



**ST. MARY'S UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**

**ASSESSMENT OF CREDIT RISK MANAGEMENT  
POLICIES AND PRACTICES IN NIB INTERNATIONAL  
BANK S.CO**

**PREPARED BY**  
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**APRIL 2015**  
**ADDIS ABABA**

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POLICIES AND PRACTICES IN NIB INTERNATIONAL  
BANK S.CO**

**A THESIS SUBMITTED TO ST.MARY'S UNIVERSITY, SCHOOL OF  
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**BY**

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## ACRONYMS

BIS	Bank of International Settlement
CRM	Credit Risk Management
CAD	Cash Against Document
CAR	Capital Adequacy Ratio
EAR	Earning At Risk
EBITD	Earnings Before Interest, Taxes, Depreciation and Amortization
FI	Financial Institution
MPT	Modern Profitability Theory
NBE	National Bank of Ethiopia
NPL	Non Performing Loan
SWOT	Strength, Weakness, Opportunity and Threat.
VAR	Value At Risk
WIP	Work In Process

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## ABSTRACT

*Credit risk refers to the probability of loss due to a borrower's failure to make payments on any type of debt. Credit risk management, meanwhile, is the practice of mitigating those losses by understanding the adequacy of both a bank's capital and loan loss reserves at any given time a process that has long been a challenge for financial institutions. The focus of this research is to assess credit risk management policies and practices of NIB international Bank S.co. The study used a mix of quantitative and qualitative research method to collect and analyze data relevant for the study. Questionnaire and in-depth interview were used to gather pertinent data for the study. Considering the number of targeted population which is only 102 and to increase the accuracy of the study's result, population censes method or the whole population is considered for this study and data is collected from 102 staffs of the Bank out of which 96 are found to be good for analysis. In-depth interview was conducted with Directors, division managers and with two special Branch managers. Descriptive statistics such as averages, percentages, frequencies and tables are used to analyze and present the data. The study found that factors such as poor credit policy, weak credit analysis, poor credit monitoring, inadequate risk management, lack of management information system in placed to insure that exposures approaching risk limits are brought to the attention of senior management have put a boundless influence towards the attainment of successful credit risk management in NIB Bank. Based on the findings, the paper recommends the Bank's credit policies should be designed and implemented with consideration for internal and external factors such as the bank's market position, particularly establish targets for portfolio mix and exposure limits to single counterparties, groups of connected counterparties, industries or economic sectors, geographic regions and specific products as doing this in credit policies and procedures enable the bank to maintain sound credit granting standards; monitor and control credit risk; properly evaluate new business opportunities; and identify and administer problem credits.*

**Key Words:** *credit risk, credit, loan, concentration risk, risk management in bank, credit policy.*

## CHAPTER ONE

### 1.1 Introduction

Credit risk is defined as the risk of a credit institution suffering losses due to default, late or incomplete execution of the debtors financial obligations before the credit organization in accordance with the terms of the contract. Credit risk involves the risk of a particular bank and the borrower's portfolio risk. Credit risk management determines the effectiveness of Credit Risk Management (CRM) policies of a commercial bank comprise those decision making structures associated with the reduction of exposures to credit asset classification and loan loss provisioning. According to the Basle Committee on Banking Supervision (BCBS) (2003), management of bank risk relates to the minimization of the potential that a bank borrower or counter-party will fail to meet its obligations in accordance with agreed terms activeness of a commercial bank.

In a bid to maximize shareholders wealth and ensure safety of depositors fund, banks act as delegated monitors on behalf of lenders (depositors) using various innovations technologies and procedures to enforce credit contracts. These measures notwithstanding, banking operations are still exposed to some inherent risks including borrowers' outright default; unwillingness or inability to meet credit commitment due to the vagaries of business activities or other environmental dynamics (Bidani *et. al.*, 2004). Credit management frameworks therefore become imperative tools in decision- making that relates to loan-pricing, delegating lending powers, mitigating or migrating as well as managing incidences of credit risk on bank portfolio.

CRM policies are designed and applied both internally as an operational tool by bank management and externally by bank regulatory authorities to manage the financial health of the banking sector. The focuses of such policies are the needs for asset diversification; maintenance of balance between returns and risk, bank asset quality and ensuring safety of depositors fund. The failure of various regulatory frameworks designed by the supervisory authorities and inability of technological innovations to stem rising "toxic assets" in many banks constitute matters of grave concern for stakeholders in both developed and developing nations" financial systems; Sinkey (1998), Saunders and Cornett (2003).

The objective of credit risk management is to minimize the risk and maximize bank's risk adjusted rate of return by assuming and maintaining credit exposure within the acceptable parameters. Credit risk management includes a) measurement through credit rating/scoring, b) quantification through estimation of expected loan losses, c) pricing on a scientific basis and d) controlling through effective review mechanism and portfolio management.

As stated by Rekha Arunkumar (2005), "Better and effective strategic credit risk management process is a better way to manage portfolio credit risk." The process provides a framework to ensure consistency between strategy and implementation that reduces potential volatility in earnings and maximize shareholders wealth. Beyond and over riding the specifics of risk modeling issues, the challenge is moving towards improved credit risk management lies in addressing banks' willingness and openness to accept change to a more transparent system, to rapidly changing markets, to more effective and efficient ways of operating and to meet market requirements and increased answerability to stake holders. The rational to analyze the efficiency of CRM frameworks is particularly acute in a developing nation like Ethiopia accordingly; there is a need to study Credit Risk Management (CRM) practice in NIB International Bank, particularly in view of NPLs level, CAR (Capital Adequacy Ratio) norms and Basel Capital Accord.

### **Background History of Nib International Bank**

Nib International Bank S.C. was established on 26th May 1999 under license No. LBB/007/99 in accordance with the Commercial Code of Ethiopia and the proclamation for Licensing and Supervision of Banking Business No. 84/1994 with a paid up capital of Birr 27.6 million and authorized capital of Birr 150 million by 717 shareholders and commenced its operation on 28th October 1999. At the end of June 2013, the authorized and Paid-up capital of the Bank reached Birr 2 billion and Birr 999.9 million respectively. Shareholders' and employees number also increased and reached to 3,877 and 2,278 respectively.

## **1.2 Statement of the Problem**

Sound credit management is a prerequisite for a financial institution's stability and continuing profitability, while deteriorating credit quality is the most frequent cause of poor financial performance and condition. The prudent management of credit risk can minimize operational risk while securing reasonable returns.

Ensuring lending staffs comply with the credit lending license and by-laws is the first step in managing credit risk. The second step is to ensure board approved policies exist to limit or manage other areas of credit risk, such as syndicated and brokered loans, and the concentration of lending to individuals and their connected parties (companies, partnerships or relatives).

The Board and Management should also set goals or targets for their loan portfolio mix, as part of their annual planning process. The loan portfolio should be monitored on an ongoing basis, to determine if performance meets the board's expectations, and the level of risk remains within acceptable limits. Credit concentration risk may arise from a single large exposure or from multiple exposures that are closely correlated. This is managed within concentration caps set by counterparty or groups of connected counterparties, and having regard for correlation, by industry in wholesale Banking, and by product and country in Consumer Banking. Additional concentration thresholds are set and monitored, where appropriate, by tenor profile, collateralization levels and credit risk profile.

The banking system in Ethiopia has witnessed a significant expansion over the past few years. The National Bank of Ethiopia (NBE) believes such growth should be matched to strong risk management practices. As a result, the NBE has revised the risk management framework it issued in 2003 to all banks so as to incorporate latest developments in the area.

This revised document, consistent with international standards and best practices, is expected to provide minimum risk management (risk identification, measurement, monitoring and control) standards for all banks operating in the country. It covers the most common and interrelated risks facing banks in the country, namely, credit, liquidity, market and operational risks. The guidelines are thus expected to assist risk-based

supervision and contribute towards safety and soundness of the banking system.

Currently the level of nonperforming credit in NIB international Bank S.C. is below the required threshold set by the regulatory body (National Bank of Ethiopia) but still forced the Bank to maintain a huge amount of provisioning expenses which is above 55 million birr as considerable amount of loans are classified bad credits which belong to about 126 defaulters, in terms of sector wise building & construction term loan alone contribute about 32.3 % of the total non- performing credit, from the Bank's half a billion revolving credit facility above 85% of it is seized by only five customer which shows a very high concentration of credit risk, and in terms of credit product classifications 89% of the outstanding credit facility goes to term loan from the total approved credit facilities of the Bank. During the first quarter of the fiscal year 2014/15 about 19.5% of the loans are approved without appropriate analysis of credit risk grading score which is against the Bank's own credit policy.

In spite of the fact that some researches were conducted in Ethiopia in the area by Tibebe (2011), Girma (2011) and Solomon (2013), these studies mainly focus on credit risk management, profitability of commercial Banks and assessing the impacts of credit risk management on performance of banks. Solomon (2013) assessed credit risk management techniques and practice of NIB International Bank, but he did not conduct his research taking the Ethiopian credit risk management guideline as a benchmark.

This existing situation along with the knowledge gap in the literatures calls for a research to assess credit risk management policies and practice of NIB international Bank. S.C

### **1.3 Objective of the Study**

The general objective of the study is to assess credit risk management policies and practices in NIB international Bank S.C. Based on this broad objective the specific objectives of this research were:

- To assess how well related parties credit transactions is conduct in NIB International
- To examine appropriateness of credit Limits and credit concentration in the NIB International Bank
- To evaluate how well Credit analysis and approval Process is caring out in NIB International Bank
- To assess the soundness of existing credit policy of NIB International Bank S.C
- To review gaps exist between Ethiopian credit risk management guideline and the Bank's credit risk management.

#### **1.4 Research questions:**

In pursuit of the specific objectives, this study seeks to answer the following questions:

- How well related parties transaction is carrying out in NIB International Bank S.C?
- How appropriately credit Limits and credit concentration seat in NIB International Bank S.C?
- How well credit analysis and approval process is carrying out in NIB International Bank S,C?
- How sound is NIB International Bank's existing credit policy?
- What gaps are exist between Ethiopian credit risk management guideline and the Bank's credit risk management.

#### **1.5 Scope of the Study**

Since the term risk is a broad area of study, the paper focuses on only assessing credit risk management policies and practices in NIB Bank ignoring other area of Bank risks such as operational, interest rate, liquidity risks and the like. Even though, credit risk management is a concern of all Banks operating in the country, the paper is limited to cover only Nib International Bank S.C's credit risk management practice. On top of this, due to time and cost constraints, the study focused only on respondents residing at Head Office and Addis Ababa Branches staffs of NIB International Bank S.C

## **1.6 Significance of the Study**

After the research has been completed, its output will contribute a lot to those parties who have similar objectives and seek information on issues related to the study under investigation.

The following are the possible significance of the research output.

- It will help commercial Banks to give insight on various component of credit risk management practice.
- It will be used as an input or documentation for credit risk management procedure formulation for NIB international Bank S.C.
- It will be used as source of information for a secondary data for those who wish to undertake future study on similar issues.
- It helps enhancing of the practical knowledge of the researcher through creating a link between the theoretical knowledge of credit risk administration and actual implementation in this area in the banking industry.

## **1.7 Organization of the Paper**

The paper is organized into five chapters. The first chapter deals with introductory part consisting of introduction/background of the study and the organization, statement of the problem, objectives of the study, scope of the study and its significance.

The second chapter reviews literatures related to the study. In this chapter various theoretical concepts and empirical literatures that relates with credit risk and credit administration is discussed. And in the third chapter research design and methodology employed is presented. Analysis of the collected data and interpretation of the analyzed data is presented in the fourth chapter. And finally, the fifth chapter presents summaries of major findings, the conclusions and the possible recommendations.

## **1.8 Operational Definitions**

### **Risk Management**

Redja (1998) defines risk management as a systematic process for the identification and evaluation of pure loss exposure faced by an organization or an individual, and for the selection and implementation of the most appropriate techniques for treating such exposure. The process involves: identification, measurement, and management of the risk.

