ST.MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

CREDIT RISK MANAGEMENT PRACTICE IN PRIVATE BANKS

CASE STUDY BANK OF ABYSSINIA

BY

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ADDIS ABAB, ETHIOPIA

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DECLARATION

I hereby declare that this research is prepared with my own effort under the guidance of my advisor T/Giorgis Aseefa (Asst.Prof.).

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List of Abbreviations and Acronyms

BOA	Bank of Abyssinia
NPL	Non performing loans
BASEL	A city in NW Switzerland, on the Rhine River, Where the Name of a set of international banking regulations put forth by the Basel Committee on Bank Supervision,
IT	Information technology
VAR	Value-at-risk

ABSTRACT

The financial sector plays vital role in any economy by transferring funds from surplus to deficit area by giving credit. In today's changing financial landscape-environment of intense competitive pressure, volatile economic conditions, rising bankruptcies, and increasing levels of consumer and commercial debt; an organization's ability to effectively monitor and manage risk associated to credit become critical. Therefore, managing its credit risk, using the credit risk management tools, can make the difference between success and failure.

Hence it is essential to overview of the credit risk management practice of the banks and identifies the gap to take proactive measures and to protect the banks from any damage. Therefore the research to identify the gap on credit risk management practices of private banks case study in one of the private banks, Bank of Abyssinia was conducted.

Qualitative research method was used and data has been collected from primary and secondary sources. In obtaining information from the primary data, a survey questionnaire was developed, pre-tested and used for collecting data. Simple random sampling technique was used to select respondents of the Bank and the data were collected from credit professionals.

The study found that lack of information system that support the risk management process , absence of risk identification focused tools on customers' business and the associated environment , unsound lending practices associated to credit processing and appraisal activities and lack of accountability, lack of measures associated to non performing loans, high concentration of loan on sector ,product ,geography and also on by large borrowers as a key drawbacks on credit risk management practices of the Bank.. Thus, it is suggested that Bank should build well organized management information system, should put in- place a system capable of assessing, monitoring and controlling risk exposures in more scientific manner, should give a key concern to minimize concentration risk and should develop code of conduct to proactively monitoring ethical standards, and prudent application of policies.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Risk is the element of uncertainty or possibility of loss that prevail in any business transaction in any place, in any mode and at any time. To sustain its operation, a business has to earn revenue/profit and thus has to be involved in activities whose outcome may be predictable or unpredictable. Hence, risks don't disappear, they gave users a choice; which to retain and which to shed (Bagch, 2006) .

The integral element of uncertainty or possibility of loss, risk, is faced by the Banks also associated to lending or credit activity, that prevail in any business transaction in any place, in any mode and at any time (Macdonal and Koch,2006) .The damage could be more severe in the case of banks as banking business is not only a stake of the owners but also that of depositors (public), other banks and hence, the economy as a whole (Ataklti, 2015). According to Macdonal and Koch, (2006) as cited in Solomon (2013) lending represents the heart of the Banking industry. Hence, managing the associated risk which is the Bank's largest asset, credit, is a key task for success, survival and to thrive on the existing competitive environment. The higher the exposures of a bank to credit risk the higher the tendency of the Bank to experience financial crisis. The issue of credit risk is of even greater concern because of the higher levels of perceived risks resulting from some of the characteristics of clients and business conditions that they find themselves.

Credit is evil for economy if it is not properly used and managed. Its improper management causes default and bad reputation and credit losses /bankruptcy (Joseph, 2013). (Hennie ,2003 as cited by Solomon G.2013) states that despite innovations in the financial services over the years, credit risk is still the major single, cause of bank failure. For the reason that more that 80% of a bank balance sheet generally relates to this aspect of risk management. (Basel ,1999) stated that the major cause of serious banking problem is associated to the loss of credit standards for borrower and counterparties, poor portfolio risk management and so on. Therefore, all the above facts prove that the extremely vital role of credit risk management in bank's risk management activities as well as the sustainable success of the organization.

Credit risk management system and practice is an ingredient part of safety, soundness, liquidity and profitability of banks. Credit risk management encompasses identification, measurement, matching mitigations, monitoring and control of the credit risk exposures. That is why many authors considered that Failure of Credit risk management system and practice as one of the main cause of financial crises in general and banking failure particularly (Bagchi, 2006), (Bessie, 2008). Thus banking industry will only serve the backbone of economic development if only comprehensive credits risk management system is properly in practice.

In a Country like Ethiopia, where capital markets are not yet created and developed banking industry is the only formal key sector which plays the intermediary role through provisioning of financial service to the society. Like bridge in which fund of savers are transferred to borrowers through financial intermediary. Hence, this sector plays a critical role on responding such demand by mobilizing surplus funds from the economy (Sahlemichale, 2009).

The past decade has seen evolutionary revival of the Banking industry in Ethiopia following the liberalization and the re-establishment of private banks. It is a normal phenomenon that as the number of banks (and other institutions providing banking services) increases, so does the competition, which in turn increases scope and complexity of banks' business to beat the competition and steer a consistently profitable course. Lessons from the traditional banking crises show that banks that had been performing well suddenly announced large losses due to either credit exposures that turned bad, liquidity problems, unmanaged interest rate and exchange rate positions taken, derivative exposures that may or may not have been assumed to hedge balance sheet risk or significant operational risks. (Atakilti, 2015). In response to such lessons, banks almost, universally have embarked upon an upgrading of their risk management systems. Thus, in this increasingly dynamic area of financial services, a distinctive position of any bank-be it private or public, large or small-lies in the way it manages its risks. (Bagchi ,2006).

Ethiopian banking system had been not given enough attention before 2010 specially regarding to the development of modern system of assessing, controlling and managing risk in banking operation in line with the changing environment and global financial standard (Ataklit ,2015). Risk management guidelines of the NBE 2010 paved the way for the latest development of Risk management practice in Ethiopian banking industry. Commercial banking earn profit out of managing risk as a result banking business is all about managing risk. As no gain no loss principles of nature, (Verma , 2005) cited by Solomon (2013) noted that 'Profiting without exposing to risk is like trying to live without being born'. Risk and return are therefore the core reason for the existence of commercial banks. (Atakelit ,2015) Therefore it is important to examine the level of credit risk management system and practice of Ethiopian Commercial banks to initiate top level management and regulatory bodies to take policy measure toward maintaining adverse effect of the credit function.

This is where the concern about this research topic began and stimulated the researcher to assess the credit risk management practice in one of the private banks, BOA, the Bank which had faced high credit default and bounded to minimize its profit up to 80%. Hence, this paper endeavors to assess the actual credit risk management practicing of Bank of Abyssinia by comparing with the most important and best practices behind credit risk management, identify and recommend the new initiation which will improve the credit risk management system of the Bank

1.2. Statement of the Problem

Channeling fund from surplus area, to needed area, financial intermediations, using product and service associated to lending is the key activity and the major source of income for commercial banks. According to Maclonal and Koch (2006) cited by Solmon (2013), lending represent the heart of the Banking industry. The loan balance is typically the largest asset and predominant source of revenue. The very nature of the Banking business is so sensitive because more than 85% of their liability is deposits from depositors (Sounders, Cornett, 2005) cited Solomon (2013). Banks use these deposits to generate credit for their borrowers, which in fact is a revenue generating activity for banks. This credit creation process exposes the Banks to high default risk, which might lead to financial distress including bankruptcy.

In today's changing financial landscape-environment of intense competitive pressure, volatile economic conditions, rising bankruptcies, and increasing levels of consumer and commercial debt; an organization's ability to effectively monitor and manage it risk is critical.

In addition more than 80% of a bank balance sheet is generally related to this aspect of risk management, and also a large portion of their income is derived from interest income associated to credit management process. This high dependence on credit creation process and the availability of huge demand on credit exposes the Banks to different risks associated with such facility. Hence, credit risk management is crucial to the success of any bank.

The organization's ability to effectively monitor and manage its credit risk can mean the difference between success and failure. Effective credit risk management attracts today more attention than before. Interest income and interest expense are the main determining factors for the profitability of private banks in Ethiopia (Yigremachew, 2008).

In this regarded, Bank of Abyssinia is the one and the only private bank which had faced big credit default and minimize its profit by 80% and also still the amount of provision for loss loan, though it was a declining trend is the highest from its peers banks average (Dashen, Wegagen, Hibert, Awash,NIB)(NBE data from year 1997-2013)

Few researches were conducted in Ethiopia in the area of credit risk managements such as Sahlemichel (2009), Atakleit (2015) , Wondimagegnehu (2012). Most of the studies reviewed focuses were on factors affecting the credit risk management and their impact of tackling credit default, assessment of determinants of NPLs and its performance on banks instead of evaluating the full implementation of credit risk management pillars. Consequently, this research will focus on an entire review of the credit risk management techniques and practices of the Bank.

Therefore, the above problems in addition with the knowledge gaps associated to evaluation of the full implementation of credit risk management pillars is the principal concern of this paper. Considering implementation of proper credit risk management is key tool that helps to mitigate risk failure depending on its application.

