers. The performance of a bank will be measured by using different measuring variables which are the core performance indicators in the banking industry. This includes:

- **Profitability:** is the efficiency of banks at generating earnings which will be measured by Profitability ratios which focus on profit of the bank. The ratio includes Return on Asset & Return on Equity.
- **Bank Liquidity** is the ability to meet its financial obligations as they come due. Bank lending finances investments in relatively illiquid assets, but it funds its loans with mostly short-term liabilities.
- **Bank Solvency** is the banks long run ability to meet all financial obligations. A solvent business has a positive net worth. Solvency indicators include the debt-to-asset ratio and debt-to-equity ratio.
- **Loan Portfolio** is total of all loans held by a bank or finance company on any given day. The value of a loan portfolio depends on both the principal and interest owed and the average creditworthiness of the loans Westerfield, (2008:228).

2.1.5 Relationship between Credit Risk Management and Capital Adequacy of Banks

Capital is the pillar of the economic strength of a bank. It promotes bank operations by offering a buffer to absorb unforeseen losses from its operations and, in case of issues, allowing the bank to continue to function in a sound and feasible way while addressing or resolving the issues (Kalu

et al., 2018). Maintaining a bank's appropriate capital reserves can create trust in the bank's economic soundness and stability by continuing to ensure that it fulfills its commitments to depositors and creditors (Nawaz, 2012). A measure of a bank's capital strength is the equity ratio, which is the quantity of regulatory capital expressed by a bank as a proportion of its risk-weighted assets. The' Capital Adequacy ' prudential guidelines set out the three primary aspects that determine the capital adequacy of a bank (Oluwafemi, Israel, & Simeon, 2014). These are exposure-related credit risk; market risk from banking operations and the type and quality of capital retained to promote these exposures. Epure and Lafuente (2015) studied the impact of risk on the performance of banks in the Costa-Rican banking industry during 1998-2007. The results showed that performance has an inverse relationship with credit risks and capital adequacy related positively with performance. Muritala and Taiwo (2016) claim that loans are the biggest and most evident cause of credit risk, while others are discovered in the multiple operations with which the bank itself has been engaged It is, therefore, a necessity for each bank in the world to be conscious of the need to define measure, monitor, and regulate credit risk while also determining how credit hazards can be reduced. This implies that a bank should have sufficient assets against these hazards and that the risks incurred are properly compensated for them. This is specified in Basel II, which regulates the amount of capital required by banks to guide them against these kinds of economic and operational hazards Kurawa and Garba, (2014).

According to the Basel Committee on the Banking Supervision, banks should be able to set general loan boundaries at the level of individual borrowers and counterparties and organizations of related counterparties aggregating distinct kinds of exposures in an incomparable and meaningful way, both in the banking and trading books and on and off the balance sheets Badu, (2012) — Maintaining a suitable credit management, measurement and tracking process, creating adequate credit risk controls and the role of credit risk measurement, tracking and control supervisors as part of the general risk management strategy. The more assets a bank has, the more it protects its creditors or the government insurance organization, and the higher the loss of capital that can be maintained without bankruptcy Coast, (2017). There is a loss of capital (given uncertainty) and an increase in risks if the bank does not handle the risk through the distribution in loans, and if the borrower fails to make his or her obligations, the bank's equity serves as an hedge against uncertainty.

A Capital Adequacy degree is a measure of the amount of bank equity as a percentage of risk-weighted loan exposure (Abayomi & Daniel, 2011). Capital adequacy increases the strength of the bank, which improves the solvency of the bank and the capacity to absorb the loan loss and

protect the bank from bankruptcy. Alshatti (2015) has asserted that the capital adequacy ratio doesn't affect the profitability of Jordanian Commercial Banks.

However, Poudel 92012) found a significant negative association between capital adequacy ratio and bank performance in the Nepalese context. Likely, Olabamiji and Michael (2018) also found that the capital adequacy ratio has an inverse impact on banks' performance. Bhattarai (2018) has found that the capital adequacy ratio was significant and hurt bank profitability. In this scenario, a negative relationship is expected between the capital adequacy ratio and bank profitability.

2.1.6 Relationship between Credit Risk Management and Asset Quality of Banks

The importance of CRM has been further elaborated in many recent studies. Some studies even associate poor asset quality of banks to bad CRM of banks. For instance, Chaplinska (2012) analyzes Latvian commercial banks in the wake of a crisis. During this period, she observes that the volume and quality of assets of the bank decrease rapidly. This, in her estimation, is a result of inefficient management of credit risk in Latvian banks. According to Muritala and Taiwo (2016) increased the number of branches and customers and the quest to get more customers to push some banks to relax their credit management policies resulting into many issues such as bad loan assessment scheme, financial crimes, bad asset quality accumulation among others. Like the banking company, the need for risk management is intrinsic in the banking sector. Poor asset quality and low liquidity concentrations are the two main causes of bank failures and are the main sources of credit risk management risk. Alshatti, (2015). Increases in credit risk raise the marginal cost of debt and equity, which in turn increases the cost of funds for the bank and hence worsens the quality of assets of the bank.

There are multiple equations used by researchers for calculating credit risk. The LOSRES ratio is a calculation of the valuation of a bank's assets, indicating how much of the overall portfolio was given but did not charge off. The higher the ratio, the lower the price; thus, the greater the risk of the portfolio (Mumbi & Omagwa, 2017) would be. Assessing the impact of loan activities on bank risk, Ofosu-Hene and Amoh (2016) used the ratio of bank loans to assets (LTA). The reason to do so is that bank loans are relatively illiquid and subject to higher default risk than other bank assets, implying a positive relationship between LTA and the risk measures. In contrast, relative improvements in credit risk management strategies might suggest that LTA is negatively related to bank risk measures (Abayomi & Daniel, 2011).

2.1.7 Relationship between Credit Risk Management and Management Quality of Banks

Management of financial institutions is responsible for the approval and formation of credit risk (Chaplinska, 2012). Also, they are responsible for reviewing strategies of the bank including

delineating bank's overall risk tolerance about credit risk, ensuring that bank's overall credit risk exposure is maintained at prudent levels and consistent with the available capital (Kurawa & Garba, 2014). They also guarantee that top management, as well as credit risk management people, have sound skills and knowledge to fulfil the risk management role, ensuring that the bank implements sound basic values that enable credit risk identification, measurement, tracking, and control (Muritala & Taiwo, 2016). They are also accountable for ensuring that adequate credit risk management plans and processes are in place.

According to the Basel Committee (1999), the correct loan approval method should include appropriate guidelines on both form and methodology for assessing the creditworthiness of borrowers, establishing credit line and interest rate suitable for the danger and credit of borrowers. Lenient credit underwriting can result in losses for financial institutions, particularly when debt repayment cannot be requested, or collateral cannot be taken in time Badu,(2012). A deficiency in underwriting norms and credit monitoring results in many loan hazards Credit officers can lead to bad lending practices, ineffective administration and ultimately a loss to financial institutions without the required knowledge in the operations they are accountable for, be it credits, investment, management of issue resources or fresh goods Coast, (2017). The risk will improve unless management receives precise and timely credit reports regularly. The reports shall contain significant data concerning the process of underwriting such as economic trends, change in the structure of the industry, or market share, commodity prices, exchange rates, including past due credits, credit concentrations, as well as analysis of problem loans.

Moreover, rapid growth and entry into new markets can tempt the management to lend without sufficient financial and economic analysis (Poudel, 2012). Management can support loan choices by using easy credit quality indicators such as the features of borrowers, the present and expected value of collateral or help from a parent business or associated businesses to promote faster decision-making. Another significant issue is financial institutions that do not carefully evaluate risks when introducing fresh products and do not install a risk management system before launching new products (Opoku, 2015). With fast loan development and increased competition, financial institutions are being forced to market without adequate testing to introduce fresh products and services. This practice may lead to severe issues for several banks, not in line with the principle of adequate loan underwriting (Coast, 2017).

Part of credit risks arise when boards or management of financial institutions cannot supervise different units to guarantee that they comply with the policy properly (Bhardwaj, 2013). Financial institutions are aimed at maximizing revenue and providing shareholders with the most

value by providing a range of financial services and by managing hazards. Most financial institutions have crashed or encountered financial problems owing, among other things, to inefficient credit risk management schemes characterized by elevated rates of insider loans, speculative loans and elevated credit concentration in some industries (Agyei, 2017). Credit risk management procedures and bad credit quality remain a dominant cause of bank failures and global banking crises.

The extent to which banks handle their credit risk affects their economic performance or survival. Because of the poor credit risk management scheme, the causes of high non-performing loans can influence profitability (Asante, 2015). Consequently, the inability to handle credit risk efficiently leads mostly to financial crisis of the banks. Effective procedures in credit risk management decrease client default risk.

2.1.7 Relationship between Credit Risk Management and Earnings Efficiency of Banks

Earnings are an indicator of banks' capacity to carry risk and increase their capital. Li and Zou (2014) employed the unbalanced panel regression in studying the impact bank regulations, financial and institutional development have on profitability in the Middle East and North Africa from 1989 to 2005 show that there is a positive relationship between credit risk bank capitalization and banks profitability. Afriyie and Akotey (2013) carried out a project which looked at the impact of CRM on profitability. This study displayed that there is a substantial correlation between bank performance (in the field of profitability) and credit risk management. Kayode, Obamuyi, Owoputi, and Adeyefa (2015) estimated the effect of credit risk on the profitability of Nigerian banks. Data on credit risk and profitability ratios were collected from 2004 to2008. The analysis of this data involved descriptive, correlation, and regression techniques. The result was that CRM has a substantial influence on the profitability of Nigerian banks. Other findings of the study showed that a rise in credit risks negatively affects profitability and liquidity. Wenner, Navajas, Trivelli, and Tarazona (2007) spells out that CRM enables financial institutions to become viable and attain sustainable growth, leads to solvency and reduces costs and improve profit margins.

Odonkor (2018) also identifies you reduce earnings volatility, avoidance of losses. It acts as a decision aid to bankers, better risk-return, avoidance of pitfalls like credit concentrations, lack of credit discipline, aggressive underwriting to high-risk counterparts, and products at inadequate prices.

2.1.8 Relationship between Credit Risk Management and Liquidity Position of Banks

Nguyen (2016) defined liquidity risk as to the likelihood that a bank may not be able to fulfil its commitments to its depositors and provide the requirements of borrowers by instantly converting assets into liquid assets with minimum losses with the capacity to borrow funds when needed, while at the same moment having sufficient resources at its disposal to conduct lucrative securities trading. Liquidity is a need for economic organizations to offset anticipated and unexpected balance sheet changes to boost development Van Greuning and Brajovic Bratanovic, (2009). Some banks, however, incorporate the need to plan for development and unexpected credit expansion; the risk here should be more properly considered as the potential for financing crisis Nguyen, (2016). A more liquid bank will be in a better position to fulfil its customers ' economic requirements and thus generate more value. The development of bank liquidity is strongly linked to bank value Rundassa and Batra, (2016). Banks as Financial Institutions have liquidity development as their primary service, but the conduct of individual financial institutions can destroy this good Ahmadyan, (2018). A liquidity loss shows that if customers turn up, they cannot satisfy the demand, and thus, the crisis can grow Wenner, Navajas, Trivelli, and Tarazona, (2007b).

The monetary capability of a bank is essential for its success. Managers have the responsibility to combat credit risk and boost stockholders' value. This is extremely important because, given the role performed by banks of being a financial mediator between surplus units and deficit units, illiquidity can lead to adverse effects by not its short-term financial obligation. This adverse is popularly known as financial distress. Financial distress is the inability in terms of meeting financial obligations to account for payables on time Serwadda, (2018). Abderahim (2013) realized that liquidity and bank size affected the effectiveness of credit risk Management significantly. According to Ofosu-Hene and Amoh (2016), there are two fundamental circumstances from which liquidity risk may arise. First, the depositors of the banks may seek to cancel their economic allegations immediately. In this respect, by resorting to borrowing or selling off assets, the bank may need to satisfy this

sudden demand. Second, banks are providers of off-balance-sheet credit commitments as well as liquidity risk. If borrowers decide to take advantage of their credit commitments, they must have instant funds to finance it rapidly, hence the liquidity demand. According to the Basel Supervisory Committee (2008), The banks ' fundamental function in transforming short-term deposits into long-term loans during maturity makes them fundamentally susceptible to the bank's liquidity risk as an organization and the (systemic) market.