### **Credit Risk**

Greuning and Bratanovic (2009) define credit risk as the chance that a debtor or issuer of a financial instrument— whether an individual, a company, or a country— will not repay principal and other investment-related cash flows according to the terms specified in a credit agreement. Inherent to banking, credit risk means that payments may be delayed or not made at all, which can cause cash flow problems and affect a bank's liquidity.

Basel Committee on Banking Supervision, Principles for the Management of Credit risk (September 2000) defined credit policy and concentration risk as follows

### **Credit Policy**

Credit policy is a written policies and procedures related to identifying, measuring, monitoring and controlling credit risk. Credit policies establish the framework for lending and guide the credit-granting activities of the banks.

### **Concentration Risk**

Credit concentration is a bank's portfolio contains a high level of direct or indirect credits to a single counterparty, a group of related counter parties, an industry, a geographical region, a type of credit facility (i.e. overdrafts); and a class of collateral

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURES**

#### **2.1 Introduction**

This chapter reviews the literature on credit risk management in banking. It discusses issues on credit risk management from different perspectives and with the view of giving a theoretical foundation to the study. It starts with an exposition on risk management, followed by reviews of literature on the rationales and categories of risk management activities as well as the kinds of risk faced by banks. The major benchmarks used for credit risk assessment of this study are different Books as well as various journal related to credit risk management and a range of documents released by the Risk Management Group of the Basel Committee on Banking supervision regarding principles which ensure sound management of credit risks in banks and empirical literatures also reviewed in this chapter as well as.

#### **2.2 Theoretical Literature**

##### **2.2.1 Risk Management in Banking**

Risk management is described as the performance of activities designed to minimize the negative impact (cost) of uncertainty (risk) regarding possible losses (Schmidt and Roth, 1990). Redja (1998) also defines risk management as a systematic process for the identification and evaluation of pure loss exposure faced by an organization or an individual, and for the selection and implementation of the most appropriate techniques for treating such exposure. The process involves: identification, measurement, and management of the risk. Bessis (2010) also adds that in addition to it being a process, risk management also involves a set of tool and models for measuring and controlling risk.

The objectives of risk management is to minimize foreign exchange losses, reduce the volatility of cash flows, protect earnings fluctuations, increase profitability, and ensure survival of the firm (Fatemi and Glaum, 2000). To ensure that banks operate in a sound risk management environment, where there is reduced impact of uncertainty and potential

losses, managers need reliable risk measures to direct capital to activities with the best risk/reward ratios. They need estimates of the size of potential losses to stay within limits set through careful internal considerations and by regulators. They also need mechanisms to monitor positions and create incentives for prudent risk taking by divisions and individuals.

According to Pyle (1997), risk management is the process by which managers satisfy these needs by indentifying key risks, obtaining consistent, understandable, operational risk measures, choosing which risks to reduce, which to increase and by what means, and establishing procedures to monitor resulting risk positions. Bessis (2010) indicates that the goal of risk management is to measure risks in order to monitor and control them, and also enable it to serve other important functions in a bank in addition to its direct financial function. These include assisting in the implementation of the bank's ultimate strategy by providing it with a better view of the future and therefore defining appropriate business policy and assisting in developing competitive advantages through the calculation of appropriate pricing and the formulation of other differentiation strategies based on customers' risk profiles.

According to Santomero (1995), the management of the banking firm relies on a sequence of steps to implement a risk management system. These normally contain four parts which are standards and reports, position limits or rules, investment guidelines or strategies, incentive contracts and compensation. These tools are generally established to measure exposure, define procedures to manage these exposures, limit individual positions to acceptable levels, and encourage decision makers to manage risk in a manner that is consistent with the firm's goals and objectives.

Risk-taking is an inherent element of banking and, indeed, profits are in part the reward for successful risk taking. In contrary, excessive, poorly managed risk can lead to distresses and failures of banks. Risks are, therefore, warranted when they are understandable, measurable, controllable and within a bank's capacity to withstand adverse results.

Although underdeveloped, the banking system in Ethiopia has witnessed a significant expansion over the past few years. The National Bank of Ethiopia (NBE) believes such growth should be matched to strong risk management practices. As a result, the NBE has revised the risk management framework it issued in 2003 to all banks so as to incorporate latest developments in the area.

### **2.2.2 Rationales for Risk Management in Banking**

The main aim of management of banks is to maximize expected profits taking into account its variability risk. This calls for an active management of the volatility risk in order to get the desired results. Risk management is therefore an attempt to reduce the volatility of profit which has the potential of lowering the value of shareholders' wealth. Various authors including Stulz (1984), Smith et al (1990) and Froot et al (1993) have offered reasons why managers should concern themselves with the active management of risks in their organizations.

According to Oldfield and Santomero (1995), recent review of the literature presents four main rationales for risk management. These include managers self interest of protecting their position and wealth in the firm. It is argued that due to their limited ability to diversify their investments in their own firms, they are risk averse and prefer stability of the firm's earnings to volatility because, all things being equal, such stability improves their own utility. Beyond managerial motives, the desire to ensure the shouldering of lower tax burden is another rationale for managers to seek for reduced volatility of profits through risk management.

### **2.2.3 Key Bank Risks**

The risks associated with the provision of banking services differ by the type of service rendered. Different authors have grouped these risks in various ways to develop the frameworks for their analyses but the common ones which are considered in this study are credit risk, market risks (which includes liquidity risk, interest rate risk and foreign exchange risk), operational risks which sometimes include legal risk, and more recently, strategic risk.

## 2.2.4 Credit Risk

Greuning and Bratanovic (2009) define credit risk as the chance that a debtor or issuer of a financial instrument whether an individual, a company, or a country will not repay principal and other investment related cash flows according to the terms specified in a credit agreement. Inherent to banking, credit risk means that payments may be delayed or not made at all, which can cause cash flow problems and affect a bank's liquidity. 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. More than 70 percent of a bank's balance sheet generally relates to credit risk and hence considered as the principal cause of potential losses and bank failures. Time and again, lack of diversification of credit risk has been the primary culprit for bank failures. The dilemma is that banks have a comparative advantage in making loans to entities with whom they have an ongoing relationship, thereby creating excessive concentrations in geographic and industrial sectors. Credit risk includes both the risk that a obligor or counterparty fails to comply with their obligation to service debt (default risk) and the risk of a decline in the credit standing of the obligor or counterparty.

While default triggers a total or partial loss of any amount lent to the obligor or counterparty, a deterioration of the credit standing leads to the increase of the possibility of default. In the market universe, a deterioration of credit standing of a borrower does materialize into a loss because it triggers an upward move of the required market yield to compensate the higher risk and triggers a value decline (Bessis, 2010). Normally the financial condition of the borrower as well as the current value of any underlying collateral are of considerable interest to banks when evaluating the credit risks of obligors or counterparties (Santomero, 1997).

According to Greuning and Bratanovic (2009), formal policies laid down by the board of directors of a bank and implemented by management plays a vital part in credit risk management. As a matter of fact, a bank uses a credit or lending policy to outline the scope and allocation of a bank's credit facilities and the manner in which a credit portfolio is managed that is, how investment and financing assets are originated, appraised, supervised,

and collected. There are also minimum standards set by regulators for managing credit risk. These cover the identification of existing and potential risks, the definition of policies that express the bank's risk management philosophy, and the setting of parameters within which credit risk will be controlled. There are typically three kinds of policies related to credit risk management.

The first set aims to limit or reduce credit risk, which include policies on concentration and large exposures, diversification, lending to connected parties, and overexposure. The second set aims at classifying assets by mandating periodic evaluation of the collectability of the portfolio of credit instruments. The third set of policies aims to make provision for loss or make allowances at a level adequate to absorb anticipated loss.

## **2.3 Portfolio Theory and Traditional Method to Credit Risk Management**

### **2.3.1 Portfolio Approach:**

Since the 1980s, banks have successfully applied modern portfolio theory (MPT) to market risk. Many banks are now using earnings at risk (EAR) and value at risk (VAR) models to manage their interest rate and market risk exposures. Unfortunately, however, even though credit risk remains the largest risk facing most banks, the practical of MPT to credit risk has lagged (William Margrabe, 2007).

Banks recognize how credit concentrations can adversely impact financial performance. As a result, a number of sophisticated institutions are actively pursuing quantitative approaches to credit risk measurement, while data problems remain an obstacle. This industry is also making significant progress toward developing tools that measure credit risk in a portfolio context. They are also using credit derivatives to transfer risk efficiently while preserving customer relationships. The combination of these two developments has precipitated vastly accelerated progress in managing credit risk in a portfolio context over the past several years.

### **A. Asset-by-Asset Approach:**

Traditionally, banks have taken an asset-by-asset approach to credit risk management. While each bank's method varies, in general this approach involves periodically evaluating the credit quality of loans and other credit exposures, applying a credit risk rating, and aggregating the results of this analysis to identify a portfolio's expected losses. The foundation of the asset-by-asset approach is a sound loan review and internal credit risk rating system. A loan review and credit risk rating system enable management to identify changes in individual credits, or portfolio trends in a timely manner. Based on the results of its problem loan identification, loan review, and credit risk rating system management can make necessary modifications to portfolio strategies or increase the supervision of credits in a timely manner.

### **B. Portfolio Approach**

While the asset-by-asset approach is a critical component to managing credit risk, it does not provide a complete view of portfolio credit risk, where the term risk refers to the possibility that actual losses exceed expected losses. Therefore to gain greater insight into credit risk, banks increasingly look to complement the asset-by-asset approach with a quantitative portfolio review using a credit model.

Banks increasingly attempt to address the inability of the asset-by-asset approach to measure unexpected losses sufficiently by pursuing a portfolio approach. One weakness with the asset-by-asset approach is that it has difficulty of identifying and measuring concentration. Concentration risk refers to additional portfolio risk resulting from increased exposure to a borrower, or to a group of correlated borrowers.

**Table 1: Summarizes strategies for reducing and coping with portfolio credit risk.**

Technique	Advantages	Disadvantages	Implication
Geographic Diversification	External shocks (climate, price, natural disasters, etc.) are not likely to affect the entire portfolio if there is spatial diversification.	If the country is small or the Institution is capital constrained, it may not be able to apply this principle. It will become vulnerable to covariate risk, which is high in agriculture.	
Loan Size Limits (Rationing)	Prevents the institution from being vulnerable to Non performance on a few large loans.	Can be carried to the extreme where loan size does not fit the business needs of the client and results in suboptimal use and lower positive impact by client. Client could become dissatisfied	Protects asset quality in the short- run but creates client retention problems in the long run. Inimical to relationship Banking.
Over Collateralization	Assures the institution that enough liquidation value will exist for foreclosed assets.	Excludes poor, low-income clients who are the vast majority of the market.	Not is commended technique if goal is to better serve the low- and moderate income clients.
Credit Insurance	Bank makes clients purchase credit insurance. In event of default, bank collects from insurer.	Databases and credit bureaus may not exist to permit insurer to engage in this line of business in cost-effective manner.	
Portfolio Securitization	Lender bundles and sells loans to a third party. Transfers default risk and improves liquidity so that it can continue to lend.	Requires well documented loans and long time series of performance data to permit ratings and reliable construction of financial projections.	Requires a well developed secondary market, standardized underwriting practices, and existence of rating companies.

Source: Publication of the Inter-American Development Bank, May 2007.

### **2.3.2 Traditional approach**

It is hard to differentiate between the traditional approach and the new approaches since many of the ideas of traditional models are used in the new models. The traditional approach is comprised of four classes of models

#### **A. Expert Systems**

In the expert system, the credit decision is left in the hands of the branch lending officer. His expertise, judgment, and weighting of certain factors are the most important determinants in the decision to grant loans. The loan officer can examine as many points as possible but must include the five “Cs” these are; character, credibility, capital, collateral and cycle (economic conditions) in addition to the 5 Cs, an expert may also take into consideration the interest rate.

#### **B. Artificial Neural Networks**

Due to the time consuming nature and error-prone nature of the computerized expertise system, many systems use induction to infer the human expert's decision process. The artificial neural networks have been proposed as solutions to the problems of the expert system. This system simulates the human learning process. It learns the nature of the relationship between inputs and outputs by repeatedly sampling input/output information.