1.3. Research Questions

The organization's ability to effectively monitor and manage its credit risk, using the credit risk management tools, can make the difference between success and failure in today's highly competitive environment. In this regard the study will describe the present state of affair of the Bank since it doesn't have any control over the variables, which is the extent of application of credit risk management tools and measurement techniques of the Bank. Therefore, the study attempts to answer the following questions.

- What are the activities performed in the credit management process at the Bank?
- What tools/techniques of credit risk management are used by the Bank?
- How does the Bank, identify, measure, monitor and control credit risk?
- What gaps exist between the credit risk management system of the Bank and the benchmark theories and principles?

1.4. Objective of the Paper

1.4.1. General Objective

The main objective of this study is to assess the credit risk management practice of the Bank.

1.4.2. Specific Objectives

The following were specific research objectives

- to identify the techniques that the Bank is used to measure its credit risk
- to identify the gap in relation to best practice

1.5. Significance of the Study

This paper examines the proper application of credit risk management in the private banking industry with special focus on Bank of Abyssinia to clearly diagnose the existing credit risk management practice. The Bank may consider the recommendation to improve its existing credit risk management processes which in turn will help to protect the Bank from future damages.

The outcome of this study could also have practical relevance to pinpoint key point for policy makers towards credit risk management implementation in the Banking industry. Finally, It also fill some knowledge gap associated the implementation of credit risk management pillars by producing the status of credit risk management application and could also serve as input for further research on the area more specifically on the implementation of key variables or component of standardized credit risk management tools.

1.6. Scope of the study

The scope of the study is to overview the application of credit risk management practice of the Bank, hence, the key area on credit risk management process as compare to acceptable standard focusing only on city branches, which consists up to 80% of credit portfolio of the Bank.

1.7. Organization of the study

The paper presented on five chapters; the first chapter covers the introduction, background of the study, research question, and objective statement of the problem, significance and scope of the study. The second chapter indicates review of related literature which includes information from books, journals, articles and reports, chapter three describes the research design, type and source of data the sampling techniques and size and data analysis methods while the fourth chapter presents the data analysis and interpretation part, the last, which consists of summary ,conclusion and recommendation is chapter five

CHAPTER 2

Literature Review

In this chapter the researcher tries to discuss overview of the theoretical consideration to explain factors related to credit risk management from books, articles, research papers, internet publications and unpublished sources

2.1. Risk and Risk Management Process

Risk is the element of uncertainty or possibility of loss that prevail in any business transaction in any place, in any mode and at any time. To sustain its operation, a business has to earn revenue/profit and thus has to be involved in activities whose outcome may be predictable or unpredictable. Hence, risks don't disappear, they gave users a choice; which to retain and which to shed (Bagch 2006),

In the financial arena, such risks can be broadly categorized as Credit Risk, Market risks and organization risk (Bagch 2006). Managing such risk is not a new phenomenon, has been there over the ages in some form or other, to make decision on which to retain and on which to shed, through its various forms and were not called market risk, credit risk or operational risk as they are today. Specially, the concern over risk management arose from the development of –the downfall of the oldest merchant bank in February-1995, the Asian financial crisis in July 1997, the Japanese bank crisis of 1993 and Bank for International settlements (2003), Fukao (2003), International Monetary Fund (2003), Kashuap (2002), American financial crises of 2007-2009, were the consequences of uncollectible (non – performing loans). The above incidents make to come to certain conclusion about risk and risk taking decisions, among that

- risk do increase over time in a business, especially in globalized environment

- Increasing competition, the removal of barriers to entry to new business units by many countries, higher order expectations by stakeholders lead to assumption of risk without adequate support and safeguards.
- a mere quantitative approach to risk perceptions –arising out of trading volume, earning level. doesn't reveal the inherent drawback in an organization/ system
- The introduction of new technologies , while introducing countless benefits, has also created many new risks for an organization
- The external operating environment in the 21 century is noticeably different. it is not possible to manage tomorrows event with yesterday's system and procedures and today's human skill

Such incident and the existing globalized stiff competitive market highly magnify the importance of risk management in recent times. The international regulatory authority, the Bank for International Settlement at Basel, Switzerland, has been working on a well- structured risk management system. Risk management is thus a functional necessity and adds to the strength and efficiency of an organization on an ongoing basis. Effective risk management is critical to any bank for achieving financial soundness. In view of this, aligning risk management to bank's organizational structure and business strategy has become integral in banking business. The efficacy of any risk management system depends on its architecture, this comprise the following essential elements (Bagch, 2006)

- A clearly defined and structured organizational set- up to mange enterprise- wide risks
- Commitment of the highest level of those who see the policy framework and oversee implementation within the organization- that is the Board Directors and Senior Management

- Codification of risk management policies/principles, articulated is such a way that it serves the organizational risks appetite within the continuous of risk perceptions,
- Implementing strategy of the direction through specific risk management process so as to effectively identify measure and control risk.
- Manpower development initiatives to improve the skill- sets of people in the organization
- Periodic evaluation
- Risk audit

Prerequisites for Efficient Risk Management In order to implement efficient risk management, sound and consistent methods, processes and organizational structures as well as IT systems and an IT infrastructure are required for all five components of the control cycle. The methods used show how risks are captured, measured, and aggregated into a risk position for the Bank as a whole. In order to choose suitable management processes, the methods should be used to determine the risk limits, measure the effect of management instruments on the Banks risk position, and monitor the risk positions in terms of observing the defined limits and other requirements. Processes and organizational structures have to make sure that risks are measured in a timely manner that risk positions are always matched with the defined limits, and that risk mitigation measures are taken in time if these limits are exceeded. Concerning the processes, it is necessary to determine how risk measurement can be combined with determining the limits, risk controlling, as well as monitoring. Furthermore, reporting processes have to be introduced.

The organizational structure should ensure that those areas which cause risks are strictly separated from those areas which measure, plan, manage, and control these risks. IT systems and IT infrastructure are the basis for effective risk management. The IT infrastructure is a central prerequisite for implementing modern risk management. Hence, implementing risk management will also insist to have supported with defined organizational – set up and defined role of the officials, principles and policy. It will also have a clear risk management process. Risk management process is a vehicle to implement an organization' risk principles and policies, aided by organizational structure, with the sole objective of creating and maintain a healthy risk culture across the organization.

Internationally, the risk management process has four components; -identification, measurements, monitoring and control. It is apparent, therefore that the risk management process through all its four wings – identification, measurement, monitoring and control- facilitates the organization's, sustainability and growth.

2.2. Credit Risk.

The concept of credit has existed from the early day of civilization. Nowadays credit implies monetary and monetary- equivalent transactions. It also includes non- monetary and/or barter transactions. Roughly we can define. "a transaction between two parities in which one (the creditor or lender) supplies money or monetary equivalent good, service, etc. in return for promise of future payment by other (the debtor or borrower) .such transaction normally include the payment of interest to the lender (Joseph, 2006). The term 'credit' in the terminology of finance has an omnibus connotation. it not only includes all types of loans and advances (known as funded facilities) but also contingent items like letter of credit, guarantees and derivative (non funded/ non credit facilities). investment in security is also treated as credit exposure (Bagchi,2006

).Credit risk is the bank's risk of loss arising from a borrower who does not make payments as promised. . Accordingly to Basel Committee " Credit risk is most simply defined as the potential that a borrower or counterparty will fail to meet its obligation in accordance with agreed terms.

Banks need to manage credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Credit risk is calculated on the basis of possible losses from the credit portfolio. Potential losses in the credit business can be divided into — expected losses and — unexpected losses Expected losses are derived from the borrower's expected probability of default and the predicted exposure at default less the recovery rate, i.e. all expected cash flows, especially from the realization of collateral. The expected losses should be accounted for in income planning and included as standard risk costs in the credit conditions. Unexpected losses result from deviations in losses from the expected loss. Unexpected losses are taken into account only indirectly via equity cost in the course of income planning and setting of credit conditions. They have to be secured by the risk coverage capital (Oesterreichische National bank).

Additionally, banks should be aware that credit risk does not exist in isolation from other risks, but is closely intertwined with other risks. Credit risk is by far the most significant risks faced by banks and the success of their business depends on accurate measurement and efficient management of these risks to a greater extent than any other risk (Gieseche, 2004 cited by Solomon2013).

2.2.1. Common Causes for Credit Risk

Credit risk decision is a complex process which implies a careful analysis of information regarding the borrower in order to estimate the probability of regular repayment. Any consequence on such decision will result to severe damage to banks. It. is, therefore, necessary to look into the cases of credit risk vulnerability. The main cause of credit risk include, limited institutional capacity, inappropriate credit policies, volatile interest rates, poor management, inappropriate laws, ineffective control processes, poor loan underwriting, laxity in credit assessment, poor lending practices, government interference and inadequate supervision by the central bank(Kithinji,2010). cited on Solomon(2013). According to (.Bagchi,2006) broadly, there are three sets of causes

- *Credit concentration*- The extent of concentration any group can pose a threat to the lender's well being. Such measure should be evaluated in relation to institution' capital base (paid- up –capital+ reserves), total tangible assets and prevailing risk level. The alarming consequence is the like hood of large losses at one time or in succession without an opportunity to absorb the shock.
- *Credit granting and/or monitoring process*- ineffective appraisal system and pre sanction care with lack of supplemented by an appropriate and prompt post- disbursement supervision and follow-up system
- *Credit exposure in the market and liquidity-sensitive sectors*- associated to absence of compact analytical system to check for the customers' vulnerability of liquidity problem.