A bank's liquidity is usually evaluated as the proportion between liquid money assets and total assets. Following the traditional notion of liquid assets in the literature on bank leadership, the definition of liquid assets involves cash and bank balance, cash on call, brief notice and short-term investment (Gladys, 2012). A higher liquidity ratio is generally understood to have a beneficial impact on a bank's stability. Excessive investment in liquid assets, however, is likely to impact the bank's profitability; a trade between liquidity and profitability is therefore essential

2.3 Theoretical Review

2.3.1 Asymmetry Theory

This research anchor on the theory of information asymmetry as the theory is very important to this research. The theory of information asymmetry elucidates the fundamental data that lenders and company owners need to know about future hazards and returns connected with investment projects for which the funds are allocated. Ennew and Binks (1995) cited in Afriyie and Akotey (2013) observed that perceived asymmetry of data presents two issues for banks: moral hazard (monitoring entrepreneurial conduct) and negative selection (making mistakes in lending choices). This means that the "5cs" (character, ability, assets, collateral, and circumstances) must be properly assessed before credit can be given. This is because the information is not freely accessible to banks to screen loan requests and track borrowers. When evaluating loan applications, bankers face an information asymmetry scenario.

Binks and Ennew (1997) quoted in Kessey (2015) asserted that information asymmetry occurs when a loan-taking borrower generally has better data about the prospective hazards and returns connected with investment projects for which the funds are allocated. On the other side, the banker does not have enough data about the entrepreneurs.

In the same vein, Olabamiji and Michael (2018) also observed that the extent to which bank executives understand more about the company than shareholders as a group is information asymmetry. According to Opoku (2015), one factor that exists between financial institutions and borrowers is information asymmetry. This phenomenon makes it difficult for banks to identify credible borrowers from bad ones. Therefore, banks must put systems in place to analyze and evaluate the creditworthiness of borrowers to avoid adverse selection and moral hazard (products of information asymmetry) which cause enormous accumulation of credit risks in their records.

2.3.2 Credit Theory

The credit theory of money suggests that when an entrepreneur borrows from a bank, two obligations come forth. First, the entrepreneur must pay the debt owed to the bank according to the stipulated and signed contract terms and second, the bank must hold the entrepreneur in debts

and to clear the entrepreneur of all debts after the debt has been paid (Diamond & Rajan, 2006). The theory also suggests that lending to an SME is a contractual agreement between the bank and the SME. It is an agreement requiring the fulfilment of obligations on both parties and defaults in those obligations by either party may have negative consequences on the relationship between the parties, such as refusal to grant future loans to a defaulter (Graeber, 2011).

The contractual link between the lender and the borrower can be defined in terms of the principal-agent theory (Eisenhardt, 1989 cited in Murigi & Thuo, 2018). Traditionally, the theory states that a contractual relationship exists between a principal (the bank) and the agent (the borrower). Berger and Udell (1990) as cited in Adarkwa (2011) emphasize that the derivation of the ideal type of the loan agreement is one of the most basic applications of agency theory to the connection between lender and borrower. This issue is traditionally regarded in the context of expensive state verification introduced by Townsend (1979) in a path-breaking article cited in Boateng (2017).

The main agent theory's essence is that the agent, who does not have any wealth of his own, borrows cash from the principal to operate a one-shot investment project. Only the agent voluntarily observes the project result. Thus, the officer faces a moral dilemma to either announce or disguise the project's real result. According to Townsend (1979) ascited in Boateng (2017), this situation describes the ex-post moral hazard, as opposed to the situation of ex-ante moral hazard, where the exercise of unverifiable effort by an agent during the project accomplishment may affect the result of the project. This problem also forms the fundamentals of credit risks, which is caused by the challenge of monitoring and information asymmetry between the bank and the borrower, thus creating an avenue for moral hazard Schmidt-Mohr, (1997 as cited in Poudel, (2018b).

Unless the principal has a system to reward or punish the officer, the rational agent will always say that the project has failed Border & Sobel, (1987 as cited in Navajas and Trivelli, (2007). Therefore, the agent would never repay the principal. The rational principle would predict this outcome, and he would never lend money to the agent.

However, Townsend (1979) as cited in Navajas and Trivelli (2007) assumes that usually possible for the principal to find out what the result of the project was. According to this assumption, the principal may incur fixed verification costs, which enable him to find out the exact correct outcome of the project. In contrast, several empirical studies indicate that there are other factors, such as information symmetry, database quality, and staff competence, that determine effective verification Eva and Jaroslav, (2012), other than monitoring costs.

The principal-agent theory suggests that as long as the agent repays the loan, the principal is satisfied, and it does not need to verify the outcome of the project. In case of a loan default, the principal imposes the bankruptcy procedure on the agent, in which case the principal takes all results of the project, and the agent is left with nothing. Townsend (1979) as cited in (Hurka, 2017) proves that under this mechanism, the agent has no incentive for moral hazard; therefore, the agent always truthfully announces the outcome of the several projects.

The following is described in the various ratios which make up the framework:

- **Capital adequacy**: capital adequacy is an important measure of a banking entity's economic health. The ratio of banks ' capital with their present liabilities and risk-weighted assets is described Poudel, (2018b). The adequacy of its assets confirmed that the bank has sufficient assets to expand its activities while at the same moment, its net value is sufficient to absorb economic slumps without becoming insolvent Bothra, (2018a). It is the ratio of time liabilities to the ability of the banks and another risk like credit risk, market risk, as well as operational risk.
- **Asset Quality**: The value of the asset represents the extent of the credit risk in the bank, because of its structure and quality of lending, advancements, and investments. Asset quality describes the economic health of banks as a risk to the solvency of economic organizations, particularly banks, from loss of value in the asset. This decreasing asset value is having an adverse effect, as losses are eventually deduced from the capital, which ultimately impacts the bank's income capacity Gupta, (2014). This structure measures the quality of assets about the level and strength of assets that are not performed, adequate measures, dispersal of assets, etc. The main argument behind the evaluation of asset quality is for non-performance asset (NPA) components to be defined as a proportion of the total assets. This indicates the quality of advances that the bank has granted to generate interest income Khodaei, Zagherd, and Barghi, (2017).
- **Management Efficiency**: management efficiency parameters indicate that the Executive Board and senior management can identify, measuring, monitoring and monitoring bank hazards Gadhia, (2015). Depending on its risk perception, the management of the bank makes key choices. It sets and achieves vision and objectives for the organization. This parameter is used to assess the effectiveness of leadership to assign a premium to badly managed banks with better quality discounts.
- **Earning Quality**: Earning quality is a vital parameter that determines a bank's capacity to continuously earn and move into the future. The quality of income refers to the sustainability

and development of the bank's future income and the Bank's ability to sustain and earn continuously. It is a profitability measure for banks (Khoury & Salem, 2018). The parameter gains importance as a substantial part of a bank's income is made through fee-based activities like investments, treasury operations, and corporate advisory services, and so on. The quality of earnings of the bank will also aid the bank in executing activities like dividend payment, maintaining an adequate level of capital, taking up growth and diversification strategies, and maintaining a competitive attitude.

- **Liquidity**: To fulfil the demands of the customers; the creditors and the depositors, banks must maintain liquidity in their assets, as the influence of liquidity crisis in banks can adversely impact their financial performance Misra and Aspal, (2013). Cash being liquid of every asset gives the full picture of the liquidity of the bank. Banks need to keep sound cash to deposit ratio to ensure that a large volume of cash is not supported, as idle cash does not generate any returns and will subsequently endanger the earnings quality of the bank

2.4 Empirical Review

Credit is what bank gives as loan to the borrowers and therefore the possibility that the returns expected from a loan extended will not be received as and when expected is called credit risk Conford,(2015). Put differently, credit risk is losses incurred when a borrower refuses or is unable to pay what he/she owes in full and/or on time Coyle, (2016). Among the causes of such credit risks include unsuitable credit policies, unsuitable laws and guidelines, fluctuating rates of interest, low levels of liquidity, irresponsible lending, poor loan appraisal process, poor loan advancing practices, government meddling and insufficient CBK regulations Laker, 2016; Sandstorm, (2017). Management of credit is therefore important as it looks at ways of mitigating such risks.

In their research on relationship between managing of credit risks and the four Sweden commercial banks profitability, Manzura and Juanjuan (2015) realized that non- performing loan portfolio's ratio affected success of all the four banks that were sampled in Sweden. They used Basel II application which strengthened the negative effect of NPLR on ROE. In similar research on commercial banks in Europe, Zou & Fan, (2016) found a good relationship among profitability and credit risk managing and the banks. The research concluded that NPLR significantly affected ROE.

Wang (2013)'s research Commercial Bank's credit risk management in Rural China realized that Commercial Banks in the Countryside (RCBs) in China need to gather enough information concerning the potential costumer so as to prevent credit risk exposure to the bank. The gathered

enough information will assist in assessing if any possibility of the loan borrower to default that loan and make wise decision. He concluded by stating that, for RCBs to maintain good credit risk management, it should concentrate on business operating environment which has unique risk before adopting any credit risk management strategy.

Gizaw, Kebede and Selvaraj (2015) did a study on effect of credit risk on success performance of commercial banks in Ethiopia. The study which relied on data collected from 8 commercial banks which has been in existence for a span of 12 years starting from 2003. The study exposed a substantial positive association between management of credit risk and success of Ethiopian banks hence encouraging managers to employ modern management of credit risk methods for better performance improvement.

Olweny & Shiph, (2016), who did research on results of finance sector issues on success of commercial banks of Kenya noted that ratio of loans that are not performing, (a credit risk managing pointer), had a useful effect on banks profitability further suggesting that banks should conduct serious information evaluation before giving credits to clients in order to have an effective and sound credit risk managing system

2.4.1 Credit Risk and Earnings Efficiency

A study by Boahene et al. (2012) cited in Hurka (2017) used regression analysis (both fixed and random effect models) in bringing to bear the linkage between credit risk and profitability of some selected banks in Ghana. It came out that the credit risk constituents instead have a positive relationship with bank profitability. This implies that, banks in Ghana experience high profitability irrespective of the large credit risk exposure. The author concentrated on the profitability of the banks instead of performance in the banking sector. Profitability within this work only concentrated on the Return on Assets. This is like the research made by Kithinji in 2010, and contrary to other studies that projected that credit risk indicators hurt profitability. In a different dimension, Kolapo et al. (2012) used panel data analysis in studying the impact of credit risk on banks performance using ROA as a measure for performance. The result concluded that an increase in credit risks or loan losses provision diminishes profitability (ROA), while an increase in total borrowing and advances enhance profitability.

The effect on the profitability of the commercial banks in Nepal from credit risk analysis was reviewed by Poudel (2018). For the period from 2002/03 to 2014/15, data was gathered from 15 commercial banks operating in the Nepalese economy. An important analytical instrument is the Fixed Effect Model (FEM) of the panel information assessment. Commercial banks ' profitability is calculated by equity returns and is reduced by bank-based factors and macroeconomic factors.

The results confirmed that credit risk has a significant negative impact on the profitability of commercial banks in Nepal. Also, the solvency ratio, interest spread rate, and inflation have an insignificant adverse effect on profitability. The research concludes that the capital adequacy, total assets, and GDP growth rate of the commercial banks of Nepal have a substantial beneficial impact on profits. Finally, the study concluded that the inter-bank interest rate has an insignificant positive impact on profitability. This study was conducted in Nepal with a different environment from Ghana. Hence there is the possibility that what pertains there might not be applicable in the Ghanaian context.

Kishori and Jeslin (2017) aimed at investigating various factors that influence credit risk and also aimed at studying the impact of credit risk on the profitability of the bank. The secondary data was collected from the annual reports of the State Bank of India for twenty years (1996- 1997 to 2015-2016). The data were analyzed using multiple regressions. The result showed that credit risk has a significant, negative impact on profitability. Moreover, the study concluded that the State Bank of India has been facing credit risk due to inefficient credit risk management and hence should minimize the credit risk by reducing the nonperforming assets and managing the leverage properly. The study utilized multiple regressions where autocorrelation of the variables can affect the findings. The analysis of the data violated the assumptions of the autocorrelation, which was neglected in this study. To prevent the possibility of this autocorrelation error, the adoption of the linear regression would have been more appropriate. Noman, Pervin, Chowdhury, and Banna (2015) found the effect of credit risk on the profitability of the banking sectors of Bangladesh. The study used an unbalanced panel data and 172 observations from 18 private commercial banks from 2003 to 2013.