#### **C. Internal Rating at Banks**

Over the years, banks have subdivided the pass/performing rating category, for example at each time, there is always a probability that some pass or performing loans will go into default, and that reserves should be held against such loans.

#### **D. Credit Scoring Systems:**

A credit score is a number that is based on a statistical analysis of a borrower's credit report, and is used to represent the creditworthiness of that person<sup>1</sup>. A credit score is primarily based on credit report information. Lenders, such as banks use credit scores to evaluate the potential risk posed by giving loans to consumers and to mitigate losses due to bad debt. Using credit scores, financial institutions determine who are the most qualified for a loan, at what rate of interest, and to what credit limits (Wikipedia, 2008).

## **E. Supervisory Authority of Bank Credit Risk Management**

The Bank of International Settlement (BIS) on November 28th 2005 in a press release issued a series of ten principles on Sound Credit Risk Assessment and valuation for Loans:

**Principle 1:** The bank's board of directors and senior management are responsible for ensuring that the banks have appropriate credit risk assessment processes and effective internal controls to consistently determine provisions for loan losses in accordance with the bank's stated policies and procedures, the applicable accounting framework and supervisory guidance commensurate with the size, nature and complexity of the bank's lending operations.

**Principle 2:** Banks should have a system in place to reliably classify loans on the basis of credit risk.

**Principle 3:** A bank's policies should appropriately address validation of any internal credit risk assessment models.

**Principle 4:** A bank should adopt and document a sound loan loss methodology, which addresses risk assessment policies, procedures and controls, for assessing credit risk, identifying problem loans and determining loan provisions in a timely manner.

**Principle 5:** A bank's aggregate amount of individual and collectively assessed loan provisions should be adequate to absorb estimated credit losses in the loan portfolio.

**Principle 6:** A bank's use of experienced credit judgment and reasonable estimates are an essential part of the recognition and measurement of loan losses.

**Principle 7:** A bank's credit risk assessment process for loans should provide the bank with the necessary tools, procedures and observable data to use for credit risk assessment purposes, account for impairment of loans and the determination of regulatory capital requirements.

**Principle 8:** Banking supervisors should periodically evaluate the effectiveness of a bank's credit risk policies and practices for assessing loan quality.

**Principle 9:** Banking supervisors should be satisfied that the methods employed by a bank to calculate loan loss provisions produce a reasonable and prudent measurement of estimated credit losses in the loan portfolio that are recognized in a timely manner.

**Principle 10:** Banking supervisors should consider credit risk assessment and valuation.

## 2.4 Managing Credit Risk Using Financial Ratios

Ratio analysis (financial and accounting ratios) is a measurement system to analyses the strength, weakness, opportunity and threats (SWOT Analysis) of an FI. The table below depicts some of the frequently used ratios in credit analysis (Table 2):

**Table 2: Frequently Used Ratios in Credit Analysis**

Category	Ratio
Operating Performance	Earnings before interest, taxes, depreciation and amortization(EBITDA)/Sales Net Income/ Sales Net Income/ Net Worth Sales/ Fixed Assets
Debt Service Coverage	EBITDA/ Interest Payment>1.5 Free Cash-flow expenditure/ Interest payments Free Cash-flow expenditures- dividend/Interest
Financial Leverage	Long-term debt/Capitalization Long-term debt/Tangible net worth Total liabilities/Tangible net worth Current liabilities/Tangible net worth
Liquidity	Current ratio (current assets/current liabilities) Quick ratio (current assets-inventory/current liabilities) Inventory turnover(inventory/Net sales) Inventory to Net working capital Current debt to Inventory Raw materials, WIP, and finished goods as a percentage of total Inventory
Receivables	Aging of receivables:30,60,90,90+days Average Collection Period

Source: Publication of the Inter-American Development Bank, May 2007.

## **2.5 The Right Credit Standards**

Before examining the techniques of individual credit appraisal, it is worth reflecting on the context in which lending decisions are taken. According to Aryeetey et al (2002), the right credit standards and a good credit culture in which to apply them are essential for the satisfactory management of credit risk. What does a good credit culture and good credit standards look like?

### **2.5.1 Credit Culture**

Credit culture, according can be defined as a bank's attitude to all matters relating to its management of credit risk. If it is to produce a sound credit risk portfolio it must fit with the overall business and organization of the bank. The culture must be capable of delivering the service the bank requires to meet the needs of its customers. It can only do this if it is compatible with the overall business strategy of the bank and is championed by top management of the bank. Because the credit culture must be a balance between taking new risks and also limiting the amount of risk, it is bound to run into opposition of various types. Top management is the only source that can ensure that the culture supports appropriate credit standards, but also is commercial enough not to cost the bank good business.

Solid credit standards, in the view of Raghuran (2004), will inevitably cost the bank some business, which in hindsight would have been good. But at the time of the decision 20/20 hindsight is not available. There must be agreement throughout the bank that there is some business it is willing to lose and a consensus as to the criteria to be used in deciding which business to do away with. This policy has to be laid down by top management and should cover the type and level of risk the bank is prepared to take and the reward it expects to earn for given levels of risk, both at the individual lending and portfolio level. Establishing the relative status and authority of the credit risk function in the bank means that there must be clarity over the extent that credit has a veto over the activities of the business developers.

The support of top management in maintaining the agreed authority according to Phelan (1997) is essential as well as the willingness to pay the cost of maintaining the culture. This includes training, analysis, monitoring the quality of decision-takers, computer systems and other elements. However, the cost here cannot simply be calculated in cash terms. It also covers willingness to overcome customer resistance as well as to educate both colleagues and customers as to the benefits of a sound credit structure and ultimately to lose business if the consumer proves uneducable. Being robust enough not to be affected by economic cycles, a work culture that changes in responses to different economic conditions is a weak one.

In the view of Santomero (1995), credit standards convert the culture into actions. They must take account of the nature of the bank's business, its structure and the quality and training of staff involved in credit decisions.

### **2.5.2 Standards**

Standards include factors such as the depth of analysis required and how far this is adapted to the needs of the borrower. There is a trade off to be made between a wish to understand all aspects of a proposition and cost. How far facilities are to be standardized and how far they are to be tailored to customers individual needs; all are important in creating sustainable credit standards. Moreover, Santomero (1995) says structuring facilities to protect the bank should be done in such a way and as far as possible that benefits eventually accrues to the customer as well. A repayment schedule for a term loan according to Dyer (1995) should match customer cash flow, not just meet some predetermined arbitrary benchmark.

Setting standards also means recognizing how far customer sensibilities are going to be balanced against the bank's need to protect itself against loss. For example, when a customer's resistance to giving or improving security or providing information is going to be allowed, then there is the need to educate the customer so as to build their capacity to be able to understand the issues at stake. In creating sound credit standards, Andrew and Victor (2003) believe that it is important to include a proper degree of monitoring and control. The point of monitoring according to Hester and Pierce (2002) is to identify

deterioration as soon as possible and to take constructive remedial action. Its effectiveness depends not only on the ability to spot deterioration, but also the quality of the reaction. It is as important to avoid a panic reaction as a complacent one.

However, this is the time when banks are at their most defensive, chastened by their own losses and more likely to be risk averse as opposed to risk aware. This is when the loan conditions are tightened beyond what is reasonable or the banks simply refuse to lend. Sometimes they almost actually add to losses by refusing to support battered but fundamentally sound companies that could recover if only they had sufficient finance. It is difficult, but necessary, to remain objectives.

In the past, lending skills were regarded as essential for all bankers and the most senior members of a bank's management would have them. Times have changed and the credit function within banks is usually one of the less glamorous places to work. Lending is often regarded as 'value destroying' because of the amount of scarce capital it uses and business that generates fees and other non-interest income is seen as more attractive. The problem with this is that customers have a need to borrow. Maybe the bigger ones access capital markets direct through bond issues or commercial paper, but there is a lot of research to show that the service that most customers – especially business ones – most value from their banker is the willingness to grant credit.

According to Dyer (1995), banks face a genuine dilemma in that if they ignore the market and apply standards rigidly, they will avoid credit losses but will have to lose the good business and market share. This must be balanced against the need to meet shareholder aspirations. While models of risk-adjusted capital are widely used and returns related to them, shareholders contribute actual real money capital and want returns on that. It is hard for banks to sit with a lot of real capital and keep ignoring the demand to leverage it. A strong credit culture can help achieve the right balance. If the bank genuinely understands its customers and has the right sort of relationship with them, it can choose when to bend standards a little and when to adhere to them, if possible, in the context of a strong customer relationship to persuade even the most macho of customers to see the bank's point of view.

Relationship banking is a two way street and customers will expect support when they need it. But where transactional banking is the norm, the risks are greater in boom time shown the marketers are driving and reasonable protections are being sacrificed to 'market conditions'. If one wants to get something outside the market in the good times, you need to be prepared to give something back when the customer is in a less strong position.

## **2.6 General Principles of Lending**

In this segment, the ground rules for the credit assessment of individual lending propositions will be considered. 'Rules' is perhaps not the right word because experienced lenders use a mixture of technical knowledge and common sense rather than rules. Each lending case has to be treated on its merits, but Essien (2005), explains that there are a number of general principles, which should be applied in all cases. This subject will be dealt with under two headings: A philosophy for lending and a methodical approach to appraisal.

### **2.6.1 A Philosophy for Lending: Art or Science?**

According to Dyer (1995), a lender does 'lend money and does not give it away'. There is a judgment therefore that at some future date repayment will take place. The lender needs to look into the future and ask: 'will the customer repay by the agreed date?' there will always be some risk that the customer will be unable to repay, and it is in assessing this risk that the lender needs to demonstrate both skill and judgment. The lender's objective will be to assess the extent of the risk and to try to reduce the amount of uncertainty that will exist over the prospect of repayment. While there are guidelines to follow, there is no 'magic formula'. The lender must gather together all the relevant information and then apply his or her skills to making a judgment. Number 'crunching' will never be enough, and this is why many experienced lenders describe lending as an 'art' rather than a science.

### **2.6.2 The Professional Approach**

It is obvious that lenders must seek to arrive at an objectives decision. This is not as easy as it sounds as there will always be pressures from customers and elsewhere, for example, the need to meet profit targets that may sway the lender's judgment. A customer may press

for a quick answer when the lender does not feel there is adequate information. The approach of the true professional is to resist outside pressures and to insist on sufficient time and information to understand and evaluate the proposition. It is the lender who is taking the risk and it is not professional to reach the wrong decision.

The professional lender who is confident in his or her ability, according to Jorion (1997) will always apply the, following principles includes: State time to reach decision- detailed financial information takes time to absorb. If possible, it is preferable to get the 'paperwork' before the interview, so that it can be assessed and any queries identified; Do not be too proud to ask for a second opinion; some of the smallest lending decision can be the hardest; Get full information from the customer and not make unnecessary assumptions or 'fill in' missing detail; Do not take a customer's statements at face value and ask for evidence that will provide independent corroboration; Distinguish between facts, estimates and opinion when forming a judgment; Think again when the 'gut reaction' suggests caution, even though the factual assessment looks satisfactory.

### **2.6.3 A Methodical Approach to Appraisal**

In the views of Havrilesky and Boorman (2001), there are five stages to any analysis of new lending propositions namely introduction of the customer, the application by the customer, review of the application, evaluation, monitoring and control.

### **2.6.4 Introduction of the Customer**

Lenders do not have to do business with people they do not feel comfortable with. The account opening procedures should be such as to establish, as far as possible, that the customer is honest and trustworthy. This is especially important when the customer wishes to borrow at a later stage. Approaches for borrowing from customers of other banks, in the view of Hester and Pierce (2002), merit special caution; why is the approach being made at all? Has the proposal already been rejected by the other bank? If the potential customer ought to have financial fact record, but does not appear to have one, a degree of suspicion is in order.