2.2.2. Forms of Credit Risk Exposures in Banks

Credit involves not only funds outgo by way of loans and advances and investment, but also contingent liabilities. Therefore, credit risk should cover the entire gamut of an organization's operations. Whose ultimate "loss factor is quantifiable in terms of money. According to(Bagchi, 2006). The following can be considered as the form credit risk

- Non repayment of the principal of the loan and/ or the interest on it
- Contingent liabilities like letter of credit/ guarantee issued by the Bank of the client and upon crystallizations amount not deposited by the customer.
- In the case of treasury operation, default by the counterparties in meeting the obligations
- In the case of securities trading. settlement not taking place when it due
- In the case of cross- border obligations, any default arising from the flow of foreign exchange and/or due to restrictions imposed on remittance out of the country

2.3. Credit Risk Management

Credit risk Management is the process of controlling the potential con-sequence of credit risk. (Solomon, 2013).The credit risk management provides the broad canvas and infrastructure to effectively identify, measure, manage and control credit risk both at the portfolio and individual levels- in accordance with an organization's risk principles, risk policies.(Ibid). Credit risk management processes enforce the Banks to establish a clear process in for approving new credit as well as for the extension to existing credit. These processes also follow monitoring with particular care, and other appropriate steps are taken to control or mitigate the risk of connected lending (Basel, 1999).Credit granting procedure and control systems are necessary for the assessment of loan application, which then guarantees a bank's total loan portfolio as per the bank's overall integrity (Boyd, 1993). It is necessary to establish a proper credit risk environment, sound credit granting processes, appropriate credit administration, measurement, monitoring and control over credit risk, policy and strategies that clearly summarize the scope and allocation of bank credit facilities as well as the approach in which a credit portfolio is managed i.e. how loans are originated, appraised, supervised and collected, a basic element for effective credit risk management (Basel, ,1999). The Basel committee has pointed out the main problems associated to bank failure- which looks, lax credit standard for borrowers and counterparties, poor portfolio risk management and lack of attention to change in the economic situation or other circumstance. Thus international regulatory authorities felt that a clear and well laid management system is the first prerequisite in ensuring the safety and stability of the system. 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 relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization (Basel, 1999). Since exposure to credit risk continues to be the leading source of problems in banks world-wide, banks and their supervisors should be able to draw useful lessons from past experiences. Banks should now have a keen awareness of the need to identify, measure, monitor and control credit risk as well as to determine that they hold adequate capital against these risks and that they are adequately compensated for risks incurred. The Basel Committee is issuing this document in order to encourage banking supervisors globally to promote sound practices for managing credit risk.(Basel ,1999)

Accordingly to Basel requirement the following are the key principle or standards that should be apply

2.3.1. General Principles of CRM

Principles for the Assessment of Banks' Management of Credit Risk

A. Establishing an appropriate credit risk environment

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

Principle 2: Senior management should have responsibility for implementing the credit risk strategy approved by the board of directors and for developing policies and procedures for identifying, measuring, monitoring and controlling credit risk. Such policies and procedures should address credit risk in all of the Bank's activities and at both the individual credit and portfolio levels.

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

B. Operating under a sound credit granting process

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

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

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

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

C. Maintaining an appropriate credit administration, measurement and monitoring process

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

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

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

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

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

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

D. Ensuring adequate controls over credit risk

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

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

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

E. The role of supervisors

Principle 17: Supervisors should require that banks have an effective system in place to identify measure, monitor and control credit risk as part of an overall approach to risk management. Supervisors should conduct an independent evaluation of a bank's strategies, policies, procedures and practices related to the granting of credit and the ongoing management of the portfolio. Supervisors should consider setting prudential limits to restrict bank exposures to single borrowers or groups of connected.

2.3.2. Credit Risk Management Process

Credit risk management process is a set of outlined activities aimed at managing credit risk. These activities will cover the range from credit granting to credit collection. They are risk identification, measurement, assessment, control and monitor (Ngwa cited by Solomon 2013). As any risk management process, credit risk management process started by identifying the risk involved in the credit process. It is necessary to spell out the danger signals. This in turn helps decision makers to get the best from various activity points of the organization, allowing them to take calculated risks and not be risk averse. While identifying risk, all types of risk must be identified and their likely effect in short- run be understood. The magnitude of each risk segment should be identified and dominate risk activities must be separated from the other. In addition a clear way of identifying risk in an organization is to scan both balance sheet items and off- balance sheet items and finds the risk elements.

The other activity in credit risk management process is measurement. Measurement means weighing the contents and /or value intensity magnitude of any object against a yardstick. In risk measurements it is necessary to establish clear ways of evaluating various risks categories in an organization. In lending activity, for higher credit limit detailed qualitative and quantitative analysis with sophisticated credit rating models may be required because the size of the credit rating models would indicate the size of default and risk and its ultimate effect on the institution. Among the factor the availability sufficient and compatible and reliable MIS and conducting the validation activities is the critical one.
Then the monitoring phase then comes in. in this phase, keeping close track of risk identification measurement activities in the light of the risk, principles and policies is a core function. it is essential that the operating wings perform their activities within the broad contour of the organization, risk perception. Such activity ensures that each credit decisions activities to have clear lines of authority and responsibility.

The final issue is controlling phase, this is the activity that helps to regulate or guide the credit risk management process in the credit as well as on the entire organizations thorough set of control devices. Such activities can be achieved by assessing risk profile techniques regularly, analyzing internal and external audit feedback from the risk angle and by putting in place a well drawn- out risk focused audit system.

2.3.3 Credit Risk Management Measurement

Measuring risk is always a critical part in risk management process, and suggested by (Fabozzi ,2006) there are three categories of methods for bank credit risk measurement-

2.3.3.1. Credit Risk Rating

A credit rating is for assessing the credit worthiness of an individual or corporations to predict the probability of default, which is based on the financial history and current assets and liabilities of the subject (Solomon ,2013). Such rating framework deploys a number / alphabets/ symbol as a primary summary of risk associated with a credit exposure, and involved both internal and external credit rating. A well structured risk rating system provides a good means of differentiating the degree of credit risk in the credit portfolio of a banking institution (Ibid). This will allow more accurate determination of the overall characteristics of the credit portfolio, quality distributions, problems credits, and the adequacy of loan loss reserves. (Comptroller's handbook ,2011)

2.3.3.2. Credit Scoring System -Credit scoring uses quantitative measures of the performance and characteristics of past loans to predict the future performance of loan with similar characteristics (Dean and kossmann ,2003)

2.3.3.3. Credit Risk Modeling-

Accordingly to (Basel ,1999b) credit risk models attempt to aid banks in quantifying, aggregating and managing credit risk across geographical and product lines, and the outputs can be very important to banks' risk management as well as economic capital assignment. regarding the potential benefits from the application of credit risk models in banking sector, (Basel ,1999b) has conclude that they are responsive and informative tools offering banks a framework for examining credit risk in a timely, manner, centralizing data on global exposures and analyzing marginal and absolute contribution to risk. In most cases, credit models concentrate on one single important issue – default risk. Investigating its characteristic (mostly finding statistical distribution) analytics can transform it into related dilemmas: how to measure it and how to price credit risk. The first one gives a chance of proper distinguishing more risky investments from the saver ones, the second one allows to calculate the value of the debt considering yield margin reflecting risk undertaken. (Tomas ,2011)

According to four types of credit risk models that are better known or commonly used by banks are – Altman's Z score model, Credit metrics model, value at risk model and KMV model (Jackson and perraudin ,1999).

- **Altman's Z score model**- predicts whether or not a company is likely to enter into bankruptcy within one or two years. The Z-score is a linear combination of four or five common business ratios, weighted by coefficients. The coefficients were estimated by identifying a set of firms which had declared bankruptcy and then collecting a matched sample of firms which had survived, with matching by industry and approximate size (assets)Altman applied the statistical method of discriminates analysis to a dataset of publicly held manufacturers. The Variables influencing the financial strength of a firm are; current asset, total assets, net sales, interest, total liability, current liability, market value of equity, earning before taxes and retained earnings.

  Credit metrics model- is a tool for assessing portfolio risk due to changes in debt value caused by changes in obligor credit quality. We include changes in value caused not only by possible default events, but also by upgrades and downgrades in credit quality. Also, we assess the value-at-risk (VaR) – the volatility of value – not just the expected losses. Importantly, we assess risk within the full context of a portfolio. We address the correlation of credit quality moves across obligors. This allows us to directly calculate the diversification benefits or potential over-concentrations across the portfolio .(George and finger ,2007). The model advocates that the amount of portfolio value should be viewed not just in terms of likelihood of default, but also in terms of credit quality over time of which default is just a specific case.

Value at risk (VaR) - is a statistical technique used to measure and quantify the level of financial risk within a firm or investment portfolio over a specific time frame. Value at risk is used by risk managers in order to measure and control the level of risk which the firm undertakes. The risk manager's job is to ensure that risks are not taken beyond the level at which the firm can absorb the losses of a probable worst outcome. Value at Risk is measured in three variables: the amount of potential loss, the probability of that amount of loss, and the time frame.