The analysis reveals some significant policy implications for increasing profitability and protecting banks from a crisis Profitability of commercial banks in Ethiopia. In analyzing the data, a SPSS software version 20 was used to compute the descriptive statics and panel data regression model and the outcome was that credit risk determinants; credit risks, loan loss provisions, and capital adequacy have a significant impact on the profitability of commercial banks in Ethiopia. Therefore, the researchers concluded the need to stressed strengthening the credit risk management policies to gain better financial standing for commercial banks in a commercial in Ethiopia. The sample selected for this study was two commercial banks which are inadequate. With only two commercial banks selected and used, generalizing the findings give more doubt to the outcome. With this study to be conducted, the researcher intends to select four banks listed in the Ghana Stock Exchange in the Bono East Region.

2.4.2 Credit Risk and Liquidity

Khan and Ali (2016) aim at investigating the relationship between liquidity and profitability of commercial banks in Pakistan. The study was to find the nature of the relationship, and the strength of the relationship exists between the variables. Correlation and regression are used respectively to discover the kind of relationship and extent of the relationship between dependent and independent variables. Secondary data was used for analysis that was extracted from the last five years (2008-2014) annual accounts of bank of abysiniya Limited. After conducting correlation and regression analysis, the study concluded that there as a significant positive relationship between liquidity with the profitability of the banks. The author concentrated on only liquidity and profitability, neglecting the other financial performance indicators. Indicators such as Capital Adequacy, Earnings and Profitability, Management Efficiency, and Asset Quality were lacking. However, this study to be conducted will include all these financial indicators.

The Study on Hakim and Neaime (2002) cited in Gatuhu (2013) on performance and credit risk in banking:

A Comparison Study for Egypt and Lebanon" investigates the impact of liquidity, credit and capital on bank profitability in order to shed light on the strength of risk management practices by using the regression model of time series and cross-section data of banking institutions in Lebanon and Egypt during the period (1993-1999). The study expressed the likelihood of borrowers not repaying their loans as promised. Applying right loan policies with a proper assessment of credit risk and determining the appropriate amount of collateral with little concentration of investment and adequate training for credit officers are part of sound risk management. Liquidity has a positive relationship with the effectiveness of credit risk management as the higher the liquidity ratio, the more the coverage of its liabilities. The study concluded that capital adequacy has a positive relationship with the effectiveness of credit risk management.

2.4.3 Credit Risk and Capital Adequacy

Ogboi and Unuafe (2013) examined the impact of credit risk and capital adequacy ratio on banks' financial performance in Nigeria using time series and cross-sectional data from 2004-2009. Moreover, the panel data model also was used to estimate the impact of loans and advances (LA), non-performing loans (CRM) and capital adequacy (CA) on return on asset (ROA). The findings concluded that credit risk management and capital adequacy ratio have a positive impact on performance, whereas loans and advances hurt the bank's profitability.

The author made use of the time series data but did not check on the assumptions of the series. It is not appropriate to run an inferential analysis without checking for the normality of the data. Alshatti (2015) examined the impact of credit risk governance on Jordan's economic performance (2005-2013) and chose thirteen commercial banks to convey their views on all Jordanian commercial banks. The results concluded that the Capital Adequacy ratio, Credit interest/Credit facilities, as well as the leverage ratio don't influence the profits of the Jordanian commercial banks as estimated by ROE, suggesting that other variables albeit capital adequacy ratio, credit interest/credit tools and the leverage ratio effect on banks' profitability. The study neglected management efficiency, which is a very relevant indicator of financial performance in the banking sector.

This study fills this research gap by including management efficiency and earnings and profitability in the financial measurement process. Kurawa and Garba (2014) assessed the effect of credit risk management (CRM) on the profitability of two Nigerian banks with a view to discovering the extent to which default rate (DR), cost per loan asset (CLA), and capital adequacy ratio (CAR) influence return on asset (ROA) as a measure of banks' profitability. Data were generated from secondary sources; generally, the annual reports and accounts of quoted banks from 2002 to 2011. Descriptive statistics, correlation, as well as random effect generalized least square (GLS) regression techniques were utilized as tools of analysis in the study. The findings concluded that CRM, as measured by three independent variables, has a significant positive effect on the profitability of Nigerian banks. The sample selected for this study was inadequate. The study used only banks in the Nigerian Stock Exchange, which is far below the 18 listed banks in the Nigerian economy.

The economic performance of second-class commercial banks in Kenya was assessed by Kipruto, Wepukhulu, and Osodo (2017). Based on the report, the research looks at how the capital adequacy ratio affects business banks economic performance in Kenya. The study was solely quantitative, and thus, the design of correlation and descriptive research was used. The trial took place in Kenya's 14-second level commercial banks. It gathered economic information from 2013 to 2016, given that CBK and commercial banks ' websites came into force in 2013. After the National Committee for Science, Technology, and Innovation (NACOSTI) obtained authorization and endorsement, the Central Bank of Kenya provided information. A descriptive review was conducted on the data gathered. In this study, it is not suitable to accept descriptive statistics. In this case, the regression model would have been more appropriate since the study

was based on the study of the capital adequacy ratio and its impacts on financial performance. The cause (influence used in the study) is best determined using the regression analysis.

2.4.4 Credit Risk Management and Management Efficiency

Abdelrahim (2013) investigated the determinants, challenges, and developing means of credit risk management at Saudi Banks. The methodology is descriptive and analytical using the SPSS for analyzing the performance of credit risk management. The study concluded that liquidity has a significant strong positive impact besides bank size, which has a significantly strong adverse effect on the effectiveness of credit risk management. In conclusion, the study indicated that while other variables of capital adequacy, asset quality, management soundness, and earning have an insignificant impact on the efficiency of credit risk management. The study evaluated the determinants and the challenges as well as developing means of credit risk management. The study, therefore, neglected the impact that these determinants have on the performance of the banking sector.

The Study of Rani (2009) cited by Kipruto, Wepukhulu and Osodo (2017) on "CAMEL Framework of Risk Management in Indian Banks" emphasized the following determinants of the efficiency of credit risk management: enhancing capital adequacy; strengthening assets quality; improving management soundness; increasing earnings, having adequate liquidity and reducing sensitivity to market risk. The study concluded that the asset turnover ratio, which is a proxy of management soundness, is increasing every year in Indian banks that denote bank efficiency in using assets in generating revenue. This study used the t-test for the analysis of the data. However, studies of this nature which emphasize effect is better evaluated using the inferential analysis such as Regression and Time Series Analysis.

Sheeba (2017) aimed at investigating the influence of Credit risk on the profitability of the bank. Through comprehensive literature review, various factors that influence Credit risk are classified as Capital adequacy ratio (CAR), Nonperforming Asset ratio (NPA), Loan to Deposit Ratio (LDR), Cost per Loan Ratio (CLR), Outline Coverage Ratio (PCR), Leverage Ratio (LR), and Nonperforming Asset to Asset Ratio (NPAAR). Return on Equity (ROE) is recognized as an indicator of profitability. The secondary data is solicited from the Annual reports of the State Bank of India for twenty years (1997-2016). The data is analyzed using multiple regressions. The result showed that NPAAR alone has a significant negative impact on ROE, and other indicators of credit risk do not have a significant impact on ROE. But overall credit risk has a significant impact on the profitability of State Bank of India. State bank of India bears credit risk due to inefficient Credit risk management. So, it is advised to fix

Credit risk management practices in State Bank of India. The State Bank of India can minimize Credit risk by reducing the Nonperforming assets by framing strict loan policies.

2.5 Knowledge Gap

From the above theoretical as well as empirical review, credit risk is affecting the performance of the Banking industry. Correspondingly, in the literature, the Bank profitability is usually expressed as a function of internal and external determinants. Various studies have been made in different countries regarding these variables. Among others, the most important internal determinants that are affecting performance include Bank Size (Age), Provision to Total Loans, Cost per Loan and Loan to Total Asset.

The studies made shows consistent results with respect to loan to total asset, Provision to Total Loans, however the empirical results for cost per loan and Bank size (Age) were mixed. Looking into the analysis of the audited financial statements for the banks for the past consecutive five years (2008-2012) depicts that, the provision to loan of the banks is above 1% which should have been the case had the entire loan and advances were under normal status i.e. in alignment of the repayment modality. The maximum was 5.7% in 2008 which is even higher than National Bank tolerable limit of 5% and the lower being 2.4% in 2012. The loan to total asset has shown a decrease from 2008 to 2011 which shows a negative implication as it is one of the major sources of revenue for the banking industry. Contrary however Cost per loan asset has increased. Thus, the research tried to examine the impact of credit risk on the profitability of Ethiopian commercial Banks and identifies the relationships between the Loan Loss Provision, Loan and Advance to Total Asset, Cost per Loan and Bank Size with Banks Profitability. The research fills the gaps below that exist in the country.

Academic (Literature) gap, the studies made in the Ethiopia so far do not consider variables like Age or Size, Cost per Loan Asset in relation to performance of the banks which however were done well in different countries. Therefore, the research serves as additional complement as reflecting the local banking industry context. As the research is applied one, it is further believed that such a study with recognition of these variables would contribute to policy making and devise risk mitigating mechanisms.

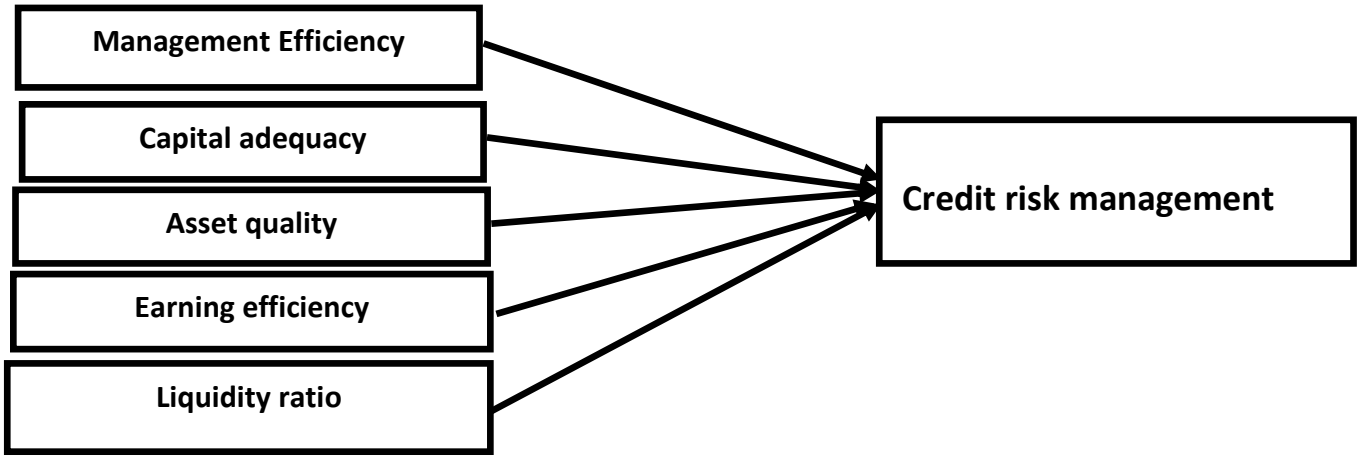
2.6 conceptual framework

The researchers considered the determination of credit risk management, as indicated in earlier studies (Agyei, 2017; Olabamiji & Michael, 2018; Taiwo et al., 2017). In their studies, credit risk management was taken as the ability to minimize the ratio of non-performing loans of a bank to

its total loans and advances. This is in accordance with the definitions of sound credit risk management as systems (which include risk identification, measurement, assessment, monitoring, and control) of policies and strategies (guidelines) which clearly targets the minimization of non-performing loans and through effective credit portfolio management; that is, how loans were originated, appraised, supervised and collected (Chen & Pan, 2012; Nawaz, 2012; Kodithuwakku & Lanka, 2015). For the components of the CAMEL as a measure of the financial performance of the banks, the study adopted the ratio of Equity to total asset as a measure for bank capital adequacy; the ratio of provision for bad debt to advances as the measure for asset quality; a ratio of operational costs to the total generated revenues as management efficiency; the return on average assets as earnings efficiency and a measure of net loans to total assets as liquidity.