An important source of new business for most lenders according to Hodgman (2001) is introductions from professional advisers such as accountants and solicitors. This is not to say that a bank is obliged to lend to customers introduced in this way. Indeed, there is no evidence to suggest that such customers are generally of better quality than others. The bank should treat such case on its merits and subject each proposition to an objective assessment. Some introducers try to put pressure on the lender, for example suggesting that further introductions may be dependent on agreement to a specific proposition. The lender, in the view of Fallon (1996) must not succumb to such pressure and needs to avoid relying too heavily on any individual source of new business. A good introducer will respect a lender who shows objectivity, while caving in under pressure will only result in being considered a 'soft touch' and generate the introduction of other less attractive prospects.

### **2.6.5 The Application**

This, according to Phelan (1997) can take many forms but should include a plan for repayment by the borrowing and an assessment of the contingencies that might reasonably arise and how the borrower would intend to deal with them. It might be in detailed written form or merely verbal. There are many instances when the lender will have to draw out sufficient further information to enable the risks in the proposition to be fully assessed.

### **2.6.6 Review of the Application**

At this stage, Dyer (1995) recommends that all the relevant information that is required need to be tested and other data sought if necessary. Either formally or informally the lender applies what are generally known as the canon of good lending. The main areas common to all lending propositions are examined in some detail. It is sometimes difficult to remember all the points to be covered during an interview and many lenders use a mnemonic as a check list. There are a number of mnemonics in common use, but the most prevalent are probably CCCPARTS (Character, Capital, Capability, Purpose, Amount, Repayment, Terms, and Security) PARSER (Persons, Amount, Repayment, Security, Expediency, remuneration) and CAMPARI which is used by two of the major clearing banks, is probably the most popular of the mnemonics and is the one described in detail

here. It stands for: Character, Ability, Margin, Purpose, Amount, Repayment, and Insurance (Security).

### **Character**

Silber (2008), explains that although some might claim otherwise, it is virtually impossible to assess an individual's character after just one meeting. It is an extremely difficult area but a vital one to get right. Facts, not opinion, are crucial, e.g. How reliable is the customer's word as regards the details for the proposition and the promise or repayment? Does the customer make exaggerated claims that are far too optimistic or is a more modest and reasonable approach adopted; is the customer's track record good? Was there any previous borrowing, and if so, was it repaid without trouble. If the customer is new, why are we being approached? Can bank statements be seen to assess the conduct of the account?

### **Ability**

This aspect relates to the borrowers' ability in managing financial affairs and is similar to character as far as personal customers are concerned. Further points in respect of business customers, according to Marshal and Siegel (1996) would include: Is there a good spread of skill and experience among the management team in, for example, production, marketing and finance, Does the management team hold relevant professional qualifications? Are they committed to making the company successful? Where the finance is earmarked for a specific area of activity, do they have the necessary experience in that area?

### **Margin**

Agreement should be reached at the outset with the borrower in respect of interest margin, commissions and other relevant fees. The interest margin, according to Allen and Santomero (1997), will be a reflection of the risk involved in the lending, while commission and other fees will be determined by the amount and complexity of the work involved. It should never be forgotten that banks are in business to make profits and to give shareholders a fair return on their capital.

## **Purpose**

The lender will want to verify that the purpose is acceptable. Perhaps the facility would not be in the customer's best interest. According to Edward and Millet (2002), customers do tend to overlook problems in their optimism and, if the bank can bring a degree of realism to the proposition at the outset, it may be more beneficial to the customer than agreeing to the requested advance.

## **Amount**

Dyer (1995), notes that this is important to verify whether the customer is asking for either too much or too little. There are dangers in both and it is important, therefore, to establish that the amount requested is correct and that all incidental expenses have been considered. The good borrower will have allowed for contingencies. The amount requested should be in proportion to the customer's own resources and contribution. A reasonable contribution from the borrower shows commitment and a buffer is provided by the customer's stake should problems arise.

## **Repayment**

The real risk in lending is to be found in the assessment of the repayment proposals. It is important that the source of repayment is made clear from the outset and the lender must establish the degree of certainty that the promised funds will be received. Where the source of repayment is income/cash-flow, the lender will need projections to ensure that there are surplus funds to cover repayment after meeting other commitments.

## **Insurance/Security**

Ideally, the canons of lending in the view of Berger and Udell (1995) should be satisfied irrespective of available security, but security is often considered necessary in case the repayment proposals fail to materialize. It is vital that the provider of security, especially third party security, understands fully the consequences of charging it to the bank. It is equally important that no advance is made until security procedures have been completed, or are at least at a stage where completion can take place without the need to involve the borrower any further.

## **2.7 Banks and Trade Financing**

Historically; banks have been involved in a single step in international trade transaction such as actions providing a loan or letter of credit. However, as financing has become an integral part of many trade transactions, banks especially major money central banks have evolved as well. According to Sharpiro (2002), they have gone from financing individual trade deals to providing comprehensive solution to trade needs. Such comprehensive services include combining leasing, and other nonbank financing source, along with political and economic risk insurance.

## **2.8 Empirical Literature**

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

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

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

Considerations that form the basis for sound CRM system include: policy and strategies (guidelines) that clearly outline the scope and allocation of a bank credit facilities and the manner in which a credit portfolio is managed, i.e. how loans are originated, appraised, supervised and collected (Basel, 1999; Greuning and Bratanovic, 2003; PriceWaterhouse, 1994). Screening borrowers is an activity that has widely been recommended by, among others, Derban *et al* (2005). The recommendation has been widely put to use in the banking sector in the form of credit assessment. According to the asymmetric information theory, a collection of reliable information from prospective borrowers becomes critical in accomplishing effective screening.

The assessment of borrowers can be performed through the use of qualitative as well as quantitative techniques. One major challenge of using qualitative models is their subjective nature (Bryant, 1999). However, borrowers attributes assessed through qualitative models can be assigned numbers with the sum of the values compared to a threshold. This technique is termed as “credit scoring” (Heffernan, 1996) The technique cannot only minimize processing costs but also reduce subjective judgments and possible biases Derban *et al.*, (2005). The rating systems if meaningful should signal changes in expected level of loan loss (Santomero, 1997). Chijoriga (1997) concluded that quantitative models make it possible to, among others, numerically establish which factors are important in explaining default risk, evaluate the relative degree of importance of the factors, improve the pricing of default risk, be more able to screen out bad loan applicants and be in a better position to calculate any reserve needed to meet expected future loan losses. Clear established process for approving new credits and extending the existing credits have been observed to be very important while managing CR (Heffernan, 1996).

Further, monitoring of borrowers is very important as current and potential exposures change with both the passage of time and the movements in the underlying variables (Donaldson, 1994; Mwisho, 2001), and also very important in dealing with moral hazard problem Derban *et al.*, (2005). Monitoring involves, among others, frequent contact with borrowers, creating an environment that the bank can be seen as a solver of problems and trusted adviser; develop the culture of being supportive to borrowers whenever they are recognized to be in difficulties and are striving to deal with the situation; monitoring the

flow of borrower's business through the bank's account; regular review of the borrower's reports as well as an on-site visit; updating borrowers credit files and periodically reviewing the borrowers rating assigned at the time the credit was granted (Donaldson, 1994).

Tools like covenants, collateral, credit rationing, loan securitization and loan syndication have been used by banks in developing the world in controlling credit losses (Benveniste and Berger, 1987; It has also been observed that high-quality CRM staffs are critical to ensure that the depth of knowledge and judgment needed is always available, thus successfully managing the credit risk in Commercial Banks.

Rekha A. (2004) Risk management in commercial banks (A case study of public and private sector banks) Banks are in the business of managing risk, not avoiding it. To the researcher, Risk is the fundamental element that drives financial behavior. Without risk, the financial system would be vastly simplified. However, risk is omnipresent in the real world. Financial Institutions, therefore, should manage the risk efficiently to survive in this highly uncertain world. The future of banking will undoubtedly rest on risk management dynamics.

Only those banks that have efficient risk management system will survive in the market in the long run. The effective management of credit risk is a critical component of comprehensive risk management essential for long-term success of a banking institution. The researcher understood that Credit risk is the oldest and biggest risk that bank, by virtue of its very nature of business, inherits. This has however, acquired a greater significance in the recent past for various reasons. Foremost among them is the wind of economic liberalization that is blowing across the globe.

The results obtained from the research clearly support the assertion that poor credit risk management contributed to a greater extent to the bank failures. Therefore effective credit risk management is important in banks and allows them to improve their performance and prevent bank distress. The success of the systems depends critically upon a positive risk culture. Banks should have in place a comprehensive credit risk management process to identify, measure, monitor and control credit risk and all material risks and where appropriate, hold capital against these risks. Establishment of a comprehensive credit risk

management system in banks should be a prerequisite as it contributes to the overall risk management system of the bank. There is also need for banks to adopt sound corporate governance practices, manage their risks in an integrated approach, focus on core banking activities and adhere to prudential banking practices.

Kosmas (2009) in his published journal entitled “The impact of effective credit risk management on bank survival” found a result that clearly support the assertion poor credit risk management contributed to a greater extent to the bank failures. Therefore effective credit risk management is important in banks and allows them to improve their performance and prevent bank distress. The success of the systems depends critically upon a positive risk culture. Banks should have in place a comprehensive credit risk management process to identify measure, monitor and control credit risk and all material risks and where appropriate, hold capital against these risks. Establishment of a comprehensive credit risk management system in banks should be a prerequisite as it contributes to the overall risk management system of the bank. There is also need for banks to adopt sound corporate governance practices, manage their risks in an integrated approach, focus on core banking activities and adhere to prudential banking practices.

## **2.9 Conclusion**

The chapter reviewed literature on a wide range of issues bordering on credit risk management. It begun by discussing theoretical concept of credit and credit risk subsequently, literature on credit risk management was extensively explored to bring the main issues to the fore. On top of this, both local and overseas empirical literature where also reviewed which are related with the concept of credit risk management.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Research Methodology**

The objective of the study is to assess the existing credit risk management policies and practice of NIB international Bank S.C. The research design looked at the overall methodology used in the study. It adopts the following structure: First the research design is described, and then population censuses, data collection methods, research procedures and data analysis methods to be followed in the research process.

#### **3.2 Research Design**

In order to achieve the general objective of the study, the researcher used descriptive research methods. Descriptive method is set out to describe and to interpret what is going on. Descriptive research, according to Tavakoli (2012), is concerned with conditions or relationships that exist; practices that prevail; beliefs, points of views, or attitudes that are held; processes that are going on; effects that are being felt; or trends that are developing. The main objective of descriptive research is to analyze the state of affairs as it prevails at the time of the study. In this view, taking the Ethiopian credit risk guideline as a benchmark descriptive research will help to analyze the existing credit risk management practice of NIB International Bank S.C.

##### **3.2.1 Population**

A population is the total collection of elements about which we wish to make some inferences. The collection of all possible observations of a specified characteristic of interest is called a population while a collection of observations representing only a portion of the population is called a sample.

The targeted population for the study was 41 Managers and 41 Loan officers from the 41 Branches of Addis Ababa and 20 Head office staffs from three department such as credit appraisal, credit customer relation and risk departments. The population size was determined based on the number of managers and loan officers as well as Head offices credit and risk related department. As of June 30, 2014, NIB International Bank S.C has 41 branch managers and 41 loan officers in the 41 Branches of Addis Ababa as well as 20

credit and risk related staffs at head office level. Addis Ababa Branches Managers and loan officers as well as all credit department and risk department staffs except secretaries of the departments are considered for the study as they have direct job relation with credit and risk matters. This has instigated the need for determine 102 staffs as a target population. Thus, a total population of 102 is considered for the study.

### **3.2.2 Sample Size and Sampling Techniques**

Considering the number of targeted population which is only 102 and to increase the accuracy of the study's result compared to previous studies on the same topic, population census method or the whole population is considered for this study.