Merton-based models- are a model, named after the financial scholar Robert C. Merton, that was developed in the 1970s and is used today to evaluate the credit risk of a corporation's debt in order to determine a company's ability to service its debt, meet its financial obligations and to gauge the overall possibility of credit default.. The current value and the volatility of the firm's assets, the outstanding debt and its maturity are required as inputs from which the borrower's default probability can be determined (Hull, and white, 2004)

2.4. Tools for Credit Risk Management

- The instruments and tools, through which credit risk management is carried out are detailed below:(Thirupathi and Manojkumar,2013)
    - Exposure ceilings- prudential limits is linked to capital funds say X percent for individual borrowers
    - Review/renewal –multi-tires credit approval authority, constitution wise delegations of powers
    - Risk rating model- set-up of comprehensive risk scoring system on a six to nine point scale.
    - Risk based scientific pricing-lining loan pricing to expected loss.
    - Portfolio management-stipulating quantitative ceiling on aggregate exposure on specific rating categories, distribution of borrowers in various industry, business group
    - loan review mechanisms- independent review credit functions

CHAPTER 3

Research Methodology

3.1. Research Design

To search design used is a descriptive research method. The main aim of the study is to describe the present state of affair of the Bank in relation to the implementation of credit risk management principles and to evaluate to which extent the credit risk management tools are implemented.

The pertinent data needed to answer the research questions is the main focus of the design through structured questionnaires, and review of relevant documents, annual reports, central bank directives and other related publications. Respondents were professionals and senior managers from risk management, credit department and branch managers.

3 .2 Source of Data

In this study, both primary and secondary data were collected. Primary data from using structured questionnaire. As a base for defining the questionnaire some adoption was considered from the study of Sahlemeichal mekonnee,2009. The secondary data from reviewing the working policy documents, periodic and central bank directives and other relevant documents were collected.

3.3. Method of Data Collection

The method of data collection was survey method. To collect the required data from respondents structured questionnaire (Adopted from Hailm,,) was employed. The primary data were collected from selected key personnel from the credit and risk management and branches using hand delivered questionnaire and the secondary data were collected from the Bank's working policies, procedures and other materials.

3.5. Sampling Techniques

The bank lending process has been operated by the new concept of liability processing center where by the whole credit processing and decision making practice is done at head office. The branch is role is minimized to collection information about customers and some analysis work. Hence, the key participants on the population size of the this study are by few employees- on Head office organs and selected branch. Hence, Stratified sampling method was employed to select relevant respondents with each group. Thus, the population of the study was divided into sub- population or strata based on Sample respondents were randomly selected from each stratum accordingly .Such measure will enable the researcher to have sufficient information or different opinion of various personnel working at different areas.

3.6. Sample Size

The credit processing activity of the Bank is organized with the new concept, liability processing center, under the credit division. The analysis, the relationship management activities to corporate customers and sanction activities above certain limit has been done by the head office organ under the processing center. In addition the workout activities are separately organized under legal division to handle and manage the problematic loans. The role of the branches towards credit processing somehow limited; their main activity is to dwell on small credit, facilitating credit relationship management and on managing non- performing loans. In addition the risk management department is also established , as per the NBE guidelines, Hence, the head office organ, ,the credit analysis , relationship management and portfolio management wings, the workout divisions , the risk management and 45 big branches with average loan size of Birr 20 Million are considered as the population size. The minimum staff involved on credit on the above selected branches, is two. Thus the total population size of the above selected branches 118.

The total number of sample that represent the 100 population with 99% confidence level size is 87 (Krejcie and Morgan, 1970). Hence, the total sample size is for the above population looks as follows.

Selected group	Representative sample
Credit analysis and relationship management	15
Risk management Department	6
Workout Division	7
Branch staff	60
Total	88

3.7. Data Analysis

All the data gathered through this research were analyzed using descriptive statistics. Thus, frequency count and percentage were used to analyze the data. Tables were employed to substantiate the research undertaken.

3.8. Validity and Reliability

Validity is about the honest nature of the research conclusion and applicability (Ghauri & Gronhaug 2010). Accordingly, to ensure the contents validity, 10 selected officers, those who know better about the issue being investigated as a pilot test. As a result the researcher proven that and reached at the confidence level same answer would be availed to another independent researcher.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

The chapter discusses the result of the empirical data collected. It will also define the conclusions and also the recommendations, proffered for improvement of the credit risk management activity of the BOA.

The analysis part is done with two main parts in relation to source, primary and secondary, used for the study. The primary data are analyzed using frequency distribution tables and the secondary data are also descriptively analyzed using different ratios.

The questionnaires were distributed to represents the key credit risk managing organs. As per the Bank's organizational structure, the credit processing activity of the Bank is organized with the new concept, liability processing center, under the credit division. The head office organs, the credit analysis and portfolio management wings, the workout divisions, the risk management and the big branches with average loan size of Birr 20 Million are considered as the population size.

All officers in risk management department, credit analysis and portfolio staff and 8 staff of workout and 50 branches are considered to the population size. Thus the total population size of the above selected branches is 118. Considering 60 staff from randomly selected branches an, all, 15, staff from credit analysis, 7 staff from risk management and 6 staff from workout were considered as sample size and to be taken as respondents. Thus the total sample size is 88, which was about 63% of the total population. Among such sample size 72 questionnaires or 81% were collected and used for analyzing the Data.

4.1. Demography

Table 1-Respondent with respect qualification level

Qualification	Frequency	Percentage
Master and above	12	17
Degree	60	83
Diploma	-	
Total	72	100

Source: own survey 2016

As we can see from the above table, among the respondent who responded to the questioner 83% of them have degree and 17% of them with master degree. This result was attested that the majority of the respondents were graduates who have the required knowledge to understand the concept of risk management which they applied to their day to day activities.

Table 2-Respondent with respect work experience

Qualification	Frequency	Percentag e
1-5 years	18	25
5-10 years	18	25
Above 10 years	36	50
Total	72	100

Source: own survey 2016

The above table shows that the frequency and percentage of years of experience of the respondents whom they have worked in areas defined on the determination of the population size. The researcher asked this question to verify the knowhow and experience of the respondents on the subject matter. The result shows that 75% of the respondents have working experience above five years, and the remaining 25% working with the range of 1-5 years. Such result implies that most of the respondents have sufficient experience pertaining to credit risk management. From such result it is possible to conclude that the better possibility to amass sufficient information about the subject matter, risk management, and which in turn would help to reach to the correct conclusion.

Table 3-Respondent with respect current position

Qualification	Frequency	Percentage
Managerial	47	65
Professional	25	35
Clerical		
Total	72	100

Source: own survey 2016

As shown in the above frequency distribution, 65% of the respondents are working at managerial position and the remaining 35% are professionals. This indicates that this study paper addresses the supervisory line employees which functionally related and part of the critical decisions making practices associated to credit sanctioning and credit risk operational activities of the Bank.

4.2. Credit Risk Assessment

4.2.1. Level of Credit Risk

Table 4-Level of credit risk on various transactions

	No risk	Very low risk	High risk	Very high risk
Direct lending		10%	90%	
Guarantees or letter of credit		87%	13%	

Source: own survey 2016

The researcher asked the above question in order to know the understanding of the respondents about the type of credit product and the associated degree of risk that the Bank will highly exposed to. Such question will also help to evaluate the understanding and the associated measures of the respondent in relation to the risk level. Accordingly, the respondents indicates that direct lending is a high risk category product with which 90% of them attested on, while the risk associated to guarantees or letter of credit risk is categorized as very low risk category. Hence, direct lending product is highly vulnerable to credit risk to the Bank.

.2. 2. The technique / instrument used for credit risk management

Table 6- The technique/instrument, used for credit risk management

Credit approval authority	2
Prudential limit	3
Risk rating	5
Portfolio management	6
Loan review policy	4
Collateral	1
Diversification	7
Other please specify____________	

Source-own survey 2016

On an effort to know more about a question associated on identifying the most important instrument/techniques which were used by the Bank for credit risk management, is forwarded to the respondents. As per the summarized result presented on the above table, number one instrument which is used as a key instrument or technique for managing the risk associated to credit is collateral, which is followed by credit approval, prudential limit. On summarizing the above table the respondent is choosing more than one instrument/ techniques for managing credit risk, which they utilized on their day to day activities.

Diversification, prudential limit and portfolio management are ranked low by majority of the respondents. Considering this fact, the Bank rely on collateral as a key instrument to manage the risk associated to borrower default.

4.2.3. Off- Balance Sheet Commitment

One of the questions associated to credit risk management is the question associated to off- balance commitment, which some time neglected by due to understanding of the nature of standard accounting practice. Which mainly focused on the items associated and categorized as , asset , liability and capital and not critically examining the impact of such exposures associated to other balance sheet items. This exposure is one of the major sources of credit risk, it is important to access whether the Bank has defined any exposure to manage off balance-sheet exposure in its book. Hence, the question, does the Bank have defined exposures for managing off- balance sheet exposures? is forwarded to the respondent. Accordingly, 75% of them attested that the existence of exposure limit, while the remaining 25% of them didn't responded to the questions, this may occur due to the unfamiliarity and lack of due concern about the office-balance sheet commitment. As per the respondent, the Bank has defined off-balance sheet commitment exposure limit associated to its capital.