Independent variable

I **Dependent variable**



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CHAPTER THREE

METHODOLOGY

This chapter focuses on the numerous methods and procedures used to perform the study and answer the objectives of the study mentioned in the previous chapter. The research design, research approach, population characteristics, sampling design and sample size, data collection methods, research procedures, data analysis methods, and ethical issues were organized in the following order.

3.1. Research Design

In this research a Descriptive and explanatory research design will be used. The descriptive research design aims to describe the current state of the identified variables. Descriptive research is considered appropriate because subjects are generally observed in their natural environment and can produce accurate and reliable information (Britt, 2006). Descriptive research studies are designed to describe phenomena or describe how various behaviors and events occur. Therefore, it will be useful in investigate Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis district

3.2. Research approach

Here the study used a mixed research approach in order to achieve the study's goal and answer the research questions. In this study Individuals contacted and questionnaires has distributed, which was filled up and returned to this research. With investigate credit risk management and its effect on the performance of bank of Abyssinia the case of west Addis district was investigated using linear regression. This method was chosen because it is an effective instrument for gathering data from a sample population in order to research the topic at hand.

3.2.1 Characteristics of population

The population about analysis will made is banks of Abyssinia customers and employees in Addis Ababa. The target populations of this study are from banks of Abyssinia data base and

from which the sample respondents will selected and the total number of employees live on such area will be used.

3.2.2. Sampling techniques and sample size

3.2.2.1 Sampling technique

The number of sample units is large and time and cost-constrained samples will draw from the target population by using non-probability sampling. This study uses non-probability sampling; because it is difficult to personally arrive at the randomly selected sample based on the customer list. When the population is unlimited, it is better to use convenient sampling techniques to reduce cost, time and ease of handling Saunders, Lewis and Thornhill, (2009). Laekemariam, (2015. The right sample size must be determined in order to draw confident generalizations about the construct under research. Size of the sample the act of determining the number of observations or repetitions to include in a statistical sample is known as sample size determination.

3.2.2.2 Sample size

According to Cooper and Schindler (2008), sample size is described as a smaller set of elements from the larger population. Mugenda (2003) argued that the choice of sample size is governed by the confidence you need to have in your data, level of certainty, and the accuracy. The sample computation will be as follows. Using all population for data collection is difficult for one researcher. So, it is difficult to use all population, and the researcher using formula developed by (Yamane, 1967). The sample size calculation and proportional allocation for each stratum (teams) as follows.

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

Where N= number of total populations

n= sample

e=level of precision (5%)

$$n = \frac{N}{1+N(e)^2} = n = \frac{240}{1+240(0.05)^2} = 150$$

Therefore, My Sample size is = 150

3.4. Data source and collection procedures

Data will acquire in both quantitative and qualitative formats from both primary and secondary sources. While the study banks of Abyssinia users, it will also rely on secondary data to fill in the gaps. Customers will provide the primary data through questionnaires. The primary data is an

item unique to the question investigated. The main tool for data collection in this study is designed through a structured questionnaire which consists of closed questions. The purpose of using this type of question is because it is easier for the respondent to answer. The original data is collected through standardized questionnaire surveys, and the auxiliary information from previous studies is used to review published institutional documents, journals and reports to generate information. The data to be collected is quantitative in nature reports, journals, and written articles) are also useful for obtaining information that is not available from primary data sources.

3.5. Method of data analysis

Both qualitative and quantitative data analysis methods will be used to analyze the acquired data. Frequencies and percentages the researcher also employed in descriptive analysis to portray quantitative data in the form of tables and graphs. For analysis, the data was coded and entered a computer using the statistical software for social science (SPSS Version 21). Each independent and dependent variable's means, standard deviations, correlations, and frequency distribution are provided. In this study, the mean and standard deviation are the most descriptive statistics utilized to describe the data.

3.6 Data collection instrument

After collecting the pilot questionnaires from the customers and obtaining a Cronbach's Alpha of > 0.60 based on the reliability test Zikmund, Babin, Carr, Griffin, (2010), the main data of the study collected, for which the rarely modified version. This study will use the five-point Likert scale to affirm. Compared to two- and seven-scale systems, this scale is more reliable and an effective option, because if the number of response options is greater than five, the reliability will be reduced Hayes, 1992. Primarily The level of customer consent based on the Likert scale of five points from "1" (strongly disagree) to "5" (strongly agree) is used for customers

3.7. Ethical Considerations

Ethical considerations will be examined by the researcher. Respondents have the option of participating or not participating in the survey, and the survey enumerator will inform them of the poll's aim as well as the confidentiality of their responses. Emerging ethical considerations will evaluate and addressed during the study's execution. The objective and importance of the study, as well as confidentiality, will state in the introduction section of the questionnaire for this purpose. Respondents advised that they have complete freedom to fill out the questionnaires or withdraw from the study at any time, with no negative consequences, and that their participation

or non-participation would not hurt them. Structured questionnaires were given to obtain primary data. To shield their responses from predisposition, only generic information will write in the paragraph of the questionnaire.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

The data is presented, analyzed, and interpreted in this chapter. The data acquired by the questionnaire is analyzed in this chapter four. The data was analyzed using descriptive and inferential statistical approaches, depending on the type of data collected. The general characteristics of the respondents, such as gender, educational qualification, and work experience in the company and job type, were analyzed using frequency and percentage. Mean, standard deviation, Pearson correlation coefficient, and multiple linear regressions were also calculated.

4.1 Response Rate

According to Bacon (2014), response rate is defined as the extent to which the final set of questionnaires collected from respondents is calculated against the number of questionnaires received back from respondents interviewed in the study. For this study, sample size was 150 respondents. From this sample size 122 fully filled questionnaires were received back from respondents representing a response rate of 82%. Objective one was to know the demographic characteristics of the respondents. To achieve it, questions were asked to capture these responses. Frequencies and percentage distribution table were employed to summarize the demographic characteristics of the respondents.

Table 4.1: response Rate

No.	Respondents' category	Frequency	Percentage
1	Responded	122	82%
2	Did not responded	28	18%
Total		150	100%

(Source: SPSS output researcher survey data, 2024)

4.2 General Information of the Respondents

This section profiles the respondents in respect to gender, age, marital states, level of education and year of experience the respondents. The items in the research instruments used in the study informed profiling of the respondents.

4.2.1 Gender of respondents

Figure 4.3 genders of the respondent

genders of the respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	68	55.7	55.7	55.7
	female	54	44.3	44.3	100.0
	Total	122	100.0	100.0	

The data sought on whether respondents were males or females. The study found it important to analyze gender distribution of the respondent so as to compare the level of participation in managers and employees of in banks of Abyssinia. The study considered any of the gender in the selection of respondents. Respondents asked to indicate their gender. From the finding of the study males made the majority of the respondents at 68 (55.7 %) and the females at 54 (44.3 %) as shownthe above table. This indicates the majority of the respondents are males.

4.2.2 Age of the respondent

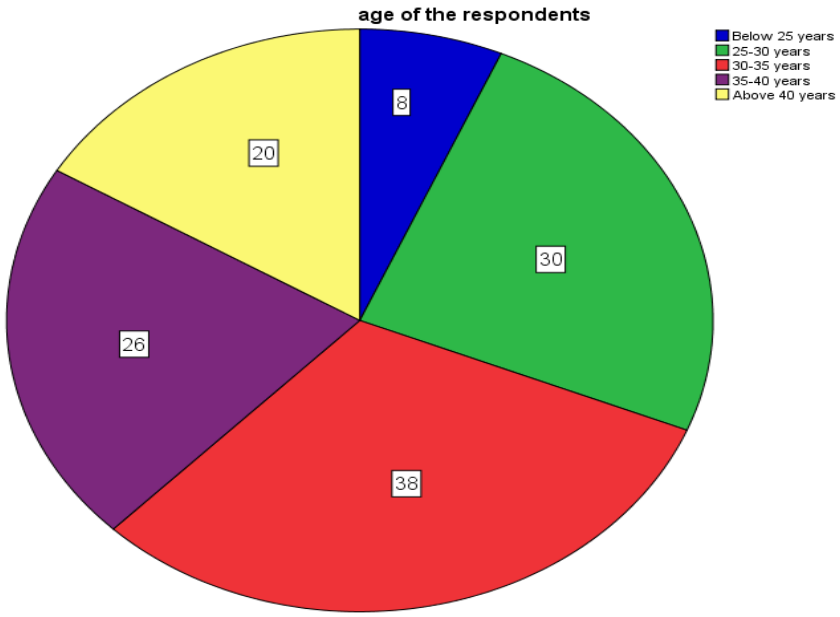

Figure 1 age of the respondents

Source: - SPSS output 2024

From the given figure above Respondent asked to indicate their age group in years. This was done to understand the age distribution of the respondents since an individual's age was consideration in the selection of respondents in this study. Age groups classified into five categories: - Regarding to respondent Age category in year majority 38 (31.1%) of respondents are participated at age of 30-35 years old, similarly the second highest number 30 (24.6 %) of respondents are ate age of 25–30-year-olds. In other hand the list participated respondents are 35-40 years old are 26 (21.3%), Above 40 years olds are 20(16.4) and finally the remaining respondents are Below 25 years which is 8(6.6%). This confirms that 38 (31.1%) of respondents were youths between the age of 26-35 years. About the age, distribution of many of them found at young and youth age.

4.2.3 Education level of respondents

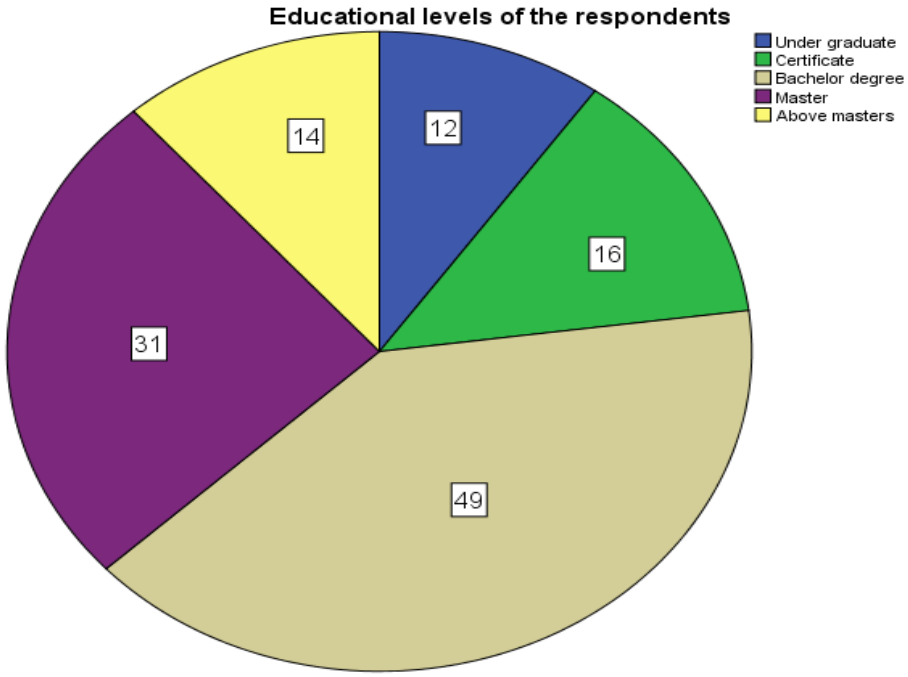

Figure 1. Educational levels of the respondents

Source: - SPSS output 2024

From the figure above the respondents asked to indicate their highest level of education. Respondent's level of education considered important in this study in respect to responding to the research instruments as well understanding credit risk management practice of in banks of Abyssinia. The study sought to establish the educational level of respondents from the findings of the respondents 49 (49.2%) are Bachelor degree followed by masters 31 (25.4%) whereas certificate holders are 16 (13.1%) as shown in the table above. Finally, 12 (9.8%) of the respondents are undergraduates and 14 or 11.5 % are above masters. From this majority of the respondents are educated and have a knowledge of credit risk management practice.