### **3.2.3 Data Collection Methods**

Primary and secondary data are collected; the primary data were collected through questionnaire and interview. The respondents were informed about the intended study through e-mail. The data collected aims to provide answers to the research questions as to credit risk management practice of Nib International Bank S.C

The questionnaire instrument is designed on the basis of the research questions, namely as to how credit risk management is implemented in Nib International Bank S.C. and interview method also employed for those who are at Division head and directors of credit and risk management department. Secondary data also collected from annual reports, credit policy and procedure manual of the Bank, various directives and regulation of National Bank as well as from different Books. The NBE's and the bank's policy documentations and guidelines concerning the management of credit risks are also a major source of information for determining whether the bank's structures and risk management tools are adequate in handling of inherent credit risks in their business activities.

### **3.2.4 Pilot Study**

A pilot study is conducted to pretest the research instrument and to reveal any gaps, inconsistencies or contradictions. The respondents at this stage include only managers, division heads and section heads of the credit appraisal and risk follow up departments.

The data obtained from these only used to fine-tune the research instrument. The data did not form part of the data which is used for the final analysis.

### **3.2.5 Data Analysis and Presentation**

The collected data is subjected to a process of cleaning to get rid of any overlaps or unnecessary data. The collected data were analyzed by using descriptive statistics. In this study descriptive analysis were chosen because of its simplicity and clarity to draw inferences. Averages, percentages, frequencies and tables were used for the analysis of the collected data which assisted in the interpretation and analysis of the data collected to help measure the bank's performance as well as judge the effectiveness of its credit risk management process.

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND INTERPRETATIONS

#### 4.1 Data Analysis

For the purpose of achieving the objectives of the study, the collected data is analyzed using descriptive analysis. Throughout the analyzing process, statistical analysis method such as frequency, total scores and percentage method is employed. Moreover, tables are used to present the findings of the study.

As discussed earlier, questionnaire was designed and distributed to 102 employees of the bank who are currently working in Addis Ababa in 41 branches and three departments located at Head Office. Accordingly, 97 questionnaires were returned, of these one questionnaire was filled by an employee who is not covered in the study, and this questionnaire was excluded from the study. As a result, the usable number of questionnaires is reduced to 96, which is about 94.1% of the total distributed questionnaires. The response rate is fair enough to represent the sample.

#### 4.2 Demographic characteristics of the respondents

The first part of the questionnaire consists of six items about demographic information of the respondents. It covers the personal data of respondents, such as sex, age, educational background, year of service in the bank, current job position. The subsequent tables revealed the total demographic characteristics of the respondents.

**Table 3: Summary of respondents by age and sex**

Age of respondents	Frequency	Percent
18-25Yrs	12	12.5%
26-35 Yrs	62	64.58%
36-40 Yrs	14	14.6%
Greater than 40 Yrs	8	8.32%
Total	96	100%

As depicted in the above table, majority of respondents i.e. 64.58% age is fall between 26-35 year, this implies that the Bank's human resource specially credit related staff are more of young aged. Youngsters are active at work place and are easy to customize themselves with technology as such behavior could benefit the company, but they are also prone for

turnover as they are not easily settled in one organization which adversely affect the bank's performance as human power is the most valuable resource in any organization.

**Table 4: Summary of respondents' educational level**

<b>Educational status</b>	<b>Frequency</b>	<b>Percentage</b>
Diploma	5	5.21%
BA Degree	69	71.87%
MSc/MA	22	22.92%
PHD	0	0.0%
Other	0	0.0%
<b>Total</b>	<b>96</b>	<b>100.0%</b>

As table 4 above revealed the Bank's staff who work on credit and credit related matter majority of the staff i.e. 71.87% holds their first degree, where as only 5.21% of them are holds diploma and 22.92% of them are hold their second degree overall the result shows that the Bank is in a good position in terms of the necessary educated manpower as the human power policy of the Bank requires educational level of first degree and above for the job of credit, risk management and managerial positions and this is justified with respondents rate that is 94.8% of them are holds their first degree and above.

**Table 5: Summary of work experience of respondents**

<b>Years of work Experience</b>	<b>Frequency</b>	<b>Percentage</b>
< 2 years	13	13.5%
2-5 Years	44	45.8%
6-10 Years	31	32.3%
Above 10 years	8	8.4%
<b>Total</b>	<b>96</b>	<b>100%</b>

As summarized in the above table respondents work experience indicated that majority of them i.e. 45.8% respondents have a work experience between 2-5 Years whereas 32.3% of respondents have an experience between 6-10 years, overall above 86.5% of respondents have a work experience above 2 years. As a result the researcher believes that these respondents were good enough in revealing accurate information about the issues under investigation. Due to their experience, respondents came across many credit risk exposure. This might have helped them to clearly understand the current credit experience

management practice of the Bank and they can easily identify the weaknesses and the strengths of same in the Bank. On top of this, it can be said that the Bank's staff are more or less stable on their organization in general and on their current work position in particular.

### 4.3 Issues related with Credit risk Management Policies and practice

The second part is about credit risk management where employees' response regarding credit risk management policies and practice of NIB International Bank S.C and its related problem is reviewed. For the purpose of reporting the findings the values of strongly agree and agree were added up to represent employees' agreement for the statement and the values of strongly disagree and disagree together represent employees disagreement.

**Table 6: Respondents view on the identification and analysis of existing and potential credit risks inherent in any products or activities**

Item	Measurement	Agree	Strongly Agree	Disagree	Strongly disagree	Neutral
The existing credit policy incorporate credit risks inherent in all products and activities on which the Bank engaged in.	In No.	8	6	37	43	2
	In %	8.3%	6.25%	38.54%	44.8%	2.08%
All the Bank's new products and activities received board approval before being offered by the Bank to customers.	In No.	85	11	0	0	0
	In %	88.54%	11.45%	0%	%	0%
All credit approval made in accordance with the Bank's written guideline and granted by the appropriate level of management.	In No.	11	19	41	25	0
	In %	11.45%	19.79%	42.7%	26%	0%

Table 6 above discussed about identification and analysis of existing and potential credit risk inherent in any products or activities about 14.55% of the respondents revealed their agreement as the existing credit policy incorporate credit risks inherent in all products and activities on which the Bank engaged in, whereas majority of respondents i.e. 83.34% not agree as the existing credit policy of the Bank incorporate issues of credit risks inherent in all products and activities on which the Bank engaged in and only 2.08% of respondents hold their neutral position of the same question.

In terms of question that all the Bank's new products and activities received board approval before being offered by the Bank to customers, all respondents agreed on this issue and as far as credit approval made in accordance with the Bank's written guideline and granted by the appropriate level of management, about 31.24% of respondents agree that all credit facilities currently availed by the Bank are meet the Bank's written guideline and also granted by the appropriate organ of management but, 68.7% of respondents not agree as credit facilities availed by the Bank are made in accordance of the Bank's written guideline and also granted by appropriate organ level of the Bank's management, this implies that the Bank is breaching its own policy and procedure which further affects the Bank's relation with regulatory organ such as National Bank of Ethiopia. This finding also supported by Solomon (2013) as his finding clearly states that credit granting and monitoring process of the Bank is over ridden by directors, senior management and influential staff.

**Table 7: Respondents view on related party's transaction of the Bank**

Item	Measurement	Agree	Strongly Agree	Disagree	Strongly disagree	Neutral
Material credit transactions of the Bank with related parties is subjected to prior approval of the Board of directors and reported to Banking supervisory authority.	In No.	42	38	7	4	5
	In %	43.75%	39.58%	7.3%	4.16%	5.3%
Proper credit limit is established by the Bank for particular economic sector, geographic region specific products, and a group of associated borrowers.	In No.	21	17	33	25	0
	In %	21.87%	17.7%	34.37%	26.06%	0%
The Bank's existing credit policy place exposure limits on single counter parties and group of associated parties.	In No.	14	0	53	29	0
	In %	14.58%	0%	55.2%	30.2%	0%
The Bank implemented effective information systems to monitor and control risks inherent to counter parties' credit portfolio.	In No.	0	0	0	96	0
	In %	0%	0%	0%	100%	

Table 7 above shows that, majority of respondents that is about 83.33% agreed as material credit transactions of the Bank with related parties is subjected to prior approval of the Board of directors and reported to Banking supervisory authority, from this we can understand that the Bank is operating in line with directive and procedure of the regulatory organ in terms of related parties credit transactions. Yet respondents which hold about 60.43% not agree that the Bank properly established credit limit for particular economic sector, geographic region specific products, and a group of associated borrowers, where as

only 39.57% of respondents agreed as the Bank established same credit limit, over all the above result revealed that the Bank is in short of identifying its existing and potential risk inherent with economic sector wise, geographic region specific product and group of associated borrower which further has a negative impact on the Bank's overall performance by exposing it for credit risk in such area. The result revealed that previous studies on the same topic such as Solomon (2013) failed to identify NIB Bank's failure to set limits and identify potential credit risks inherent with geographic region specific product and group of associated borrower

Again as we understand from result of the above table all respondents not agree that the Bank implemented effective information systems to monitor and control risks inherent to counter parties' credit portfolio. Faller to implement effective information system to watch and manage risks related to counter parties credit portfolio may lead to the Bank to breach NBE's regulation and expose the Bank for penalties seats forth such malfunction and hamper its relation with the regulatory body. This specific finding also supported by previous study Solomon (2013) as he states in his finding there is no adequate management information system in the Bank.

**Table 8: Respondents view on monitoring credit procedure**

Item	Measurement	Agree	Strongly Agree	Disagree	Strongly disagree	Neutral
The Bank properly follow credit repayments which are being made from the source that was anticipated at the time of credit approved.	In No.	13	7	18	55	3
	In %	13.54%	7.29%	18.75%	57.3%	3.12%
The Bank's off-balance sheet products such as LCs, Guarantees, and CADs are subjected to same credit appraisal, limits and monitoring procedure as part of	In No.	17	11	41	27	0
	In %	17.7%	11.48%	42.7%	28.12%	0%

overall credit to individual customers.						
The current internal risk rating procedure properly monitors the quality of individual credits as well as the total credit portfolio.	In No.	19	15	38	21	3
	In %	19.79%	15.63%	39.58%	21.87%	3.12%
The Bank placed a system for early remedial action on deteriorating credits, managing problem credits and similar workout situation.	In No.	42	35	19	0	0
	In %	43.75%	36.45%	19.79%	0%	0%
The Bank has a management information system in place to insure that exposures approaching risk limits are brought to the attention of senior management.	In No.	0	0	0	91	5
	In %	0%	0%	0%	94.79%	5.21%
The existing credit policy clearly set out how the Bank will manage problem credit.	In No.	85	11	0	0	0
	In %	88.54%	11.46%	0%	0%	0%

Respondents have given their view for questions related to credit mentoring and credit procedure as summarized in the table 8 above, accordingly for question as the Bank properly follow credit repayments which are being made from the source that was anticipated at the time of credit approved majority of them i.e. about 76.05% of them do not agree as the Bank properly follow repayment source of customer as long as they pay it regularly, but here the National Bank of Ethiopia directive explicitly states that any repayment of the loan should be sourced directly from the business for which the loan is disbursed and warned all Banks to confirm same, otherwise the NBE has the authority to classify such loan adversely which further may increase the non performing loan of that Bank.

For the question as to the Bank's off-balance sheet products such as LCs, Guarantees, and CADs are subjected to same credit appraisal, limits and monitoring procedure as part of overall credit to individual customers, again majority of respondents i.e. about 70.82% are not agree as the Bank follows same credit approval procedure for such facilities while only 29.18% of respondents agree positively for such question, overall one can understand from the result as the Bank not follow same credit approval practice for its off Balance sheet credit products likewise for its on Balance sheet products, but this may expose the Bank for credit risk resulted from such products since the Bank failed to develop an adequate framework for managing risk exposure in off-balance sheet products as a part of overall credit to an individual customer and subject them to the same credit appraisal, limits and monitoring procedures.