4.2.5 Pricing Credit Risk

Table 7. Factors considered for pricing credit risk

	Highly considered	**considered**	**Somehow considered**	**Not considered**
Portfolio quality	80%	14%	4%	2%
Value of collateral	86%	14%		1
Future business potential	27%	17%	40%	16%
Portfolio industry exposure	20	12	31%	37%
Tenure period of credit	25%	20%	32%	23
Any other please specify				

Source-own survey 2016

The responses obtained in this regard are presented in the above table. According to the amassed data presented on the above table, value of collateral and portfolio quality are the most important and the second most important factors that are considered for pricing credit risk by the majority of the respondent. Tenure period of credit and future business potential have claimed third and fourth position, respectively. The last rated parameter is the portfolio industry exposure.

The pricing of credit risk should depend on how much the riskier of the loan product and viability of the customers business than concentrating on value of collateral, which is the second way out in the event of default. While the practice of the Bank associated to pricing credit risk is mainly rely on collateral value.

4.2.6 Credit Risk Model Used

Table8.Credit risk models

Models	Frequency	percentage
Altman's Z score model	-	
Merton based model/KMV model		
Credit metrics model	5	**7%**
Value at risk model	9	**13%**
Other please specify		
Not used	11	**15%**
	25	
No response	47	**65%**
Total	72	**100%**

Source-own survey 2016

In this uncertain and volatile economic environment, it is necessary to utilize any tools that help proactively assess the default risk and to handle any risk associated to their customers regarding payment of their obligations. Hence, making use of different credit risk model for evaluating the existing credit portfolio of the Banks is merely applied on banks. Accordingly, the researcher is asking the respondent about the use of models on the Bank.

As per the result shown on the above table, the respondent didn't have any knowledge or awareness regarding the models that are mentioned on the questioner. Considering the target group, which is directly engaged on credit risk management activity, lack of awareness on such tool, risk model, should question about understanding of using of models on credit risk management activities.

4.2.7. Measuring Credit Risk

Table 9. The tools used by the Bank to measure credit risk?

Activities	Frequency	Total Frequency	Percentage
Internal rating	54	72	75%
Through the Five C's if credit	40	72	55%
Through financial statesman	45	72	62%
Human Judgment through experience	33	72	46%
Other specify			

Source-own survey 2016

As it was found on the above table, the Bank has utilized different tools to measure credit risk, as per the respondent , the internal rating is more utilized tool to evaluate following on relying on financial statement judgment. As per the Bank' credit manual also the combination of different measurement tools used to evaluate the credit risk. Such measures help the Bank to analysis the risk in relation to the different risk exposures.

4.2.8., Calculation of Probability of Default of Customers

Table10- probability of default

	Frequency	Percentage
We calculate	5	7%
We don't calculate	38	52%
Our studies are going on	29	41%
Total	72	100%

Source-own survey 2016

As we can see from the above table, 93% of the respondent attested for not doing calculation of probability of default at customer level. Such measure has shown the gap on the activity of the Bank in relation to the risk identifications, measurement and controls activity.

4.2.9.. Calculation of Recovery Rate of a loan

Table 11- calculation of recovery rate of loan

	Frequency	Percentag e
yes	59	82%
No	13	18%
Total	72	100%

Source-own survey 2016

The 82% of the respondents have ascertained that the existence of the activity associated to the calculation of recovery rate of the loan. Associated to the corresponding question of when, some of the respondents indicate that time when the loan status is categorized as NPL.

4.2.10 Activity Performed for Credit Risk Management

Table 12- Activities for credit risk management

	Rank
Industries studies/ profiles	5
Periodic credit calls	3
Periodic visits of plants	2
Developed MIS	6
Credit risk rating/ risk scoring	1
Annual review of accounts	4

Source-own survey 2016

The response from the respondents associated to ranking the activities performed for credit risk management at the Bank is shown on the above table. The main aim of the question is to evaluate the tendency of the Bank on various activities that should be performed for managing credit risk. As per the amassed information from the respondent, "credit risk rating" and periodic visits of plants are the most popular activities. While among activities, credit risk rating is also properly handle with certain standards. "Periodic credit calls and annual review of accounts are performed in their order of importance for managing credit risk. Industries studies/profiles and developed MIS are given the minimum importance as credit risk management activities.

The required importance is not given to the "development of MIS "which should deserve to be the key area of attention. In addition the "industries studies" should also be considered the best attention area. MIS is one of the important tools that enable the management to properly asses, identify, measure and monitor and control the risk associated on credit risk management. Even the other credit risk management activities should also not be an effective tool without the availability of the proper MIS. Even further the industries studies/profiles should also be given the necessary attention in relation to properly analyzing the overall industry profile, in the face of huge competition in the market. Injecting additional disbursement without properly analyzing the industry position may enlarge the occurrence of the probability of default.

Thus, the Bank should focus on developing MIS as the prerequisite to developed effective credit risk management activity. Organized information are the key tools to forecast and or also to develop the better probability of identifying the risk and or also to develop the mitigating and controlling mechanisms

4.3. Credit Risk Management Review Functions

4.3.1 Risk Reporting and Training

Table 13 risk reporting status

Activities	Frequency	Percentage
On a regular, formal basis (separate)	69	96%
As part of other management reporting	3	4%
On and adhoc basis		
Not reported at all		
Total	72	100%

Source-own survey 2016

The above table shows 96% of the respondent acknowledge that the risk management report is prepared on regular or formal basis.

4.3. 2 Credit Risk Management Training

Table 14- Credit risk management training

Activity	Frequency	Percentage
Never	12	17%
Half yearly	8	11%
quarterly	6	8%
Annually	46	64%
Total	72	100%

Source-own survey 2016

Risk management training is a key instrument in order to build the required knowledge and to create the necessary awareness on new risk management techniques and updates on newly and identified risk types. As per the respondent 64% of them have taken training program annually, while the remaining 8% have taken quarterly. Considering the above efforts as a good endeavor, the reaming 17% had never taken any training program. In relation to the sample groups, which have the role to make decisions on credit management activities, such figures may have some impact on the efficiency of the performers.

4.3.3.. Advisory Services to its Loan Customers

Table 15-providing advisory service

	Frequency	Percentage
Yes	29	39%
No	43	61%
Total	72	100%

Source-own survey 2016

The respondents for question associated to the advisory service to its loan customers 61% of them have witnessed for not giving the necessary advisory service to the client while the remaining 39% of them had supported the availability of the service. The researcher understand that, such gap is observed due to the Bank marketing segmentation strategy and the corresponding service to its clients, corporate customers who owns the highest amount of credit exposure are separately handled with assigned relationship manager. Each corporate customer has one relationship manger who facilitate and follow-up the overall relationship and gives the necessary advisory service.

As per the respondents, the following points are the forms used by the Bank

- Recommending the best way to handle the situation whenever the customers face difficulty in any condition associated to their business through consultation ;
- Visiting their business and the corresponding marketing activities and recommending the best way to handle and
- Communicating whenever there is big macro and micro economic environment changes.

4.3.4.. The problems Encountered During Debt Recovery from Customers

On this open ended question some of the respondents have given their response as follows;

- Mostly customers have taken long time to get involved in the recovery process;
- Unplanned and spontaneous movements to mitigate the problem and
- Diversion of fund and not clearly stated their doing and associated the failure to the existing business.

Regarding the measures that have been taken in connection to processing and sanctioning activities associated to credit which later turn out bad, the respondent stated that the availability of different work out strategies to mitigate the problem such as extending of time, injection of funds and so on.

4.4.. Credit Risk Management process

Table 16-level of agreement for credit risk management process

4.4.1.. Credit processing /appraisal	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
The Bank checks the borrowers history before granting loans	59%	41%			
The Bank properly assess the customer ability to meet obligation	23%	28%	49%		
Credit- granting approval process established accountability for decision taken		30%	50%	20%	
There are times credit granting and monitoring process is overridden by Executives	31%	53%	16%		
The Bank carried out credit processing activities independent of the appraisal function		69%	18%	13%	
4.4.2.Credit administration					
The process of credit administration is performed independently of individuals involved in the business organizations		29%	18%	25%	
The Bank has well structured documentation tracking system for credit and collateral files	19%	39%	19%	23%	
4.4.3.monitoring and control of credits					
Collateral coverage is regularly assessed and related to the borrower's financial health	17%	34%	11%	18%	
The Bank regularly undertakes stress testing on the overall credit portfolio		29%	14%	57%	
The Bank periodically prepared credit quality reports for signaling loan loss in any portfolio	11%	45%	44%		
The Bank monitors the business of clients after granting credits on regular interval basis	14%	40%	33%	13%	
Customers are often given sufficient training on loans usage	10%	25%	11%	52%	
4.4.4. Managing problem credit/recovery					
The Bank segregates the workout activity from the area that originated the credit	47%	53%			
The Bank has credit risk policy that clearly set out how problem credits are to be managed	21%	72%	7%		
The Bank has appropriate criteria for credit classification, provisioning and write off	26%	74%			
Adequate measures are put in place to recover non-performing loans	5%	55%	40%		

Source-own survey 2016

The researcher define these questions in order to clearly understand the overall credit risk management process of the Bank .The key categories which the researcher wants to find responses from the respondents, who are the critical points on this activity, are the credit processing / appraisal process, the credit administration, monitoring and control of credits and managing problem credit/ recovery. Accordingly, key questions were forwarded to the respondents to get the confirmation of their agreements or disagreements on established scales, the result looks as follows.