4.2.4 Martial states of respondents

Table 4.3 Martial states of respondents

Martial states of the respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	single	46	37.7	37.7	37.7
	married	58	47.5	47.5	85.2
	Divorce	18	14.8	14.8	100.0

	Total	122	100.0	100.0	

From the given figure above Respondent asked to indicate their Martial states. This was done to understand the Martial stats of the respondents since an individual's Martial states was considered in the selection of respondents in this study. Total respondents conceded 47.5% of the respondents are married whereas 37.7% of the given respondents are single and finally the remaining respondents are divorced.

In general, from the information given majority of the respondents are married as result the will highly contributed to credit risk management practice banks of Abyssinia

4.2.5 Work Experience of respondents

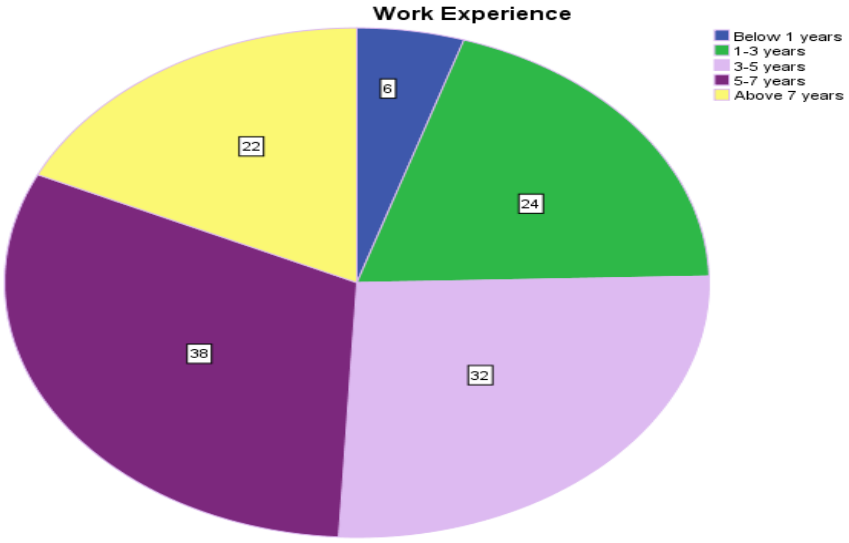

Figure 2. Work Experience of respondents

Source: - SPSS output 2024

From the given table above the study sought to establish that the work experience of respondents from the findings of the respondents below 1 year are 6 (4.9%) and those respondents who are 1-3 years of work experience are 24 (19.7%) followed by those 3-5 years of experience of 32 (26.2 %). From the given table above respondents with 5-7 years of work experience are 38 (31.1 %) and above 7 years 22 (18 %) as shown the above table. So, the from the work exercise of respondents we can concluded that 31.1% of the major respondents have 5-7 years of work experience and have basic knowledge on credit risk management practice

4.3 Descriptive statics of Credit risk management and its impact on performance

4.3.1 Capital adequacy

This section presents the analysis of Capital adequacy obtained from the results. Interpretation of

the data and findings in the following discussion produced the mean score and standard deviation of the responses of respondents on Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis district. Please show the extent of your perception on the assessments of credit risk management. Please indicate in the Rating or Liker items measuring technique using very high (VH), High (H), Moderate (M), Low (L) and very low (VL) to rate the exhibited Capital adequacy. The analysis of the Capital adequacy was investigated by using means and standard deviations from the results. The results of the means were interpreted based on 1-1.49 = Very Low; 1.5-2.49 = Low; 2.5-3.49 = Moderate; 3.5-4.49 = High; 4.5-5.0 = Very high.

Table 4.4 Descriptive Statistics of Capital adequacy

Descriptive Statistics of Capital adequacy					
	N	Minimum	Maximum	Mean	Std. Deviation
The percentages of risk weighted asset are important to avoid risk	122	1.00	5.00	3.8689	.91769
Banks availability capital important to resist credit risk management	122	2.00	5.00	4.1721	.94206
CA helps to ensuring solvency of banks	122	1.00	5.00	3.5410	1.28016
CAR mandate that a certain amounts of the depositors to keep aside when loan being made	122	1.00	5.00	3.6967	1.29135
CA used for credit exposer in your bank	122	1.00	5.00	3.8607	1.15934
Risk management is clearly set out and understood in your institution	122	1.00	5.00	3.6803	1.20787
Valid N (listwise)	122				
Aggregate mean and STD				3.8033	1.120987

Source: - SPSS output survey data 2024

The results presented in Table 4.4 indicate that the sample mean for individual items ranged between 3.5410 and 4.1721. These values of sample mean generally tends to 3.8033 on the Likert scale used in this study and thus translates to agreement amongst respondent in respect to the activities implied by the statements. Similarly, the sample standard deviation for the different responses ranged between .91769 and 1.29135 demonstrating that the responses were

fairly close together around the sample mean as the variability was narrow. Furthermore, the aggregate scores for sample mean and sample standard deviation for Capital adequacy were 3.8033 and 1.120987 respectively.

According to the given table majority of the respondents stated that Banks availability capital important to resist credit risk management having a highest means of 4.1721 and STD of .94206 The percentages of risk weighted asset are important to avoid risk having a highest means of 3.8689 and STD of .91769 and CA used for credit exposer in your bank having a highest means of 3.8607 and STD of 1.15934respectively.

On the other hand majority, the respondents stated that CAR mandate that a certain amounts of the depositors to keep aside when loan being made having a means of and 3.6967 STD of 1.29135, risk management is clearly set out and understood In your institution having a means of 3.6803 STD of 1.20787 and CA helps to ensuring solvency of banks having a means of 3.5410 STD of 1.28016 respectively.

In general Capital adequacy of the respondents were highly impacted Credit risk management and its performance on the bank of Abyssinia in case of west Addis district having aggregate scores for sample mean and sample standard deviation for Capital adequacy were 3.8033 and 1.120987 respectively

4.3.2 Asset quality

This section presents the analysis of Asset quality obtained from the results. Interpretation of the data and findings in the following discussion produced the mean score and standard deviation of the responses of respondents on Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis district. Please indicate in the Rating or Liker items measuring technique using very high (VH), High (H), Moderate (M), Low (L) and very low (VL) to rate the exhibited Asset quality. The analysis of the Capital adequacy was investigated by using means and standard deviations from the results. The results of the means were interpreted based on: 1-1.49 = Very Low; 1.5-2.49 = Low; 2.5-3.49 = Moderate; 3.5-4.49 = High; 4.5-5.0 = Very high.

Table 4.5 Descriptive Statistics of Asset quality

Descriptive Statistics Asset quality					
	N	Minimum	Maximum	Mean	Std. Deviation
Decreasing asset value having an adverse effect	122	1.00	5.00	3.7705	1.10436

Your institution is good in asset quality	122	2.00	5.00	4.2705	.82359
Asset quality is a managements of credit risk	122	1.00	5.00	3.5984	1.10341
Asset quality determine risk that profoundly impacts liquidity and cost	122	1.00	5.00	4.0410	1.06327
Your bank improves asset quality to prevent risks	122	1.00	5.00	3.3443	1.16966
Inferior asset quality increase risk relatives to your banks	122	1.00	4.00	3.1393	1.04696
Valid N (listwise)	122				
Aggregate mean and STD				3.694	1.069437

Source: - SPSS output survey data 2024

The results presented in Table 4.5 indicate that the sample mean for individual responses ranged between 3.1393 and 4.2705. These values of sample mean generally tends to 3.694 on the Likert scale used in this study and thus translates to agreement amongst respondent in respect to the activities implied by the statements. Similarly, the sample standard deviation for the different responses ranged between .91769 and 1.29135 demonstrating that the responses were fairly close together around the sample mean as the variability was narrow. Furthermore, the aggregate scores for sample mean and sample standard deviation for Asset quality were 3.694 and 1.069437 respectively.

According to the given table majority of the respondents stated that Your institution is good in asset quality having a highest means of 4.2705 and STD of .82359, Asset quality determine risk that profoundly impacts liquidity and cost having a highest means of 4.0410 and STD of 1.06327 and Decreasing asset value having an adverse effect having a highest means of 3.7705 and STD of 1.10436 respectively.

On the other hand, majority, the respondents stated that Asset quality is a managements of credit risk having a means of and 3.5984 STD of 1.10341, Your bank improve asset quality to prevent risks having a means of 3.3443 STD of 1.16966 and Inferior asset quality increase risk relatives to your banks having a means of 3.1393 STD of 1.04696 respectively.

In general asset quality of the respondents were highly impacted Credit risk management and its performance on the bank of Abyssinia in case of west Addis district having aggregate scores for sample mean and sample standard deviation for asset quality were 3.694 and 1.069437 respectively

4.3.3 Management quality

This section presents the analysis of Management quality obtained from the results. Interpretation of the data and findings in the following discussion produced the mean score and standard deviation of the responses of respondents on Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis district. Please indicate in the Rating or Liker items measuring technique using very high (VH), High (H), Moderate (M), Low (L) and very low (VL), to rate the exhibited Management quality. The analysis of the Management quality was investigated by using means and standard deviations from the results. The results of the means were interpreted based on 1-1.49 = Very Low; 1.5-2.49 = Low; 2.5-3.49 = Moderate; 3.5-4.49 = High; 4.5-5.0 = Very high.

Table 4.6 Descriptive Statistics of Management quality

Descriptive Statistics Management quality					
	N	Minimum	Maximum	Mean	Std. Deviation
Management Quality ensures high quality of product by reduce risks	122	1.00	5.00	4.0082	1.06403
Management quality is important for banking industry	122	1.00	5.00	3.9098	1.15711
Management quality important for credit risk management	122	1.00	5.00	3.7951	1.10550
Management quality results banks profitability	122	1.00	5.00	3.8770	1.07240
Management quality increase customer loyalty and retention in banks	122	1.00	5.00	3.7377	1.14129
Valid N (listwise)	122				
Aggregate mean and STD				3.86556	1.12671

Source: - SPSS output survey data 2024

The results presented in Table 4.6 indicate that the sample mean for individual responses ranged between 3.7377 and 4.0082. These values of sample mean generally tends to 3.86556 on the Likert scale used in this study and thus translates to agreement amongst respondent in respect to the activities implied by the statements. Similarly, the sample standard deviation for the different responses ranged between 1.06403 and 1.15711demonstrating that the responses were close together around the sample mean as the variability was narrow. Furthermore, the aggregate scores for sample mean and sample standard deviation for Management quality were 3.86556 and 1.12671 respectively.

According to the given table majority of the respondents stated that Management Quality ensures high quality of product by reduce risks having a highest means of 4.0082 and STD of 1.06403, Management quality is important for banking industry having a highest means of 3.9098 and STD of 1.15711 and Management quality results banks profitability having a highest means of 3.8770 and STD of 1.07240 respectively.

On the other hand, majority, the respondents stated that Management quality important for credit risk management a means of and 3.7951 STD of 1.10550, Management quality increase customer loyalty and retention in banks having a means of 3.7377 STD of 1.14129 respectively.

In general Management quality of the respondents were highly impacted Credit risk management and its performance on the bank of Abyssinia in case of west Addis district having aggregate scores for sample mean and sample standard deviation for Management quality were 3.86556 and 1.12671 respectively

4.3.4 Earning efficiency

This section presents the analysis of earning efficiency obtained from the results. Interpretation of the data and findings in the following discussion produced the mean score and standard deviation of the responses of respondents on Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis district. Please indicate in the Rating or Liker items measuring technique using very high (VH), High (H), Moderate (M), Low (L) and very low (VL), to rate the exhibited earning efficiency. The analysis of the earning efficiency was investigated by using means and standard deviations from the results. The results of the means were interpreted based on 1-1.49 = Very Low; 1.5-2.49 = Low; 2.5-3.49 = Moderate; 3.5-4.49 = High; 4.5-5.0 = Very high.