For questions related to the Bank's current internal risk rating procedure as it is properly monitors the quality of individual credits as well as the total credit portfolio, about 61.45% of respondents not agree with the statement, whereas 35.42% of them support the statement positively and 3.12% of respondents remain neutral for such question, from the result we can realized that, the Bank's current internal risk rating procedure is in short of monitoring the quality of individual credits as well as the total credit portfolio, but the literature clearly states that a well-structured internal risk rating system should differentiate the degree of credit risk in the different credit exposures of a bank to help the Bank having more accurate determination of the overall characteristics of the credit portfolio, problem credits, and the adequacy of loan loss reserves. Here previous study findings on the same topic, Solomon (2013) says nothing on the Bank's internal risk rating system, though internal credit risk rating is one of the major tool that the Bank should properly formulate and implement so as to enable it identifying potential credit risks.

For question as Bank placed a system for early remedial action on deteriorating credits, managing problem credits and similar workout situation bulk of respondents who hold about 80.2% agree as the Bank is in a good position to take proper early remedial action and work out of deteriorating loans.

Respondents view also assessed whether on the Bank has a management information system in place to insure that exposures approaching risk limits are brought to the attention of senior management surprisingly almost 95% of them are believed the Bank has not any management information system designed for same purpose but management information system is important tool that allow management to assess quickly and accurately the level of credit risk that the bank has incurred through its various activities and determine whether the bank's performance is within the tolerance limits of the credit risk strategy.

**Table 9: Respondents view on internal control of the Bank**

Item	Measurement	Agree	Strongly Agree	Disagree	Strongly disagree	Neutral
The Bank establishes a system of independent, ongoing assessment of credit risk management process.	In No.	9	13	47	24	3
	In %	9.37%	13.54%	48.95%	25%	3.13%
The Bank in place a clear established process for approving a new credits as well as amendment, renewal and re-financing of existing credits.	In No.	81	9	0	0	6
	In %	84.37%	9.375%	0%	0%	6.25%
All relevant personnel clearly understood the Bank's credit policy and procedure and are accountable for complying with the established policies and procedures.	In No.	15	9	33	38	1
	In %	15.7%	9.38%	34.4%	39.5%	1%

As table 9 above revealed that respondents view is assessed about internal control of the Bank, and in relation to this for the question such as the Bank establish a system of independent, ongoing assessment of credit risk management process, about 22.91% of respondents agree with the statement where as large number of respondents holding about

73.95% don not agree that the Bank established proper system of independent, ongoing assessment of credit risk management process on the other hand the reaming 3.13% of respondents remain neutral from giving their opinion for the same question. Over all the result proves that, the Bank has a poor system of internal control to mitigate its credit risk. The bank should have an efficient internal review and reporting system as an effective oversight mechanism in respect of its credit function. This system should provide the board of directors and senior management with sufficient information to evaluate the performance of account or relationship officers and the condition of the credit portfolio.

**Table 10: Respondents view on Managements responsibilities of credit risk mitigation.**

Item	Measurement	Agree	Strongly Agree	Disagree	Strongly disagree	Neutral
The management develops lines of communication to ensure the timely dissemination of credit risk management policies and other credit risk management information to all individuals involved in the process.	In No.	39	23	17	13	4
	In %	40.6%	23.9%	17.7%	13.5%	4.16%
The management of the Bank monitor the quality of the credit portfolio and ensure that the portfolio is classified in line with the NBE Directives on Provisioning, uncollectible exposures written off and lo losses provisions are accounted in line with the NBE requirements.	In No.	71	19	0	0	6
	In %	73.9%	19.8%	0%	0%	6.25%
The management of the Bank undertake the administration of credit risk in accordance the delegated authority developed by the board.	In No.	55	29	2	0	10
	In %	57.2%	30.2%	2.08	0%	10.4%
The management of the Bank develops procedures and practices that facilitate the implementation of the broad credit risk management strategy and policies adopted	In No.	39	47	0	0	10
	In %	40.6%	48.9%	0%	0%	10.4%

From table 10 above we understand the management of the Bank is doing well to fulfill its responsibility as required both by the Bank itself and NBE, as this is justified by majority number of respondents response on related questions such as management develop lines of communication to ensure the timely dissemination of credit risk management policies and other credit risk management information to all individuals involved in the process this is supported by above 64.5% of respondents where as only 31.2% of them are not agreed with the statement. On the one hand almost 94% of respondents believed that the Bank's management is in the position of monitoring the quality of the credit portfolio and ensure that the portfolio is classified in line with the NBE Directives on Provisioning, uncollectible exposures written off and lo losses provisions are accounted in line with the NBE requirements.

Still for question related to management of the Bank develops procedures and practices that facilitate the implementation of the broad credit risk management strategy and policies adopted by the board, above 89% of respondents positively responded to this statement where as only 10.4% of them remain neutral to respond for such question. Over all the result shows that the current management of the Bank is in good position in terms of fulfilling its responsibility in relation to credit risk and develop lines of communication to ensure the timely dissemination of credit risk management policies and other credit risk management information to all individuals involved in the process.

**Table 11: Respondents view on questions related to the current Credit Policy of The Bank**

Item	Measurement	Agree	Strongly Agree	Disagree	Strongly disagree	Neutral
The Bank's existing credit policy incorporate credit risk philosophy governing the extent to which the bank is willing to assume credit risk.	In No.	17	9	38	32	0
	In %	17.7%	9.38%	39.58%	33.33%	0%
The existing credit policy of the Bank indicate general areas of	In No.	71	25	0	0	0

credit in which the bank is prepared to engage or is restricted from engaging?	In %	73.96%	26.04%	0%	0%	0%
The credit policy of the Bank clearly defined appropriate levels of delegation of approval, and provision or write- off authorities.	In No.	73	23	0	0	0
	In %	76.04%	23.95%	0%	0%	0%
The Bank's credit policy incorporate sound and prudent credit portfolio concentration limits.	In No.	12	9	41	34	0
	In %	12.5%	9.375%	42.7%	35.41%	%

Table number 11 above revealed respondents view on the current credit policy of the Bank, for related question to the subject such as the Bank's existing credit policy incorporate credit risk philosophy governing the extent to which the bank is willing to assume credit risk, about 72.91% of respondents not agree with the statement where as only 27.08% of respondents are respond positively to this specific question. In general one can understand from the result the current credit policy of bank lacks valuable ingredient as to which extent the Bank can assume its exposure to credit risk as the theory clearly states that a cornerstone of safe and sound banking is the design and implementation of proper written credit policies and procedures related to identifying, measuring, monitoring and controlling credit risk.

For question about whether the existing credit policy of the Bank indicate general areas of credit in which the bank is prepared to engage or is restricted from engaging, all respondents believed that the Bank's current credit policy clearly states general areas of credit in which the bank is prepared to engage or is restricted from engaging, incorporating such statement in one own credit policy helps the Bank to give early attention for those staff who are engaged in credit activates of the Bank and assist the Bank further to protect and restrict its self from risks and illegal practice or activities which may harm its overall performance and its relationship with stake holders and government.

Respondents view also assessed for the question whether the credit policy of the Bank clearly defined appropriate levels of delegation of approval, and provision or write-off authorities and the result discovered that all respondents believed the existing credit policy of the Bank clearly states delegation of loan approval and provision or write-off authorities from this result we can understand that NIB adopts decentralized credit approval system based on total exposure limit and anticipated risks.

As also summarized above in the table, respondents view also assessed for the question whether the Bank's credit policy incorporate sound and prudent credit portfolio concentration limits, the result shows surprisingly all respondents don not agree as the Bank incorporate such statement in its current credit policy. But experience in other place suggest that the policies should be designed and implemented with consideration for internal and external factors such as the bank's market position, particularly establish targets for portfolio mix and exposure limits to single counterparties, groups of connected counterparties, industries or economic sectors, geographic regions and specific products. Effective policies and procedures enable a bank to: maintain sound credit-granting standards; monitor and control credit risk; properly evaluate new business opportunities; and identify and administer problem credits. The findings of this paper on the bank's credit policy totally differ from previous study's result such as Solomon (2013) as he clearly indicates the Bank has adequate credit policy, and procedure in his findings.

**Table 12: Respondents view on questions related to credit limits and credit concentration.**

Item	Measurement	Agree	Strongly Agree	Disagree	Strongly disagree	Neutral
The credit policy place exposure limits on single counter parties and groups of associated counter parties.	In No.	7	19	37	30	3
	In %	7.29%	19.79%	38.54%	31.25%	3.13%
The credit policy states diversification of key industries or economic sectors, geographical regions and new or existing products to be entertained.	In No.	41	49	0	0	6
	In %	42.7%	51%	0%	0%	6.25%

As results of respondents summarized in table 12 above indicate, 69.79% of respondents not agreed the current credit policy of the Bank place exposure limits on single counter parties and groups of associated counter parties while only 27.08% of them are agree the current credit policy of the Bank incorporate such statement where as 3.13% of respondents remain neutral for this specific question. Over all from the result any one can understand that the Bank's current credit policy not incorporate exposure limits on single counter parties and groups of associated counter parties. But the existing directive of NBE clearly states that every Bank should place credit exposure limit on single counter parties and groups of associated counter parties and failing to do this may expose Bank's for penalties as they are birching of directive of the regulatory body. Not placing a credit exposure limit on related parties may expose the Bank to extend more of its credit for related parties this may also further lead to baize on counter parties' transaction and affects the Bank's performance result negatively.

For question as credit policy of the Bank states diversification of key industries or economic sectors, geographical regions and new or existing products to be entertained, majority respondents i.e. about 93.7% are agree the policy is incorporate such statement and the reaming 6.25% of respondents are neutral to give their opinion for this specific question. This result shows the Bank is in very good condition in terms of diversifying its credit products by economic sector and geographical region and minimized its credit risk because no investment can be a winner all the time. Managers get it wrong. Every product doesn't fall victim to a newer one. But a well-diversified portfolio with a variety of investments may help the Bank to avoid serious losses.

**Table 13: Respondents view on questions related to Credit Analysis and Approval Process of the Bank.**

Item	Measure	Agree	Strongly Agree	Disagree	Strongly disagree	Neutral
The credit analysis procedure of the Bank considers factors purpose of the credit and sources of repayment.	In No.	45	51	0.00	0.00	0.00
	In %	46.87%	53.12%	0%	0%	0%
Borrower's repayment history, current capacity to repay, based on historical financial trends and future cash flow projections under various scenarios are considered on the credit analysis.	In No.	81	9	0	0	6
	In %	84.37%	9.375%	0%	0%	6.25%
Current risk profile of the counterparty (including the nature and aggregate amounts of risk), and sensitivity to economic and market developments, especially for major exposures are extensively considered in the credit analysis.	In No.	3	12	43	38	0
	In %	3.12%	12.5%	44.79%	39.6%	0%

Table 13 above shows from the total respondent who are asked question as credit analysis procedure of the Bank considers factors purpose of the credit and sources of repayment all respondents agree the credit analysis and approval procedure of the Bank give emphasis for such factor, knowing purpose of the loan and the primary source of repayment helps the Bank to have information exactly how borrowers intend to repay the loan and the probability of successful repayment of the loan which further assist for proper loan sanction. Again for question as borrower's repayment history, current capacity to repay,

based on historical financial trends and future cash flow projections under various scenarios are considered on the credit analysis, majority of respondents i.e. 93.74% agreed that all techniques on this statement are properly employed in the credit analysis of the bank and the remaining respondents i.e. 6.25% remain neutral to respond for this question. Over all the result shows employing proper credit analysis could increase the efficiency of the Bank in client selection, helps to determine adequate credit conditions for a client depending on the level of risk involved, Provides access to other antecedents, payment behavior and anticipated warnings, allows minimizing debt collection expenses of the Bank.

But as summarized above in table 13 majority of respondents i.e. 84.39% are not agree as current risk profile of the counterparty (including the nature and aggregate amounts of risk), and sensitivity to economic and market developments, especially for major exposures are extensively considered in the credit analysis while only the remaining 15.61% respondents give their positive opinion for this specific question. In general the result clearly shows that the bank is not in the position for considering proposed economic development projects incorporating an analysis of risk and uncertainty as part of its overall feasibility analysis of such projects. Proposer analysis requires knowledge of risk analysis, economic and fiscal impact assessment approaches, reasonable development assumptions, and current information on the overall economic development market and trends, but failing to make a proper analysis on these area a head of loan sanctioning may increase probability of risks and uncertainty of collecting back the Bank's granted credit.