4.4.1. Credit Processing and Appraisal

Under this category, the first question forwarded to the respondents is regarding to their agreement whether the Bank checks the borrower's history before granting loans. Accordingly, 59% of them strongly agree and the remaining 41% also confirm their agreements on checking of borrowers history before granting loans. From this we can conclude that the Bank has made an effort to check the borrower's' history before granting the loan. The next question under this category is associated to the proper assessment of customers' ability to pay or to meet their obligations, which mainly support the quality of the assessment on the side of the Bank. Accordingly, 23% of them strongly agree and 28% of agree on popper assessment of the customers' request and the overall agreement rate of the respondents were 51%. While the remaining 49% of them remain neutral, such agreement somehow questioned the assessment quality of the Banks associated to customers' capacity to meet their obligations.

The third question on this category is associated to availability of the accountability process of the Bank associated to the credit decisions practices. To the questions associated to find the confirmation of their agreements for the time that credit granting process is established accountability, among the respondents 50% of them remain neutral and the remaining the 30% agree, while 20% of them disagree. Such result clearly indicate the absence of accountability to credit decision and critically questioned of the Bank's commitment on setting accountability associated to each empowerment on credit process.

The question associated to the interference of the Bank's executives on credit granting process, were to confirm their degree of agreement on there are times credit granting and monitoring processes is overridden by , 31% of the respondent strongly agree and 53% of them confirms their agreement, while only the remaining 16% of them are disagree. Such result, the interference of the Bank executives, is critically hamper the process of proper appraisal of the customers based on facts and data associated to the customer and also the prevailing economic condition, macro and micro environment. Instead subjective evaluation on the capacity and knowledge of the executive is become the key decision parameters.

The final question on this category is to confirm the availability of independent appraisal function. Accordingly to the question requested the respondent agreement of the Bank carried out credit processing activities independent of the appraisal function. 18% of the respondent disagree and the 13% remaining neutral and the remaining 6% agree on credit processing activities are carried out independent of the appraisal function.

Based on the above facts associated to credit processing and appraisal activities of the Bank, the quality of the assessment on customers' ability is in question and also absence of accountability on credit decision and the unnecessary intervention of the executive on credit granting process are the key drawbacks.

4.4.2. Credit Administration

The researcher wants to confirm that how the credit administration activity of the Bank is done associated to its independence and or on its organization. Accordingly, regarding the question on independent organizations of the credit administration 60% of them disagree on while 22% of them agreed and the remaining 18% of them holds neutral status. On the availability of well structured documentation and tracking system the 24% respondent disagree while the remaining 42% agree and the remaining 14% remain neutral. This result shows that the credit administration activity of the Bank is neither organized independently not well structured.

4.4.3. Monitoring and Control of Credit

Under this category, the researcher wanted to evaluate the monitoring and control activity of the Bank associated to credit risk management. Accordingly, the implementation and the availability of key tools such as collateral coverage and regular assessment, stress testing, business visit were examined based on respondent responses.

The first question under this category is associated to regular assessment of collateral in relation to borrowers' financial health. Accordingly, 47% of the respondents agreed on the assessment of collateral while 18% of them disagree and 11% of them remain at neutral status. In relation to the activity associated to stress testing, the 57% of them disagree on implementation of such activity and 14% are neutral on status.

To the level of agreement question associated to the preparation of credit quality reports, 56% of them agreed on the implementations of such activity, while the remaining 44 remained neutral. The next level of agreement question associated to the activity in relation to monitoring the business activity of the ients after granting credits on regular interval basis, on agreement level, 14% strongly agree and 40% agree on while 13% remain neutral and the remaining 13% disagree on the implementations of the activity. The final level of agreement question is the activity on regular and sufficient training to the customers on loan usage. Accordingly, 52% of the respondent disagrees on the availability of the activity and 8% of them remain neutral.

On the monitoring and control activity of the Bank associated to conducting stress testing activity, which enables to see the capacity and the associated measures in relation to different scenarios, worst and good, and on evaluating the capacity to stand with on such scenarios are not as per the standard of credit risk management activity. In addition, the Bank has conducted regular visit of its customers, while the effort towards developing a mechanisms on creating the necessary awareness is only focused to its corporate customers.

4.4.4. Managing Credit Problem/recovery

On this category, the researcher wants to know more about the activity in relation to the management of problems on credit. The first key question associated to the activity is the organizational position of the workout activity. Accordingly, on the level of agreement question associated to the segregation of workout activity from the area that the credit is originated, 100% of the respondents agree on the segregation of the workout activity. Regarding the availability of the credit policy regarding the management of problem credits 72% of them agreed and 18% strongly agreed only the 10% remained neutral. In connection to the availability of sufficient criteria for classification, provisioning and write off, 74% of the respondent agree and the remaining 26% with strong agreement endorse the availability of the documents.

The final question, after the attesting, the availability of all documents on managing the problem loans, the researcher wants to ask is the availability of the corresponding measures associated to recover non-performing loans. Accordingly, to the level of agreement questions associated to the availability of adequate measures to recover non-performing loans, 60% of them agree, while 40% of them remain neutral

As per the respondents, the Bank has the necessary organizational frame works, which separate the workout from the loan credit process, and also sufficient document and criteria to bad loan classification, while the availability of sufficient measure associated to non-performing loans is not as proven by the respondent.

4.5. Secondary Data Analysis

One of the tools used by the researcher used in order to meet the object of the study is secondary data collections. The Bank's policy, procedures annual and quarterly reports, central bank directives and financial report status(unofficial) were critically examined to in order to further examined to show the actual Credit Risk Management . The analysis made on evaluating the existing position of the Bank rather than predicting the trend.

Bank of Abyssinia was established on February 15, 1996 and started operation with an authorized and paid up capital of Birr 50 Million and Birr 17.8. Million respectively, and with only 131 shareholders and 32 staff,. In about seventeen years since its establishment of Bank of Abyssinia has registered a significant growth in paid up capital and total assets. Currently, the Bank has an authorized capital of Birr 1.5 Billion and a total deposit balance of Birr 9.Billion and a total loan and advance of Birr 7.Billion. Presently, Bank of Abyssinia has almost 3,000 employees and more than 400,000 customers. The number of share holders reached to 1,637.

The main activities of the Bank are mainly focused on playing the intermediary role or mobilizing deposit from surplus section and delivering in the form of credit to the needy sector, to perform such activities the Bank has deliver different product and services to its customers. Among the activities the account management activities like saving account, demand deposit, are the key to mobilize deposit from surplus section and to support the cash movement transactions to its customers. On the other part, transactional service activities, such us money transfer foreign and local, foreign letter of credit and facilitating export transactions are the main ones. In addition the Bank also gives different service to its customers such as, Card banking, mobile banking, the conventional banking service of Domestic banking and international banking service.

As one of the key activity of the Bank, credit risk management activity, presently has organized on three distinct activities under two Departments and one section. The activities are the credit analysis and appraisal department, the relationship management and work-out section. The two credit departments, credit analysis and appraisal and the corporate relationship management are accountable to the V/President Operations, while the work-out division is organized under the legal department. The Bank has adequate policies and procedure, limits and graining criteria as well as documented credit risk management guidelines.