Table 4.7 Descriptive Statistics of earning efficiency

Descriptive Statistics of Earning efficiency					
	N	Minimum	Maximum	Mean	Std. Deviation
Banks has the ability to sustain and earn continuously	122	1.00	5.00	3.7705	1.15556
The bank maintaining an adequate level of capital, taking up growth and diversification strategies	122	1.00	5.00	4.0656	1.01018
The bank can increase Profitability when it reduces its Credit Risk	122	1.00	5.00	4.0574	1.07795
The bank Earning efficiency can achieve by closely worked with customers.	122	1.00	5.00	3.9016	.81727
Higher bank Earning efficiency is a result of proper Credit Risk Management Practices	122	1.00	5.00	3.8689	1.09054
Valid N (listwise)	122				
Aggregate mean and STD				3.9328	.967541

Source: - SPSS output survey data 2024

The results presented in Table 4.7 indicate that the sample mean for individual responses ranged between 3.7705 and 4.0656. These values of sample mean generally tends to 3.9328 on the Likert scale used in this study and thus translates to agreement amongst respondent in respect to the activities implied by the statements. Similarly, the sample standard deviation for the different responses ranged between .81727 and 1.15556 demonstrating that the responses were fairly close together around the sample mean as the variability was narrow. Furthermore, the aggregate scores for sample mean and sample standard deviation for earning efficiency were 3.9328 and .967541 respectively.

According to the given table majority of the respondents stated that the bank maintaining an adequate level of capital, taking up growth and diversification strategies having a highest means of 4.0656 and STD of 1.01018, The bank can increase Profitability when it reduces its Credit Risk having a highest means of 4.0574 and STD of 1.07795 and The bank Earning efficiency can achieve by closely worked with customers. having a highest means of 3.9016 and STD of .81727 respectively.

On the other hand, majority, the respondents stated that Higher bank Earning efficiency is a result of proper Credit Risk Management Practices having a means of and 3.8689 STD of 1.09054, and Bank's has the ability to sustain and earn continuously having a means of 3.7705 STD of 1.15556 respectively.

In general earning efficiency of the respondents were highly impacted Credit risk management and its performance on the bank of Abyssinia in case of west Addis district having aggregate scores for sample mean and sample standard deviation for earning efficiency were 3.9328 and .967541 respectively

4.3.5 Liquidity ratio

This section presents the analysis of Liquidity ratio obtained from the results. Interpretation of the data and findings in the following discussion produced the mean score and standard deviation of the responses of respondents on Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis district. Please indicate in the Rating or Liker items measuring technique using very high (VH), High (H), Moderate (M), Low (L) and very low (VL). The analysis of the Liquidity ratio was investigated by using means and standard deviations from the results. The results of the means were interpreted based on: 1-1.49 = Very Low; 1.5-2.49 = Low; 2.5-3.49 = Moderate; 3.5-4.49 = High; 4.5-5.0 = Very high.

Table 4.8 Descriptive Statistics of Liquidity ratio

Descriptive Statistics of Liquidity ratio					
	N	Minimum	Maximum	Mean	Std. Deviation
Liquidity Ratio determines banks' ability to pay	122	1.00	5.00	3.6230	1.16653
Liquidity Ratio in your bank is high	122	1.00	5.00	3.4016	1.20371
Liquidity Ratio commonly used in your bank	122	1.00	5.00	3.2623	1.19782
Liquidity Ratio indicates the sufficient of your bank's current asset	122	1.00	5.00	3.7131	1.16760
Liquidity Ratio important to credit management in your bank	122	1.00	5.00	3.5984	1.23087
Valid N (listwise)	122				
Aggregate mean and STD				3.51968	1.18692

Source: - SPSS output survey data 2024

The results presented in Table 4.8 indicate that the sample mean for individual responses ranged between 3.2623 and 3.7131. These values of sample mean generally tends to 3.9328 on the Likert scale used in this study and thus translates to agreement amongst respondent in respect to the activities implied by the statements. Similarly, the sample standard deviation for the different responses ranged between 1.16653 and 1.23087 demonstrating that the responses were fairly close together around the sample mean as the variability was narrow. Furthermore, the aggregate scores for sample mean and sample standard deviation for Liquidity ratio were 3.51968 and 1.18692 respectively.

According to the given table majority of the respondents stated that Liquidity Ratio indicates the sufficient of your banks current asset having a highest means of 3.7131 and STD of 1.16760, Liquidity Ratio determines banks' ability to pay having a highest means of 3.6230 and STD of 1.16653 and Liquidity Ratio important to credit management in your bank having a highest means of 3.5984 and STD of 1.23087 respectively.

On the other hand, majority, the respondents stated that Liquidity Ratio in your bank is high having a means of and 3.4016 STD of 1.20371 and Liquidity Ratio commonly used in your bank having a means of 3.2623 STD of 1.19782 respectively.

In general Liquidity ratio of the respondents were highly impacted Credit risk management and its performance on the bank of Abyssinia in case of west Addis district having aggregate scores for sample mean and sample standard deviation for Liquidity ratio were 3.51968 and 1.18692 respectively

4.3.6 Credit risk management

This section presents the analysis of Credit risk management obtained from the results. Interpretation of the data and findings in the following discussion produced the mean score and standard deviation of the responses of respondents on Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis district. Please indicate in the Rating or Liker items measuring technique using very high (VH), High (H), Moderate (M), Low (L) and very low (VL), to rate the exhibited Credit risk management. The analysis of the Credit risk management was investigated by using means and standard deviations from the results. The results of the means were interpreted based on: 1-1.49 = Very Low; 1.5-2.49 = Low; 2.5-3.49 = Moderate; 3.5-4.49 = High; 4.5-5.0 = Very high.

Table 4.9 Descriptive Statistics of Credit risk management

Descriptive Statistics of Credit risk management					
	N	Minimum	Maximum	Mean	Std. Deviation
The credit risk strategy set by the Board of Directors are effectively transformed and communicated within your institution the shape of policies and procedures by the top management	122	1.00	5.00	3.1639	1.37487
Your institution has a credit risk rating framework across all type of credit activities	122	1.00	5.00	3.7377	1.08181
Your institution monitors quality of the credit portfolio on day-to-day basis and takes remedial measures as and when any deterioration occurs‟	122	1.00	5.00	4.1066	.95179
Your institution is aware of the strengths and weaknesses of the risk management systems of other banks	122	2.00	5.00	3.7787	.91374
Your institution report for capital at risk	122	1.00	5.00	3.7541	.79577
Your institution report for credit risk	122	2.00	5.00	4.1557	.91832
The institution has competent personnel for carrying out client appraisal.	122	2.00	5.00	4.2049	.93542
Client appraisal is a viable strategy for credit management.	122	1.00	5.00	3.6639	1.18956
Valid N (listwise)	122				
Aggregate mean and STD				3.82069	.0936714

Source: - SPSS output survey data 2024

The results presented in Table 4.9 indicate that the sample mean for individual responses ranged between 3.2623 and 3.7131. These values of sample mean generally tends to 3.9328 on the Likert scale used in this study and thus translates to agreement amongst respondent in respect to

the activities implied by the statements. Similarly, the sample standard deviation for the different responses ranged between 1.16653 and 1.23087 demonstrating that the responses were fairly close together around the sample mean as the variability was narrow. Furthermore, the aggregate scores for sample mean and sample standard deviation for Credit risk management were 3.51968 and 1.18692 respectively.

According to the given table majority of the respondents stated that The institution has competent personnel for carrying out client appraisal having a highest means of 4.2049 and STD of .93542, Your institution report for credit risk having a highest means of 4.1557 and STD of .91832, Your institution monitors quality of the credit portfolio on day-to-day basis and takes remedial measures as and when any deterioration occurs having a highest means of 4.1066 and STD of .95179 and The your institution is aware of the strengths and weaknesses of the risk management systems of other banks having a highest means of 3.7787 and STD of .91374 respectively.

On the other hand majority the respondents stated that Your institution report for capital at risk having a means of and 3.7541 STD of .79577, The your institution has a credit risk rating framework across all type of credit activities having a means of and 3.7377 STD of 1.08181, Client appraisal is a viable strategy for credit management having a means of and 3.6639 STD of 1.18956 and The credit risk strategy set by the Board of Directors are effectively transformed and communicated within your institution the shape of policies and procedures by the top management having a means of 3.1639 STD of 1.37487 respectively.

In general the respondents were highly responded on statements on Credit risk management and its performance on the bank of Abyssinia in case of west Addis district having aggregate scores for sample mean and sample standard deviation for Credit risk management were 3.51968 and 1.18692 respectively

4.4 Correlations

The correlation between the dependent and independent variables are analyzed using SPSS. The correlation shows that the strength of relationship between the independent variables (Capital adequacy, Management quality, Asset quality, earning efficiency, Liquidity) with the dependent variable which is Credit risk management. The item that should be noticed is the probability (p) value. If $p>0.05$, it means that independent variable does not influence the dependent variable. If $p<0.05$ it means that independent variable influences the dependent variable (Pallant, 2010). The test also indicates the strength of a relationship between variables by (r) value that can range

from -1.00 to 1.00; when 0 indicates no relationship, - 1.00 indicates a negative correlation, and 1.00 indicates a perfect positive correlation (Pallant, 2010). For the rest of the values is used the following guideline: weak correlation for value 0.1 to 0.29; moderately strong for 0.3 to 0.49; and strong for 0.50 to 1.0 Pallant, (2010)

Table 4.11 **Correlation analysis**

Correlations							
		Capital adequacy	Asset quality	Management quality	Earning efficiency	Liquidity ratio	Credit risk management
Capital adequacy	Pearson Correlation	1	.522**	.826**	.630**	.656**	.736**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	122	122	122	122	122	122
Asset quality	Pearson Correlation	.522**	1	.739**	.358**	.516**	.742**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	122	122	122	122	122	122
Management quality	Pearson Correlation	.826**	.739**	1	.591**	.687**	.770**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	122	122	122	122	122	122
Earning efficiency	Pearson Correlation	.630**	.358**	.591**	1	.754**	.743**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	122	122	122	122	122	122
Liquidity ratio	Pearson Correlation	.656**	.516**	.687**	.754**	1	.781**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	122	122	122	122	122	122
Credit risk management	Pearson Correlation	.736**	.742**	.770**	.743**	.781**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	122	122	122	122	122	122

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

Source: Own survey, 2024

As indicated in Table above the relationship among all the variables was found by using Pearson's correlation coefficient. The correlation value r = .736** shows that there is a strong

relationship between Capital adequacy and Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis district and the p-value showed that the relationship is significant.

Regarding to Credit risk management and asset quality, r=.742**, which shows a strong relationship between the two variables, and the p-value indicates that the relationship is significant. When Coming to the relationship of Credit risk management with management quality, the r=.770** showed a strong relationship between the two variables, also p-value shows that the relationship issignificant.

Regarding to Credit risk management and Earning efficiency, r=.743**, which shows a strong relationship between the two variables, and the p-value indicates that the relationship is significant. When Coming to the relationship of Credit risk management with liquidity ratio, the r=.781**, showed a strong relationship between the two variables, also p-value shows that the relationship is significant. The result of correlation analysis shows that all study variables have positive and significant relationship with Credit risk management in the study area

4.5 Regression Analysis

Multiple regression analysis studies the relationship between a dependent (response) variable and independent variable (predictors, repressors', IV's). In this study multiple regression analysis was used. Regression analysis is a statistical method that relates one dependent variable to a linear combination of one or more independent variables. Regression identifies how much each independent variable has an effect on dependent variable. Multiple regression analysis calculates multiple correlation coefficients and R-square (Kerlinger and Lee, 2000).

4.5.1Testing assumptions of multiple regression model

Before conducting multiple regression analysis, the study assessed whether the collected data satisfied multiple regression model assumptions or not. According to Dhakal, (2018) any fit of a multiple regression model is valid, if and only if it should satisfy assumptions of linear relationship between, data must not show multicollinearity, Homoscedasticity, and the residuals (errors) are approximately normally distributed. The tested assumptions are shown as follows:

Assumption 1: Linearity Test

Linearity means the relationship between dependent and independent variables is to be linear. Thisrelationship characterized by a straight line. Linearity allowed the researcher to predict the dependent variable based on one or more several independent variables. The assumption was

checked through a scatter plot by looking at whether the two variables approximately form a straightline. As presented figure 3 there was linear relationship between dependent and each of independent variables in the study area.