#### **4.4 Analysis of Interview**

To gather more information about credit risk management policies and practices in Nib international bank s.co, interview questions were forwarded to division heads, two special branch managers and directors of credit and appraisal departments, as well as CRM departments of the Bank. Accordingly the interviewee's responses to the questions are depicted briefly as follows. However, most interview responses are presented and analyzed in the questionnaire analysis part as a supportive response.

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

Risk management has been practiced as a professional discipline in financial institutions that maintain derivative dealerships for decades. The fundamental goal of this function is to improve the quality of business decision making at all levels of the firm and thereby to increase shareholder wealth. It executes this responsibility through activities that clarify the firm's exposure to all forms of risk to its future earnings and analyses them on a sound economic foundation, in doing proper administration its credit risk NIB bank faced with challenges diversion of loan funds, over presenting of project costs by borrowers, lack of standard loan process from the client's initial enquiry to the final lending decision, poor projects fusibility studies from the customer sides, lax proper procedures used for credit risk assessment and lack of trained lending personnel, Bank's clients started new businesses in which they had no experience, un updated exchange of clients credit information among Banks, overestimated of collateralized properties and legal issue of transferability of collateral properties in case of defaults are among other mentioned by respondents.

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

Banks have appropriate credit risk assessment processes and effective internal controls commensurate with the size, nature and complexity of the bank's lending operations to consistently determine provisions for loan losses in accordance with the bank's stated policies and procedures, the applicable accounting framework and supervisory guidance. And a bank should adopt and document a sound loan loss methodology, which addresses credit risk assessment policies, procedures and controls for assessing credit risk, identifying problem loans and determining loan loss provisions in a timely manner. But in the contrary result of response shows the bank's unqualified credit judgment and reasonable estimates for the recognition and measurement of loan losses, the bank's aggregate amount of individual and collectively assessed loan loss provisions is not adequate to absorb estimated credit losses in the loan portfolio, the bank's current credit policies is not appropriately address validation of any internal credit risk assessment models.

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

The factors which intensifying credit risk in the Bank had been divided into three categories; bank related factors, economic factors and customer related factors. From the response of interview, the factor identified to have the highest contribution to credit risk is borrowers' company dissolution. The second factor was death of the borrower. The others factors which followed were, poor monitoring and control of loans by bank management and Bankruptcy of the debtor. Diversion of funds by the borrower from the intended purpose had the least significant contribution in leading credit risk. The result found out that the other factors exposed to credit risk were: knowing your customer, security issues, (failure by guarantors,) company merger and interbank competition.

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

Before engaging in new lending business, a Bank should identify and properly manage the associated credit risks as required in the general Principles of Credit Risk Management of the Supervisory Policy Manual of its own. Supervisors involve in participations and assignments in loans should also conduct a comprehensive, thorough and independent risk assessment before committing themselves in the business. They should apply the same standards of prudence, credit assessment and approval criteria, and risk control limits as if they were originating the loans. As this is the fact stipulated in many literatures interview results of this study shows the Bank supervisors are not periodically evaluate the effectiveness of a bank's credit risk policies and practices for assessing loan quality and they also periodically assessed methods employed by a bank to calculate loan loss provisions produce a reasonable and prudent measurement of estimated credit losses in the loan portfolio that are recognized in a timely manner., Banking supervisors should consider credit risk assessment and valuation policies and practices when assessing a bank's capital adequacy.

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

It is apparent that banks need to seriously consider all the internal and external factors causing non performing loans as well as the impact of non-performing loans on the bank's overall performance. Accordingly respondents gave their view measures that must be taken by the Bank so as to reduce problem loans. Management need to ensure that borrowed funds are being used for the intended purpose through enhanced credit monitoring. This can be achieved by adopting a relationship management approach which helps management to have a closer look at the business as well as the characters of the senior managers running the organization, the Bank should follow cash flow lending approach rather than focusing on collateral based lending, a detailed credit analysis and risk grading also should be made before loans are approved as well as risky business sectors are to be identified prior to granting loans so as to have a balanced loan portfolio management.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Summary of Findings

Based on the results of the study obtained through the questionnaire distributed to 96 credit and risk related employees of the Bank and interviews made with higher official of the Bank so as to assess management of the Bank's credit policy and practice findings of both good points that are appreciated and areas that need improvements are summarized and conclusions were made accordingly.

In simple descriptive analysis majority of the Bank's staff fall between 26-35 year of age, this implies that the Bank's human resource particularly who are working on credit and risk related matters are more of young aged.

Demographic characteristics of the Bank revealed that the Bank is in a good position in terms of the necessary educated manpower and experienced staffs as all staff who are working on credit and risk related issue have at least BA degree and or above as well as beyond 86.5% of respondents have a work experience of above 2 years.

It is found that majority of respondents are not agreed that as credit policy of the Bank which is currently in operation incorporate issues of credit risks inherent in all products and activities on which the Bank engaged in.

The Bank's Board of directors is actively executing its responsibility, this is defensible with respondents complete agreement as all the Bank's new products and activities received board approval before being offered by the Bank to customers.

The result also discovered that about 68.7% of respondents are far from agreement as some credit facilities availed by the Bank made in accordance of the Bank's written guideline and also granted by appropriate organ level of the Bank's management.

Respondents holding about 83.33% extend their agreement that material credit transactions of the Bank with related parties is subjected to prior approval of the Board of directors and reported to Banking supervisory authority.

The analysis clearly shows that the Bank not yet established proper credit limit for particular geographic region specific products, and a group of associated borrowers.

It is also found that the Bank did not implement effective information systems to monitor and control risks inherent to counter parties' credit portfolio as this is supported by all respondents view.

The Bank not properly follows credit repayments which are being made from the source that was anticipated at the time of credit approved.

The Bank's off-balance sheet products such as LCs, Guarantees, and CADs are not subjected to same credit appraisal, limits and monitoring procedure as part of overall credit to individual customers.

Concerning the Bank's current internal risk rating procedure majority of respondents believed that the Bank is not properly monitoring the quality of individual credits as well as the total credit portfolio.

Bulk of respondents who hold about 80.2% are agreed that Bank placed a system for early remedial action on deteriorating credits, managing problem credits and similar workout situation.

The Bank has not a management information system in place to insure that exposures approaching risk limits are brought to the attention of senior management.

The Bank is not established proper system of independent, ongoing assessment of credit risk management process, the Bank has a poor system of internal control to mitigate its credit risk.

The Bank is in good position in terms of fulfilling its responsibility in relation to credit risk and develops lines of communication to ensure the timely dissemination of credit risk management policies and other credit risk management information to all individuals involved in the process.

The Bank's on hand credit policy does not incorporate credit risk philosophy governing the extent to which the bank is willing to assume credit risk.

All respondents believed that the Bank's current credit policy clearly states general areas of credit in which the bank is prepared to engage or is restricted from engaging.

The credit policy the Bank currently has does not incorporate sound and prudent credit portfolio concentration limits.

Majority of respondents not agreed the current credit policy of the Bank place exposure limits on single counter parties and groups of associated counter parties.

Though repayment history, current capacity to repay, based on historical financial trends and future cash flow projections under various scenarios are considered on the credit analysis of the Bank yet current risk profile of the counterparty (including the nature and aggregate amounts of risk), and sensitivity to economic and market developments, especially for major exposures are not extensively considered in the credit analysis.

The interview result revealed that credit risk challenges the Bank faced with such as diversion of loan funds, over presenting of project costs by borrowers, lack of standard loan process from the client's initial enquiry to the final lending decision, poor projects fusibility studies from the customer sides, lax proper procedures used for credit risk assessment and lack of trained lending personnel or experts on project loans, Bank's clients engaged on new businesses in which they had no experience, un updated exchange of clients credit information among Banks, overestimated of collateralized properties and legal issue of transferability of collateral properties in case of defaults are among other mentioned by interviewed respondents.

## **5.2 Conclusions**

From a bank's perspective, a high level of credit risk management means more than simply meeting regulatory requirements: the aim is rather to enhance the risk/return performance of credit assets. To achieve this goal, it is essential to measure how much a single obligor in a portfolio contributes to the total risk, i.e. the risk contributions of single exposures.

It is obvious to say that NIB Bank is not in a position to control its credit risk to the level required, as it does not develop appropriate and effective credit policies, procedures and practices. The Bank's credit policy don't cover all material aspects of credit risk, and reflects

the complexity of the activities in which a bank engages as it fails to incorporate issues of credits risks inherent in all products and activities on which the Bank operated with.

The Bank may expose itself to a high credit risk as far as credit facilities availed by the Bank are not made in accordance of the Bank's written guideline and also granted by appropriate organ level of the Bank's management.

As a result of its failure to establish proper credit limit for particular economic sector and concentrated in specific types of loans with common characteristics such as common industries and/or geographic areas are negatively impacted by a catastrophic event within the business line, industry, or geography the Bank exposed itself for a high degree of concentration risk as this is justified by building & construction term loan alone contribute about 32.3 % of the total non- performing credit of the Bank, from the Bank's half a billion revolving credit facility above 85% of it is seized by only five customer which shows a very high concentration credit risk.

As a result of the poor and inaccurate management information system, decision makers in NIB Bank are in short of getting timely, accurate, reliable and verifiable information that accelerate their decision-making process and the Bank's credit risk management is adversely affected.

Despite the fact that, Banks supervisory organ directive explicitly states that any repayment of the loan should be sourced directly from the business for which the loan is disbursed and warned all Banks to confirm same, But contrary to this original purpose and source of repayment of some loan the Bank already disbursed for its customer are not aligned with their original intention as a result NBE reclassified these loan adversely and forced the Bank to increase its amount of provision hold for loan loss.

Nevertheless repayment history, current capacity to repay, based on historical financial trends and future cash flow projections under various scenarios are considered on the credit analysis of the Bank yet current risk profile of the counterparty (including the nature and aggregate amounts of risk), and sensitivity to economic and market developments, especially for major exposures are not extensively considered in the credit analysis. As a result the Bank's credit risk management system is negatively affected.

Overall, the Bank's credit risk management and policy affected with problems both internal and external factors, the research findings indicated that internal factors such as poor credit policy, weak credit analysis, poor credit monitoring, inadequate risk management, lax proper procedures used for credit risk assessment and lack of trained lending personnel or experts on project loans, and overestimated of collateralized properties have a boundless influence towards the attainment of successful credit risk management in NIB Bank and external factors from customer part such as diversion of loan funds, over presenting of project costs by borrowers, poor projects fusibility studies from the customer sides, Bank's clients engaged on new businesses in which they had no experience, un updated exchange of clients credit information among Banks, and legal issue of transferability of collateral properties in case of defaults are among other to be sited as a challenge.

### **5.3 Recommendations**

The Bank needs to revise its current credit policy by identify and incorporating all credit risk inherent in all products and activities it engaged and has to also ensure that the risks of products and activities new to it 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.

The Bank has to establish a clearly-established process in place for approving amendment, renewal and re-financing of existing credits. All extensions of credit need to be made on an arm's-length basis. In particular, credits to related companies and individuals has to 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. The Bank requires also to established a credit follow up system which control consistency of all credit approvals made as per the Bank's written guidelines and granted by appropriate organ level of the Bank's management.

The Bank needs to implement information systems and analytical techniques that enable management to measure the credit risk inherent in all on- and off-balance sheet activities and risk exposure of counter parties. The information system is supposed to provide

adequate information on the composition of the credit portfolio, including identification of any concentrations of risk.

Loans' purpose and its repayment source after disbursement has to be strictly followed by the Bank so as to avoid any diversions to be made by some customers so that the Bank can avoid any forced adverse reclassification of its credit products by the regulatory body as a consequence.

The Banks off-balance sheet products such as LCs, Guarantees, and CADs needs to be subjected to same credit appraisal, limit and monitoring procedure as parts of overall credit to individual customers so as to diagnose any credit risks that might be arises in advance.