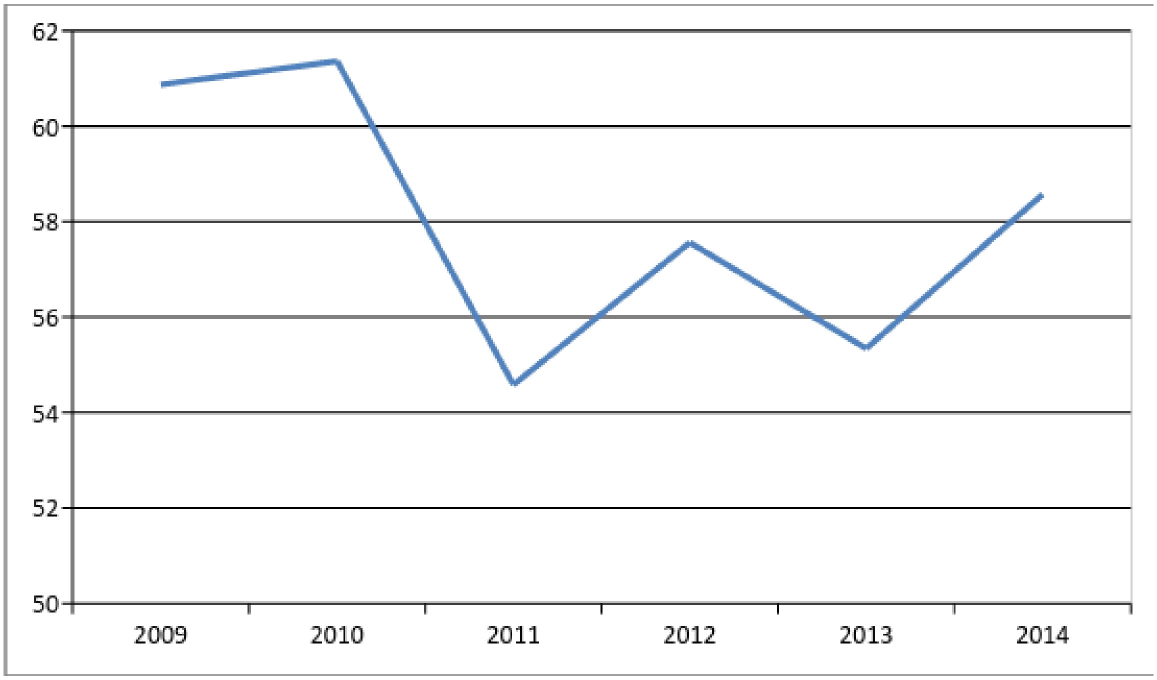
In addition the Bank establish risk management Department, which is independently organized and accountable to the Bank' Board. Based on this principle BOA has developed a risk and compliance management Guidelines enacted since 2011. Accordingly, as part of the risk management framework of the Bank, the Risk Management and Compliance Department has been entrusted with the following tasks

1. Overview the overall credit quality of the Bank's total loans and advances at portfolio and transaction level, provisioning requirements and customers' exposures;
2. Ensure that the lending process is being done in accordance with the provisions of the credit-risk-management policy;
3. Conduct periodic reviews of internal credit ratings;
4. Produce quarterly reports regarding the loan portfolio and the overall credit risk, using the designed reporting system; and
5. Prepare a matrix that shows the overall direction of the credit-risk-management level of the Bank on quarterly basis.

4.5.1. Disbursement Performance and Quality of loan

One of the key components which may help us to evaluate the Bank performance on credit is loan to deposit ratio, which mainly shows the capacity of the Bank's management towards utilizing the resource mobilized. The overall trend of the Bank in utilizing the overall deposit mobilization looks as follows.

Graph 1. Loan to deposit ratio



Source NBE report

As we can seen from the above table, the capacity to utilize the resource mobilized in the form deposit is very fluctuating. On the year 2011, the ratio was reached to lowest stage, which shows the availability of the amount of deposited mobilized not properly disbursed, in the face of high credit demand in market. As the acceptable ratio, 80-85% considering NBE bill and 53-58% excluding NBE bill is a key performance indicator which are somehow constant at any time, the trend of loan to deposit ratio of the Bank shouldn't fluctuate as above.

The second trend that the researcher wants to examine is the credit risk management endeavor of the Bank, associated to the cumulative provision on doubtful loans as a ratio of outstanding loans and advances. Such figure mainly associated to the amount of Non Performing loan of the Bank which helps to understand the effect of credit risk management activity of the Bank.

The research wants to analyze such trend of the Bank as compare to peer groups instead of the overall bank's' position as well from all private banks. Peer banks are somehow similar on their capital strength, age of establishment, number of customer, human resource, and technology usage. Comparing the Bank's position with the peer banks may help to critically evaluate the overall trend of the Bank's credit risk management capacity as compare to the key participant on the market with the same capacity

Table17 : Cumulative provision to loans and advances ratio

Name of Bank	**Average (6 Years)**	**2009**	**2010**	**2011**	**2012**	**2013**	**Average (5 Years)**	**Total Average**
Dashen	**2.55**	2.23	2.17	2.03	2.11	-	**2.14**	**2.71**
AIB	**2.90**	5.82	4.95	3.77	2.78	2.36	**3.94**	**4.05**
BOA	**6.11**	10.90	8.00	3.45	2.64	2.03	**5.40**	**6.26**
Wegagen	**4.57**	6.48	4.14	4.76	2.49	2.29	**4.03**	**4.82**
United	**2.61**	3.19	3.79	2.85	2.39	1.89	**2.82**	**3.07**
NIB	**3.28**	4.83	4.06	4.30	2.79	2.57	**3.71**	**3.87**

Source: Annual Reports of Peer Banks

As obviously known the poor asset quality of BoA's loans and advances is the main reason for high ratio of provision to loans. The Bank's first six years average was more than 6%, it reaches its pick level in 2009 (i.e. 10.9%) and shows a declining trend and reach to 2.03% in 2013. The annual provision held on doubtful loans and advances as a ratio of total loan portfolio which mainly associates to the amount of nonperforming loan of the Bank is higher on average from its peer banks. Which one way or another shows that relatively poor capacity on credit risk management activity of the Bank specially on properly addressing and managing the credit risk starting from origination up to settlement of the loan.

4.5.2. Credit Concentration Risk Indicators

Under this category the researcher wants to evaluate the Bank's portfolio associated to one of the key risk measurement tools, concentration risk.

A. Sector Review

Economic sector concentration showed that Domestic Trade & Services took the highest share (43.05%) of total loan balance trailed by Export (20.05%) and Housing and construction sector loans (14.85%), while Import loans represent (14.12%). The sector wise loan concentration of the Bank was not evenly distributed. While in general the Bank's outstanding loan portfolio is dominated by domestic and international trade finance with the three (domestic trade, Export and Import) sector categories representing nearly (78%) of the Bank's outstanding loan portfolio stand out as the more concentrated sector at.

Overall assessment of sector wise loan concentration shows that (92.75%) the Bank's outstanding loans are lent in two broader sectors of the economy: the trade sector and the construction sector. Outstanding loans due to the other three important sectors of the economy: Industry, Transport & Communication and Agriculture along with personal loans represent only 7.25% of the Bank's total outstanding loan portfolio as at March 31, 2016.

While the Bank's focus on lending for trading businesses is associated with the overall structure of the economy and the very nature of commercial banks reliance on short term funding.

B. Product Review

Concentration of loan portfolio by product type indicated that Term Loans constituted the majority by taking up 65% followed by Overdraft facilities taking a share of 23% of the total portfolio, while Advances on Import & Export Bills and Merchandise Loans represent 9% as at March 2016

C. Geographical Concentration

Concentration of loans by Branches showed that outstanding loans are distributed between city branches and outlying branches in an uneven manner favoring city branches. That is, 73% of the total outstanding balance of loans and advances was held by city branches while the rest 27% was held by outlying branches. This indicates the Bank's outstanding loans are geographically highly concentrated at the Addis Ababa City. Given the economic activity concentration in the Capital City, this could be considered a structural reality with inherent risk element as at March 2016.

However, geographical loan concentration within the capital city if seen together with the sector wise concentration of the outstanding loans in the Domestic & International Trade Sectors can become a cause for enhanced concentration risk.

D. Concentration of Loans at Large Borrowers

The total amount of outstanding loan and advance possessed by top twenty borrowers has reached Birr 25.09% of the total outstanding loans at the end of March 2016. This indicates that one-fourth of the loan is concentrated in twenty borrowers and this shows there is high concentration loans by few borrowers as at March 2016.

4.5.3. Credit Quality- Non-Performing Loans

NPLs balance at the end march 2016 has reached to 5.41% of the total loan portfolio. This is above the statutory requirement set by the NBE or regulatory authority.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

Lending is the heart of banking industry. While doing so, the integral element of uncertainty or possibility of loss, risk, is faced by the Banks associated to lending or credit activity. Managing this risk is a vital with the help of standardized credit risk management tools in order to survive and thrive in such volatile and competitive environment.

Accordingly, this study aim to evaluate the credit risk management practice of one of the private bank, Bank of Abyssinia, with the established objective. The analysis of primary and secondary data revealed some very interesting aspect about the credit risk management practices of the Bank. Regarding the respondents who responded to the questionnaires, 83% of them have a degree and the remaining 17& with master degree, which sufficiently support the availability of the required knowledge associated to the risk management practice of the Bank. The majority of respondents believe that direct lending is the key source of risk the Bank will exposed. The result as per the predefined objective of the study looks as follows.

i. The overall assessment of the credit risk management practice of the Bank look as follows. The Bank has adequate policies and procedure, limits and graining criteria as well as documented credit risk management guidelines. In addition the Bank has also established risk management Department, which is independently organized and accountable to the Bank' Board. Based on this principle BOA has developed a risk and compliance management Guidelines enacted since 2011. While doing so the under mentioned results have been obtained as a research findings.

- The key challenges on implementing credit risk management activities of the Bank are lack of management information system and also the timeliness and quality of information, which are the key variable to make proper credit assessment and able to forecast the probability of any occurrence.