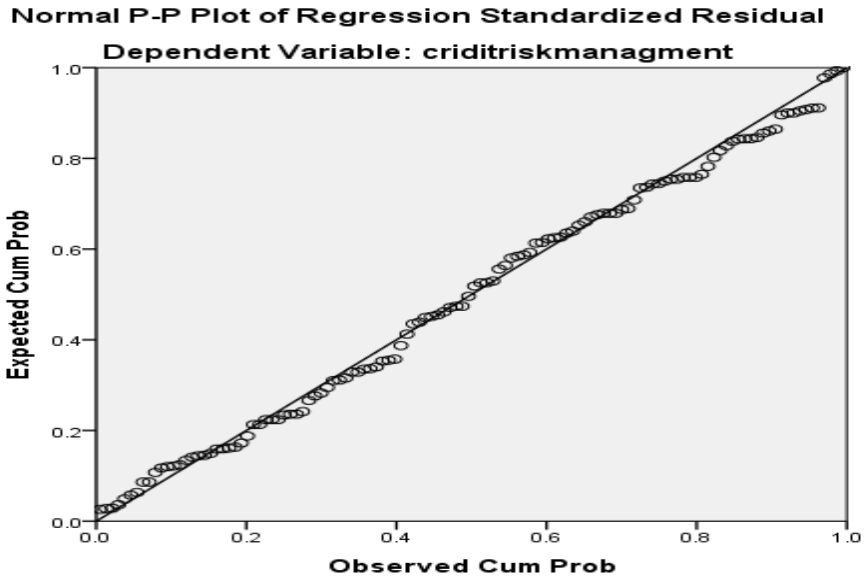

Figure 4.5 Linearity test

Source: Own survey, 2024

Assumption 2: Multicollinearity Test

Multi-collinearity is the undesirable situation when one independent variable is a linear function of other independent variables or high correlations between the independent variables (Gelman, 2006). Andy (2006) suggests that a tolerance value less than 0.1 almost certainly indicates a serious collinearity problem. According to Liu, (2010) a VIF value greater than 10 is because for concern. In this study the researcher was checked this assumption with tolerance and VIF statistics. As it canbe observed from Table 4.11 taking in to account the Variance Inflation Factor not to exceed the allowable value (10) and Tolerance value greater than (0.1) for all independent variables. Therefore,multi-collinearity problem does not exist.

Table 4.12 **Table Multicollinearity Test**

Model	Collinearity Statistics	
	Tolerance	VIF
Capital adequacy	.721	1.387
Asset quality	.603	1.659
Earning efficiency	.661	1.513

Liquidity ratio	.605	1.654
Management quality	.702	1.462

a. Dependent Variable: Credit risk management

Source: Own survey, 2024

Assumption 3: Normality Test

Most statistical analysis works on the assumption and requirement of normality (Kline, 2016). Pallant (2011) explained normal distribution as it describes a symmetrical bell-shaped curve that portrays the greatest frequency of scores in the middle, with smaller frequencies towards the extremes.

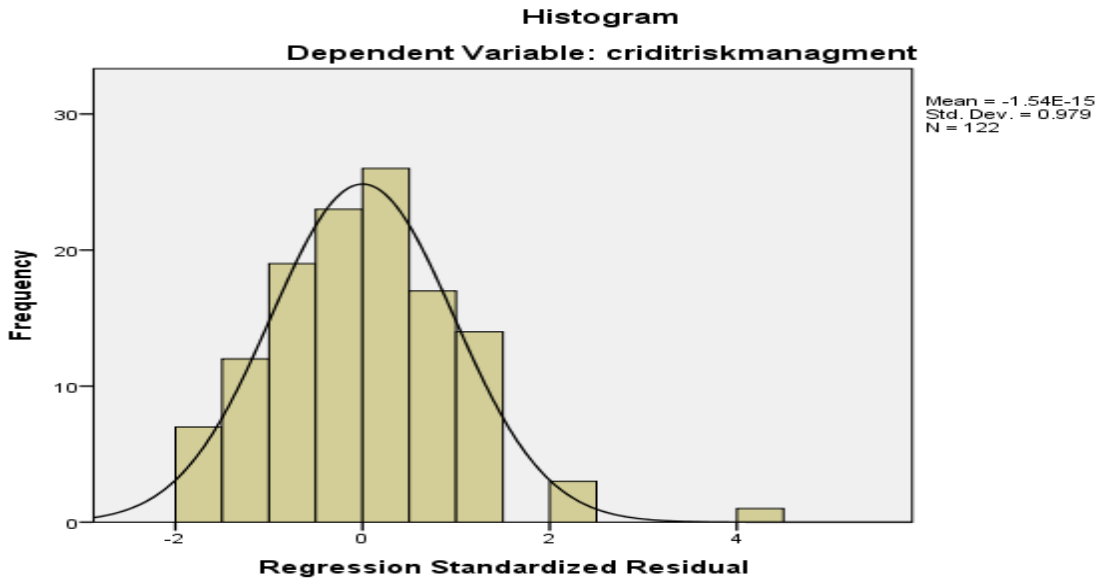

Figure 4.6 Normality test

Source: Own survey, 2024

Assumption 4:7 Homoscedasticity Test

This is the assumption that the variation in the residuals (or amount of error in the model) is similarat each point across the model. In other words, the spread of the residuals should be fairly constantat each point of the predictor variables (or across the linear model). It can be getting an idea of thisby looking at our original scatter plot but to properly test this, we need to ask SPSS to produce a special scatter plot for us that includes the whole model (and not just the individual predictors). To test this assumption, we need to plot the standardized values our model would predict, against the standardized residuals obtained. As shown in figure 5 the spread of the residuals were fairly constantat each point of the predictor variables or our plot of standardized residuals vs standardized predicted values showed no obvious signs of funneling, suggesting the assumption of homoscedasticity has been met.

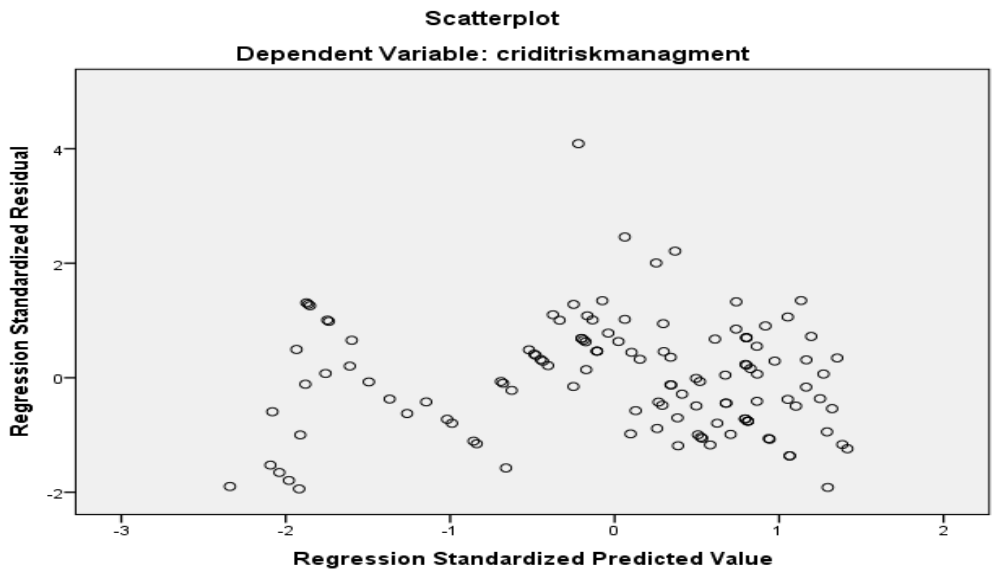

Figure 4.7 Homoscedasticity Test

Source: Own survey, 2024

4.5.2 Result of Regression Analysis

Multiple regression analysis calculates multiple correlation coefficients and R-square. The contribution of independent variables towards dependent variable is measured by Beta value and can be explained on bases of p or t values. From the study finding each point were presented below:

Table 4. 13 Model Summaries

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.925[a]	.888	.849	.26070

a. Predictors: (Constant), management quality, asset quality, earning efficiency, liquidity ratio, capital adequacy

b. Dependent Variable: credit risk management

Source: Own survey, 2024

In Table 4.13 R value represents the correlation strength between dependent variable and independent variables of the study. The value .925 shows strong correlation between variables tested (dependent and independent variables) R-square is the coefficient of determination and measures the proportion of variance in dependent variable (credit risk management) that is explained by independent variables (management quality, asset quality, earning efficiency, liquidity ratio, and capital adequacy) in case of bank of Abyssinia in case of west Addis district

Table 4. 14 ANOVA

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	46.522	5	9.304	136.899	.000[b]
	Residual	7.884	116	.068		
	Total	54.406	122			

a. Dependent Variable: credit risk management

b. Predictors: (Constant), management quality, asset quality, earning efficiency, liquidity ratio, capital adequacy

Source: Own survey, 2024

Table 4.13 shows whether the test carried out was statistically significant for the regression model used in the study using ANOVA and degree of variability. Since the sig = .000 which is less than 0.05, the model is good fit of the data tested i.e. the independent variables (management quality, asset quality, earning efficiency, liquidity ratio, capital adequacy) statistically significant to predict the dependent variable (credit risk management) at in bank of Abyssinia in case of west Addis district and The F calculated at 5% level of significance is 136.899 this shows that the overall model is significant.

Table 4. 15 Regression Coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.426	.213		-1.994	.049
	Capital adequacy	.231	.056	.318	4.148	.000
	Asset quality	.473	.050	.416	9.453	.000
	Earning efficiency	.359	.064	.321	5.646	.000
	Liquidity ratio	.163	.065	.155	2.495	.001
	Management quality	.096	.038	-.141	-2.507	.004

a. Dependent Variable: credit risk management

Source: Own survey, 2024

According to Kabir (2016) one of the approaches used to test a research hypothesis is *p*-value

approach. In this approach, researchers compute the p-value on the basis of a test statistic and thencompare it with the significance level (test size). If the p-value is smaller than the significance level, research rejects the null hypothesis. A p-value is considered as amount of risk that researchers have to take when rejecting the null hypothesis. This study used the test size of $\alpha = .05$ which is at 95% confidence level or 5% level significance. Pallent (2016) states the general rule to reject Ho if $p < 0.05$ and accept Ho if $p \geq 0.05$. Table 4.14 above presents regression coefficientresult. According to Dhakal (2018) unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant.The regression coefficient provides the expected change in the dependent variable for a one-unit increase in the independent variable. In order to measure the contribution of each independent variable on the dependent variable the study considers the following model specification by using unstandardized coefficient values.

Where: $x1$, $x2$, $x3$, $x4$ and $x5$ are independent variables of the study (i.e management quality, asset quality, earning efficiency, liquidity ratio, capital adequacy) respectively. From the above regression equation, the researcher understands that keeping all other variables constant: For every one-unit increment on Capital adequacy, the percentage of credit risk management increases by 23.1 % in the study area. For every one-unit increment on Asset quality, the percentage of credit risk management increases by 47.3 %. For every one-unit increment on earning efficiency, the percentage of credit risk management increases by 35.9%. For every one-unit increment on Liquidity ratio, the percentage of credit risk management increases by 16.3%. For every one-unit increment on Management quality, the percentage of credit risk management increases by 9.6%. As it can be seen from the regression result, out of five independent variables, the impacts of Asset quality are the most significant, followed by Earning efficiency, Capital adequacy, Liquidity ratio and then Management quality

CHAPTER FIVE

SUMMARY, CONCLUSSION AND RECOMMENDATION

5.1Summary of Findings

- The aim of this study was to investigate Credit risk management and its impact on the performance of bank of Abyssinia in case of west Addis district. This study used To identify the capital adequacy of bank of Abyssinia in credit risk management practice in case of west Addis district, To investigate the impacts asset quality on bank of Abyssinia credit risk management practice, To examine the management quality of BOA in credit risk management practice in case of west Addis district, To assess the earning efficiency of BOA In credit risk management practice in case of west Addis district, To examine the liquidity ratio of BOA In credit risk management practice in case of west Addis district
- The sample size of 150 questionnaires was distributed and 122 responses have correctly filled and returned which accounted 82% of response rate.
- Majority of the respondents 55.7 % are males and the majority of this respondents 38(31.1%) were in the age range of 30-35 years. On the other hand, the majority of respondents 49(49.2%) were bachelor's degree holders and 31.1% of them have well experienced for 5-7 year and from total respondent's considered 47.5% of the respondents are married.
- The result of the aggregate mean and STD of all Capital adequacy related items were 3.8033 and 1.120987, which lies between the range of [3.5 - 4.49] and it felt high mean range section and Capital adequacy highly impacted Credit risk management and its performance on the bank of Abyssinia in case of west Addis district
- The result of the aggregate mean and STD of all Asset quality related items were 3.694 and 1.069437, which lies between the range of [3.5 - 4.49] and it felt high mean range section and Asset quality highly impacted Credit risk management and its performance on the bank of Abyssinia in case of west Addis district
- The result of the aggregate mean and STD of all Management quality related items were 3.86556 and 1.12671, which lies between the range of [3.5 - 4.49] and it felt high mean range section and Management quality highly impacted Credit risk management and its performance on the bank of Abyssinia in case of west Addis district
- The result of the aggregate mean and STD of all earning efficiency related items were 3.9328 and .967541, which lies between the range of [3.5 - 4.49] and it felt high mean range section

and earning efficiency highly impacted Credit risk management and its performance on the bank of Abyssinia in case of west Addis district