The internal credit rating systems of the Bank needs to take proper account of gradation in risk and the overall composition of portfolios in originating new loans, assessing overall portfolio risks and concentrations, and reporting on risk profiles to directors and management. Moreover, such rating systems also should play an important role in establishing an appropriate level for the allowance for loan losses, conducting internal bank analysis of loan and relationship profitability, assessing capital adequacy, and possibly performance-based compensation.

The effectiveness of a bank's credit risk measurement process is highly dependent on the quality of its management information systems since this information is used by the board and management to fulfill their respective oversight roles. Therefore, NIB Bank has to establish management information systems and analytical techniques that enable management of the Bank to measure the credit risk inherent in all on- and off-balance sheet activities and provide adequate information on the composition of the credit portfolio, including identification of any concentrations of risk.

The bank needs an efficient internal review and reporting system as an effective oversight mechanism in respect of its credit function. This system should provide the board of directors and senior management with sufficient information to evaluate the performance of account or relationship officers and the condition of the credit portfolio.

The Bank's credit policies needs to be redesigned and implemented with consideration for internal and external factors such as the bank's market position, particularly establish

targets for portfolio mix and exposure limits to single counterparties, groups of connected counterparties, industries or economic sectors, geographic regions and specific products as doing this in credit policies and procedures enable the bank to maintain sound credit granting standards; monitor and control credit risk; properly evaluate new business opportunities; and identify and administer problem credits.

NIB Bank need to have well-established policies and procedures that stress the identification of and the prudent controls over concentrations. Appropriate risk diversification through the establishment of prudent concentration limits may help to minimize the potential negative impact on earnings performance and/or capital should such an event occur

The Bank has to implement specific regulations limiting concentrations to one borrower or set of related borrowers and also monitor industry concentrations. The Bank also needs exploring techniques to identify concentrations based on common risk factors or correlations among factors to diversify its potential concentration credit risks.

The bank has to establish stress testing mechanism that involve identifying possible events or future changes in economic conditions that could have unfavorable effects on a bank's credit exposures and assessing the bank's ability to withstand such changes. The bank also needs to identify the types of situations, such as economic downturns, both in the whole economy or in particular sectors, higher than expected levels of delinquencies and defaults, or the combinations of credit and market events that could produce substantial losses or liquidity problems.

The regulatory body, NBE, needs strictly supervise monitor and examine the condition of banks and their compliance with laws and regulations. If a bank under the NBE jurisdiction is found to have problems or be noncompliant, NBE also has to use its authority to request that the bank correct the problems. Bank regulation includes issuing specific regulations and guidelines to govern the operations, activities and acquisitions of banking organizations.

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## Appendix

### ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES MBA PROGRAM

The purpose of this questionnaire is to carry out a research for the partial fulfillment of master's degree in MBA. The research focuses on NIB International Bank S.C with the topic of “**Assessment of Credit Risk Management Practice**”. The outcome of the study will be used to suggest possible solutions for problems identified on the captioned topic. Thus, your free will and cooperation in giving the reliable information is very important. Any information provided by you will only be used for academic purpose. As a result it will be kept confidential and utmost anonymity. Please use a (X) mark and put the answer on the space provided.

N.B.

- No need of writing your name;
- Please respond as accurately as possible and at your earliest possible time.

*Thank you in advance for taking your time to fill out this questionnaire!*

*This Questionnaire has two parts, Part one contains Personal profile (Demographic characteristics of respondents) and Part Two enclosed specific questions related to Banks' credit risk management.*

*If I may be of further assistance, please do not hesitate to contact me in the following address*

*Alebachew Fantu Tel. 0911-419941*

*E-mail address alebachewfa@gmail.com*

#### **1. Part one Personal Profile**

1.1. Sex : Male\_\_\_\_\_ Female\_\_\_\_\_

1.2. Age : 18-25 yrs\_\_\_\_\_ 26-35yrs\_\_\_\_\_ 36-40 yrs\_\_\_\_ more than 40yrs\_\_\_\_\_

1.3. Marital Status Single\_\_\_\_\_ Married\_\_\_\_\_

1.4. Educational Level : Diploma\_\_\_\_\_ BS/BA \_\_\_\_\_ MSc/MA\_\_\_\_\_  
PhD\_\_\_\_\_ Other\_\_\_\_\_

1.5 Work experience in the Bank: Less than 2 year\_\_\_\_\_ 2 – 5 year\_\_\_\_\_ 6- 10 year\_\_\_\_ above  
10 year\_\_\_\_\_

1.6 What is your current position in Nib International Bank \_\_\_\_\_

## 2. Part two: Questions related to general credit policy and risk management:

No.	Questionnaires	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<b>Questions related to identification and analysis of existing and potential credit risks inherent in any credit products or activities</b>						
1	Does the existing credit policy incorporate credit risks inherent in all products and activities on which the Bank engaged in?					
2	Do all the Bank's new products and activities received board approval before being offered by the Bank to customers?					
3	Do all credit approval made in accordance with the Bank's written guideline and granted by the appropriate level of management?					
<b>Questions related to Related party transactions</b>						
4	Do material credit transactions of the Bank with related parties is subjected to prior approval of the Board of directors and reported to Banking supervisory authority?					
5	Does proper credit limit is established by the Bank for particular economic sector, geographic region specific products, and a group of associated borrowers?					
6	Does the Bank's existing credit policy place exposure limits on single counter parties and group of associated parties?					
7	Does the Bank implemented effective information systems to monitor and control risks inherent to counter parties' credit portfolio?					
<b>Questions related to monitoring credit procedures</b>						
8	Does the Bank properly follow credit repayments which are being made from the source that was anticipated at the time of credit approved?					
9	Do the Bank's off-balance sheet products such as LCs, Guarantees, and CADs are subjected to same credit appraisal, limits and monitoring procedure as part of overall credit to individual customers?					
10	Does the current internal risk rating procedure properly monitor the quality of individual credits as well as the total credit portfolio?					
11	Dose the Bank established proper single Borrower limit so as to avoid credit concentration risk?					
12	Does the Bank placed a system for early remedial action on deteriorating credits, managing problem credits and similar workout situation?					

13	Does the Bank has a management information system in place to insure that exposures approaching risk limits are brought to the attention of senior management?					
14	Does the existing credit policy clearly set out how the Bank will mange problem credit?					
15	Does the Bank implemented proper credit risk grading practice to assess credit worthiness of loan customer?					
<b>Questions related to internal control</b>						
16	Does the Bank establish a system of independent, ongoing assessment of credit risk management process?					
17	Does the Bank in place a clear established process for approving a new credits as well as amendment, renewal and re-financing of existing credits?					
18	Do all relevant personnel clearly understood the Bank's credit policy and procedure and are they accountable for complying with the established policies and procedures?					
<b>Questions related to management responsibilities</b>						
19	Does the management develop lines of communication to ensure the timely dissemination of credit risk management policies and other credit risk management information to all individuals involved in the process?					
20	Does the management of the Bank monitor the quality of the credit portfolio and ensure that the portfolio is classified in line with the NBE Directives on Provisioning, uncollectible exposures written off and lo losses provisions are accounted in line with the NBE requirements?					
21	Does the management of the Bank undertake the administration of credit risk in accordance the delegated authority developed by the board?					
22	Does the management of the Bank develop procedures and practices that facilitate the implementation of the broad credit risk management strategy and policies adopted by the board?					
<b>Specific Questions related to credit policy of the Bank</b>						
23	The Bank's existing credit policy incorporate credit risk philosophy governing the extent to which the bank is willing to assume credit risk?					

24	The existing credit policy of the Bank explicitly indicate general areas of credit in which the bank is prepared to engage or is restricted from engaging?					
25	The credit policy of the Bank clearly defined appropriate levels of delegation of approval, and provision or write- off authorities?					
26	Does the Bank's credit policy incorporate sound and prudent credit portfolio concentration limits?					
<b>Questions related to Credit Limits and Credit Concentration</b>						
27	Does the credit policy place exposure limits on single counter parties and groups of associated counter parties?					
28	Does the credit policy states diversification of key industries or economic sectors, geographical regions and new or existing products to be entertained?					
<b>Questions related to Credit Analysis and Approval Process</b>						
29	Does the credit analysis procedure of the Bank consider factors purpose of the credit and sources of repayment?					
30	Borrower's repayment history, current capacity to repay, based on historical financial trends and future cash flow projections under various scenarios are considered on the credit analysis?					
31	Current risk profile of the counterparty (including the nature and aggregate amounts of risk), and sensitivity to economic and market developments, especially for major exposures are extensively considered in the credit analysis?					

**32. Please write below if you have any additional comment in relation to the bank's credit risk management system:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**St. Mary University**  
**School Graduate Studies**  
**Masters of Business Administration**

**Check List for in-depth Interview Questions for Directors Credit customer relation, Credit appraisal and follow up, and Managers in two special Branches of the Bank and division heads of credit appraisal, credit follow-up and risk management Department.**

**Dear Respondent,**

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

- 1) What are the challenges administrating credit risk?
- 2) How do you evaluate credit evaluation process of the Bank?
- 3) What factors do you think would contribute intensifying of credit risk in the Bank?
- 4) How do you evaluate the Bank's management role to control credit risk of the Bank?
- 5) What procedure and measure should the Bank employed to manage its problem loans?

**Outstanding Loan and Advance for Five years and Respective Non-performing Balance**

<b>Year</b>	<b>Quarter</b>	<b>Total outstanding balance</b>	<b>Total NPLs balance</b>	<b>NPLs %</b>
2010	1 <sup>st</sup>	2,572,839,670.23	335,082,366.30	13.02%
	2 <sup>nd</sup>	2,546,124,595.08	199,533,580.56	7.84%
	3 <sup>rd</sup>	2,545,552,685.37	224,337,022.55	8.81%
	4 <sup>th</sup>	2,854,292,650.54	193,919,477.36	6.79%
2011	1 <sup>st</sup>	2,775,276,393.37	204,410,149.02	7.37%
	2 <sup>nd</sup>	2,766,386,604.57	139,626,919.07	5.05%
	3 <sup>rd</sup>	2,760,146,611.87	175,614,142.10	6.36%
	4 <sup>th</sup>	3,382,557,933.73	261,828,237.98	7.74%
2012	1 <sup>st</sup>	3,643,022,953.00	214,015,524.60	5.87%
	2 <sup>nd</sup>	3,708,190,342.00	90,565,749.03	2.44%
	3 <sup>rd</sup>	3,951,769,528.33	137,461,703.64	3.48%
	4 <sup>th</sup>	4,512,148,846.49	174,919,317.86	3.88%
2013	1 <sup>st</sup>	4,618,108,655.51	221,491,776.87	4.80%
	2 <sup>nd</sup>	4,542,780,606.62	172,074,441.76	3.79%
	3 <sup>rd</sup>	4,656,387,314.94	237,218,473.04	5.09%
	4 <sup>th</sup>	4,942,297,743.80	245,248,049.00	4.96%
2014	1 <sup>st</sup>	5,311,094,666.02	293,513,878.00	5.53%
	2 <sup>nd</sup>	5,521,631,227.48	176,234,237.33	3.19%
	3 <sup>rd</sup>	5,876,533,872.11	246,364,199.42	4.19%

**Source: Quarterly Compiled Report of NIB's Credit Department**

## **DECLARATION**

I, the undersigned, declare that the thesis entitled “ASSESSMENT OF CREDIT RISK MANAGEMENT POLICIES AND PRACTICES IN NIB INTERNATIONAL BANK S.CO” is my original work, prepared under the guidance of Dr. Zenegnaw Abiy. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

**NAME: ALEBACHEW FANTU**

**SIGNATURE: \_\_\_\_\_**

**ST. MARY’S UNIVERSITY**

**APRIL 2015**

**ADDIS ABABA**

## **ENDORSEMENT**

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a University advisor.

**Advisor's Name: Zenegnaw Abiy (PhD)**

**Signature: \_\_\_\_\_**

**St. Mary's University**

**April 2015**