  - The tools which are used in credit risk management by the Bank are mainly depending on collateral value and credit approval authority. the Bank didn't utilize other methods like portfolio management, diversification

  - As part of credit risk management activities different tasks were conducted by the Bank, as a good juncture, while the key activity such as industries studies , which help to critically examine the industry potential to accept the new demand is not properly handled or get due consideration

- The activity associated to risk report is a good endeavor , which helps to review the risk management activity of the Bank, though the researcher couldn't find any responses associated to any finding emanated from the such regular reports
- Pricing of credit risk mainly associated to the collateral value in the Bank. the Bank didn't consider the viability of customer business, which should be the key point to consider the pricing risk
- Under credit processing and appraisal activities of the Bank, the quality of assessment on customer ability is not fully attested by the respondent, and also lack of sufficient information, were identified as a drawback. In addition lack of accountability and executives overridden activities were also noted on the Bank's credit processing and appraisal activity. Such activities will have negative impact on the quality of credit process and appraisal activities
- The credit administration activity of the Bank is not getting the necessary attention and there is no structured document tracing system
- Under monitoring and control activities of the Bank, stress testing on the overall credit portfolio is not conducted,
- The necessary advisory service had not given to all Banks' loan customer.

- The Bank has adequate policies and procedure, limits and granting criteria as well as documented credit risk management guidelines on managing problem loans. while on managing problem loans the adequate measures are not taken as required to recover non-performing loans

- Concentration risk associated to sector, product and geography are also existed on the Bank. In addition high concentration of loan by large borrowers is also witnessed on the credit portfolio of the Bank.

ii. The techniques used by the Bank to measure its risk,

- The study finding shows that collateral is used as a number one technique used by the Bank to manage credit risk. Regarding the use of model to forecast the portfolio risk, presently, the Bank didn't utilize any model. Even the awareness of the staff in relation to the matter is not as per the expectation. In addition The Bank didn't calculate the probability of default of each customer. In general proper credit risk measurements are not used by the Bank such as credit risk rating, credit scoring system and credit risk modeling.

iii. The following key points are observed as compared to best practices. According to Basel requirements, the key four categories are defined as best practice to manage credit risk. The under mentioned gaps are observed by the Bank based on the result found

- Establishing an appropriate credit risk environment is one of the best practices established to manage credit risk. Such practices mainly depend on key requirements, on the availability of credit procedure and about the role of the Bank's Executives associated to the implementation of such procedure. Accordingly as per the input found on secondary data, the Bank has sufficient credit risk strategy and credit policy approved by the concerned organs.

- Operating under sound credit granting process under this practice, the key issues under this best practice are mainly depends on the availability of credit granting criteria, limits, process on approving new credits as well as the amendments. Regarding such best practices, the Bank has defined credit granting criteria, which is almost deepened on the value of collateral, which is the critical gap on this best practice.

- Maintaining an appropriate credit administration, measurement and motioning process. Under this best practices frame works, the critically tasks are the availability of administering capacity of various credit risk portfolios, system of monitoring the condition of individual credit, the availability of information system and analytical techniques , assessing individual credit portfolios. As per the research finding, the wide gap on implementation of best practices is observed on this category. The bank has no well defined management information system, the monitoring effort also jeopardize due the absence of the required information. The analytical techniques used to define credit risk are almost not compatible to the existing environment.

- Ensuring adequate control over credit risk, under this category the key issues are the independent assessment of the credit risk, and the availability of internal control and remedial actions. Accordingly, the Bank has established risk management department and the independent review has been conducted regular.

In summary there are both good points that are appreciated and areas need improvement. To this the following points are recommended based on the study findings

5.2. Recommendation

In line with the findings obtained, the following recommendations are forwarded

- Information is a crucial input for conducting, proper assessment on customers' ability and on understanding the overall track record of the customer. It also help to measure and monitor the credit risk inherent in all on-and off- balance sheet items. Hence the Bank should build well organized management information system , which support the overall credit assessment activity of the Bank

- The Bank management should prepare itself to move into the new environment of financial operation and trading and equip itself to cope-up with new tools and systems capable of assessing, monitoring and controlling risk exposures in a more scientific manner. Different portfolio management tools, risk monitoring and control tools and model should be used, instead of relying on traditional project financing and computing mechanism and dependence on collateral.

- The Bank should give a key concern on minimizing its concentration risk, by developing different methodologies to diversify the credit concentration on one or two sectors, location and geographical areas. Associated to individual credit concentration one fourth of the credit portfolio of the bank is in the hand of very few large borrowers, which the Bank should consider serious concentration.

- The Bank should strengthen its advisory role associated to create the necessary awareness on timely payments and other and should also incorporate the whole credit customers of the Bank. In addition to present practice of availing the service to corporate customers.

- National Bank of Ethiopia should also strengthen its on-site examination and also regularly review the credit risk management activity of the Bank

- NBE should also enforce the Bank to develop code of conduct, to prohibit the interference of executives from overriding the Bank's policy and procedures.

✓ Recommendation for further study.

The improper credit risk management practices of any Bank will have a great impact on the overall financial sector and also on the economy. Hence, the result what is obtained on this paper may also be the fact of other private banks. Hence, future research should be required on how to develop a standardized credit risk management practices in the sector.

Saint Marry University

Questionnaire

Dear respondent

This questionnaire is designed to gather information for the research to be conducted on "Credit risk Management practice at Bank of Abyssinia". The purpose of the study is to fulfill a thesis requirement for the Masters of Business Administration (MBA). Your response for this questionnaire is extremely important for successful completion of my thesis and also to serve as a great input the Bank.

The information that you will provide will only be used for the purpose of the study and kept strictly confidential.

I would like to thank you for your cooperation and sparing your valuable time for my request.

Please put tick mark one of the give choice

Part I. Personal information

1. Gender Male ☐ Female ☐
2. Years of service:- _______________
3. Educational level _____________

4. Your working place__________________

Part II. Research related questions

1. Please tick the level of credit risk being faced by the Bank on the following questions

	No risk	Very low risk	High risk	Very high risk
Direct lending				
Guarantees or letter of credit				

2. Tools of credit risk management

2.1. Which technique/instrument, do you use for credit risk management in your bank? (***Please tick and you can choose more than one answer***)

Credit approval authority	
Prudential limit	
Risk rating	
Portfolio management	
Loan review policy	
Collateral	
Diversification	
Other please specify_____________	

2.2. Does the Bank have defined exposures for managing off- balance sheet exposures?

Yes ☐ no ☐

2.3. Please rate, which of the following factors you consider for pricing credit risk?

	Highly considered	considered	Somehow considered	Not considered
Portfolio quality				
Value of collateral				
Future business potential				
Portfolio industry exposure				
Tenure period of credit				
Any other please specify				

Altman's Z score model	
Merton based models/KMV model	
Credit metrics model	
Value at risk model	
Other please specify____________	
Not utilized	

2.4. Please indicate which of the following credit risk module your use for evaluation of *please tick you can choose more than one answer*

2.5. What are the tools used by the Bank to measure credit risk?

1. Internal rating ☐ ☐

2. Through the five C's of credit ☐

3. Through financial statement ratios ☐

4 .Human judgments through experience ☐

5. Others, please specify.____
____

2,6, Do you calculate probability of default of customers?

We calculate ☐ we don't calculate ☐ ur studies are going on ☐

2.7. Do you calculate recovery rate of a loan?

Yes No

2.8. If yes, when do you calculate this (Hint: at the time loan is pass, special mention, or at all

Time).____

3. Activity performed for credit risk management

3.1. Does the Bank perform the following activities for credit risk management

	Most important	**Important**	**Least Important**	**Not used**
Industries studies/ profiles				
Periodic credit calls				
Periodic visits of plants				
Developed MIS				
Credit risk rating/ risk scoring				
Annual review of accounts				

3.2. Which of the following best describes the way risk management is reported within the Bank?

1. on regular. Formal basis ☐
2. as part of other management reporting ☐
3. on an adhoc basis ☐
4. Not reported at all ☐

3.3. How often the Bank provides credit risk management training

☐

1. Never
2. Half yearly
3. Quarterly
3. Annually

3.4. Does the Bank provide any advisory services to its loan customers?

Yes ☐ no. ☐

3.5. If yes. What form does it take?

3.6. What are the problems encountered during debt recovery from customers?

3.7. What measures have been taken in connection to processing and sanctioning activities associated to credit which later turn out bas?

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5. Credit Risk Management process

Please provide your level of agreement using the following rates

5.1.. Credit processing /appraisal	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
The Bank checks the borrowers history before granting loans					

The Bank properly assess the customer ability to meet obligation					
Credit- granting approval process established accountability for decision taken					
There are times credit granting and monitoring process is overridden by Executives					
The Bank carried out credit processing activities independent of the appraisal function					
5.2.Credit administration					
The process of credit administration is performed independently of individuals involved in the business organizations					
The Bank has well structured documentation tracking system for credit and collateral files					
5.3.monitoring and control of credits					
Collateral coverage is regularly assessed and related to the borrower's financial health					
The Bank regularly undertakes stress testing on the overall credit portfolio					
The Bank periodically prepared credit quality reports for signaling loan loss in any portfolio					
The Bank monitors the business of clients after granting credits on regular interval basis					
Customers are often given sufficient training on loans usage					
5.4. Managing problem credit/recovery					
The Bank segregates the workout activity from the area that originated the credit					
The Bank has credit risk policy that clearly set out how problem credits are to be managed					
The Bank has appropriate criteria for credit classification, provisioning and write off					
Adequate measures are put in place to recover non-performing loans					

6. Please give any comment or opinion about the Bank' credit risk management practices

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