- The result of the aggregate mean and STD of all Liquidity ratio related items were 3.51968 and 1.18692, which lies between the range of [3.5 - 4.49] and it felt high mean range section and Liquidity ratio highly impacted Credit risk management and its performance on the bank of Abyssinia in case of west Addis district
- The result of the aggregate mean and STD of all Credit risk management related items were 3.51968 and 1.18692, which lies between the range of [3.5 - 4.49] and it felt high mean range section on risk management and its performance on the bank of Abyssinia in case of west Addis district
- The correlation value r = .736** shows that there is a strong relationship between Capital adequacy and Credit risk management and its impact on performance of bank of Abyssinia in case of west Addis district and the p-value showed that the relationship is significant. Regarding to Credit risk management and asset quality, r=.742**, which shows a strong relationship between the two variables, and the p-value indicates that the relationship is significant. When Coming to the relationship of Credit risk management with management quality, the r=.770** showed a strong relationship between the two variables, also p-value shows that the relationship issignificant.
- Regarding to Credit risk management and Earning efficiency, r=.743**, which shows a strong relationship between the two variables, and the p-value indicates that the relationship is significant. When Coming to the relationship of Credit risk management with liquidity ratio, the r=.781**, showed a strong relationship between the two variables, also p-value shows that the relationship issignificant. The result of correlation analysis shows that all study variables have positive and significant relationship with Credit risk management in the study area
- For every one-unit increment on Capital adequacy, the percentage of credit risk management increases by 23.1 % in the study area. For every one-unit increment on Asset quality, the percentage of credit risk management increases by 47.3 %. For every one-unit increment on earning efficiency, the percentage of credit risk management increases by 35.9%. For every one-unit increment on Liquidity ratio, the percentage of credit risk management increases by 16.3%. For every one-unit increment on Management quality, the percentage of credit risk management increases by 9.6%.
- As it can be seen from the regression result, out of five independent variables, the impacts of Asset quality are the most significant, followed by Earning efficiency, Capital adequacy, Liquidity ratio and then Management quality

5.2 CONCLUSSIONS

The aim of this study was to investigate Credit risk management and its effect on performance of bank of Abyssinia in case of west Addis district. This study concludes that credit risk management practices had a positive significant impact on banks profitability, for instance, proper information evaluation before approving loans to the customers is a good credit risk management system that eventually enhances banks performance. Further, it was concluded that banks understanding its business operating environment to ensure enhanced profitability is a proper credit risk management strategy that should be adopted.

The study summarizes that banks used different credit risk management tools, techniques and assessment models to manage their credit risk, the credit risk management and that they all have one main objective, i.e. to reduce the amount of loan default which is a principal cause of bank failure. The surveys show that respondents identified commitment and support from top management as the most important. Top-level management responds to business processes and manages credit risk. Most of the organizations believe that it is the responsibility of the Board of Directors or Committee and Executive Management team to establish credit risk management. Top management decides the objectives and strategies for organizational credit risk management activities, mission and overall objectives. The entire respondent indicates that their organization has a documented credit risk management guidelines and Most of the respondents understand the guideline of credit risk management. The guidelines also help the institutions to supports the goals and objectives of credit risk management.

In case of capacity adequacy BOA, the percentages of risk weighted asset are important to avoid risk, Banks availability capital important to resist credit risk management, CA helps to ensuring solvency of banks, CAR mandate that a certain amounts of the depositors to keep aside when loan being made, and CA used for credit exposer in BOA. In asset quality risk management is clearly set out and understood in your institution, decreasing asset value having an adverse effect, the bank institution is good in asset quality, Asset quality is a managements of credit risk and asset quality determine risk that profoundly impacts liquidity and cost. In management quality the bank improves asset quality to prevent risks, Inferior asset quality increase risk relatives to your banks, Management Quality ensures high quality of product by reduce risks, Management quality is important for banking industry, Management quality important for credit risk management, Management quality results banks profitability and Management quality increase customer loyalty and retention in Bank's has the ability to sustain and earn continuously

In case of earning efficiency the bank maintaining an adequate level of capital, taking up growth and diversification strategies, The bank can increase Profitability when it reduce its Credit Risk, The bank Earning efficiency can achieve by closely worked with customers, Higher bank and Earning efficiency is a results of proper Credit Risk Management Practices whereas Liquidity Ratio determines banks' ability to pay, Liquidity Ratio in your bank is high, Liquidity Ratio commonly used in your bank, Liquidity Ratio indicates the sufficient of your banks current asset and Liquidity Ratio important to credit management in BOA according to the respondents.

The credit risk strategy set by the Board of Directors are effectively transformed and communicated within your institution the shape of policies and procedures by the top management, The your institution has a credit risk rating framework across all type of credit activities, the institution monitors quality of the credit portfolio on day-to-day basis and takes remedial measures as and when any deterioration occurs, The institution is aware of the strengths and weaknesses of the risk management systems of other banks. In credit risk management BOA institution report for capital at risk, the institution report for credit risk, the institution has competent personnel for carrying out client appraisal and Client appraisal is a viable strategy for credit management.

Finally, the study concludes that commercial banks al Loan and advances contributed to financial performance in BOA, majority of the respondents indicated that the banks' Loan and advances contributed to financial performance in the banks. From the study findings, majority of the respondents indicated that Loan and advances contribute to financial performance in the banks to a very great extent and only a few respondents thought Loan and advances did not contribute to financial performance in the BOA at all.

5.3 Recommendations

The result in this study therefore, suggested that the need for strong credit risk management must be adopted. On financing investment, the BOA should adopt new financing methods to save costs, to improve customer relationships, business processes and procedures and to open new business opportunities. It might also help the commercial banks to respond better to existing challenges and improve the anticipation of future developments in financial performance.

- ► It was found out that the CRM decreased the performance of the banking sector. The policy and procedures should be living documents that reflect current and emerging credit practices.
- ► The Management Board and the Board should, therefore, monitor and assess its credit strategies continuously to ensure that lending operations of the bank are carried out in a safe

and sound way and line with strategic goals, present business procedures, and financial circumstances.3

- Management should, therefore, use the services of skilled and skilled staff in the banking sector. This will ensure that decisions concerning delineating the bank's overall risk tolerance are reviewed about prudent credit risk policies.3
- It is recommended that banks adopt proper credit risk management strategies since effective credit management enables financial institutions to become viable and attain sustainable growth and improve profit margins.
- To assess and evaluate its Credit risk exposures, BOA developed an internal credit rating system. However, due to improper application of the system, the bank couldn't get an effective output from the system. Therefore, to enable the bank capture risks without delay and to have a perfect estimate of expected loss, the system should be programmed in a way that clearly define rating thresholds, review ratings periodically, preferably at half yearly intervals.
- Employees of BOA, especially those assigned in the areas of Credit Risk Management are required to update themselves with current information about government credit policies and regulations. However, training schedules of the bank are not enough in accomplishing these objectives. Therefore, to make employees understand the risk management practices and enabling them to do better to the bank's benefit, the bank should revise its training schedule and improve the Capacity of employees
- BOA should Participation in portfolio planning and management. Working with Business Groups and individual in creating credit risk awareness, within the bank's risk-taking capacity, Creating goal concurrent, Developing and maintaining credit approval authority structure and granting and approval authority to qualified and experienced individuals.
- Since the credit risk management department is at infant stage providing training for the employee to enhance their capacity and reviewing the adequacy of credit training across. Developing data base management to manage portfolio data and setting an information technology system to enhance communication and obtaining accurate data in timely manner. Presents information about the bank's exposure to and its management and control of credit risks, in time
- Follow up the implementation credit policies and standards that conform to regulatory requirements and the bank's overall objectives and improve the miss implementation of credit risk management policies or guidelines. Establish external credit

rating agencies to obtain the true information of the clients and use modern credit evaluation technique and improve the collateral registration process and obtain cash equivalent collateral for each loan made to the customers.

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APENDEX A: -QUESTIONER, BACKGROUND INFORMATION.

1. Gender.

Male ☐ Female ☐

2. Age

Below 25 years. ☐

25- 30 yrs. ☐

30- 35 yrs. ☐

35- 40yrs ☐

Above 40 years. ☐

3. Qualification

Undergraduate ☐

Certificate ☐

Bachelor's degree ☐

Master ☐

Above master ☐

4. How many years you have worked in banking industry?

Below 1 years ☐

1-3 years ☐

3-5 years ☐

5-7 years ☐

Above 7 years ☐

6 Martial states

Single ☐

Married ☐

Divorce ☐

APENDEX B: QUESTIONER, CLOSED TYPE QUESTIONS

Please show the extent of your perception on the assessments of credit risk management. Please use (√) symbol to indicate in the Rating or Liker items measuring technique using very high (VH), High (H), Moderate (M), Low (L) and very low (VL).

Kindly tick in the spaces provided for the answer that best represents your view.

1. **Capital adequacy**

No	Capital adequacy	VH	H	M	L	VL
1	The percentages of risk weighted asset are important to avoid risk					
2	Banks availability capital important to resist credit risk management					
3	CA helps to ensuring solvency of banks					
4	CAR mandate that a certain amounts of the depositors to keep aside when loan being made					
5	CA used for credit exposer in your bank					
6	risk management is clearly set out and understood In your institution					

2**. Asset Quality**

No	Asset Quality	VH	H	M	L	VL
1	Decreasing asset value having an adverse effect					
2	Your institution is good in asset quality					
3	Asset quality is a managements of credit risk					
4	Asset quality determine risk that profoundly impacts liquidity and cost					

5	Your bank improves asset quality to prevent risks					
6	Inferior asset quality increase risk relatives to your banks					

3. Management Quality

No	Management Quality	**VH**	**H**	**M**	**L**	**VL**
1	Management Quality ensures high quality of product by reduce risks					
2	Management quality is important for banking industry					
3	Management quality important for credit risk management					
4	Management quality results banks profitability					
5	Management quality increase customer loyalty and retention in banks					

4. Earning efficiency

No	Earning efficiency	**VH**	**H**	**M**	**L**	**VL**
1	Banks has the ability to sustain and earn continuously					
2	The bank maintaining an adequate level of capital, taking up growth and diversification strategies					
3	The bank can increase Profitability when it reduces its Credit Risk					
4	The bank Earning efficiency can achieve by closely worked with customers.					
5	Higher bank Earning efficiency is a result of proper Credit Risk Management Practices					

5. Liquidity Ratio

No	Liquidity Ratio	**VH**	**H**	**M**	**L**	**VL**
1	Liquidity Ratio determines banks' ability to pay					
2	Liquidity Ratio in your bank is high					
3	Liquidity Ratio commonly used in your bank					
4	Liquidity Ratio indicates the sufficient of your banks current asset					
5	Liquidity Ratio important to credit management in your bank					

7 Credit risk management

	Credit risk management	VH	H	M	L	VL
1	The credit risk strategy set by the Board of Directors are effectively transformed and communicated within your institution the shape of policies and procedures by the top management					
2	Your institution has a credit risk rating framework across all type of credit activities					
3	Your institution monitors quality of the credit portfolio on day-to-day basis and takes remedial measures as and when any deterioration occurs‟					
4	Your institution is aware of the strengths and weaknesses of the risk management systems of other banks					
5	Your institution report for capital at risk					
6	Your institution report for credit risk					
7	The institution has competent personnel for carrying out client appraisal.					
8	Client appraisal is a viable strategy for credit management.					