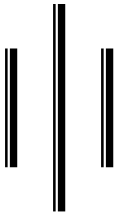
A STUDY ON RISK MANAGEMENT OF EVEREST BANK LIMITED

A Thesis Report



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In the Partial Fulfillment of the Requirement for the Degree of Master of Business Studies (M.B.S.)

A Thesis Submitted to:

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Faculty of Management

Tribhuvan University

Kathmandu, Nepal

February, 2012

RECOMMENDATION

This is to certify that the Thesis

Submitted by

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Entitled:

A STUDY ON RISK MANAGEMENT OF

EVEREST BANK LIMITED

Has been prepared as approved by this Department in the prescribed format of the Faculty of Management. This thesis is forwarded for examination.

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VIVA-VOCE SHEET

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And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for the

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DECLARATION

I, hereby, declare that the work reported in this thesis entitled ***"A Study On Risk Management Of Everest Bank Limited"*** submitted to office of the Dean, Faculty of Management, Tribhuvan University, is my original work done for the partial fulfillment of the requirement for the Masters of Business Studies (MBS) under the supervision of **Associate Prof. Prakash Singh Pradhan** of Shanker Dev Campus, Putalisadak, Kathmandu.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

%	Percentage
&	And
A.D	Anno Domini
ABBS	Any Branch Banking System
ADB	Agriculture Development Bank
ALCO	Asset Liabilities Management Committee
ATM	Automated Teller Machine
B. S.	Bikram Sambat
BCBS	Basel Committee on Banking Supervision
C. V.	Coefficient of Variation
CAR	Capital Adequacy Ratio
CBS	Central Bureau of Statistics
CD	Credit Deposit
Co.	Company
CPG	Credit Policies Guidelines
CPI	Consumer Price Index
CRR	Cash Reserve Ratio
EBL	Everest Bank Limited
ECA	export credit agencies
Ed.	Edition
FY	Fiscal Year
GDP	Gross Domestic Product
i .e	That is
IRB	internal ratings based

IRR	Interest Rate Risk
LA	Loan & Advance
LC	Letter of Credit
LLP	Loan Loss Provision
LTD	Limited
MBA	Masters' of Business Administration
MBS	Masters' of Business Studies
Misc.	Miscellaneous
NBA	Non Banking Assets
NBL	Nepal Bank Limited
NCC	Nepal Credit & Commerce
NEPSE	Nepal Stock Exchange
No.	Number
NPA	Non Performing Assets
NPL	Non Performing Loan
NRB	Nepal Rastra Bank
NRB	Nepal Rastra Bank
P.E	Probable Error
PEs	Public Enterprises
PNB	Panjab National Bank
RWA	Risk Weighted Assets
S.D	Standard Deviation
SAARC	South Asian Association for Seasonal Co-Operation
SDC	Shankar Dev Campus
SEBON	Securities Board of Nepal
SSA	Simplified Standardized Approach
T. U.	Tribhuwan University

CHAPTER- ONE

INTRODUCTION

1.1 Background of the Study

In a general view bank is an institution which collect the money from people and also give loan if anyone need the fund. But in the broad sense, bank is that institution which polls the scatter fund and utilizes it into the productive sector that may contribute in the development of the economy. Bank deals with the money also it deals with credit and remittance and expanding business and perform the agent between the two parties.

Bank is an institution which performs the intermediary between the surplus and deficit in the financial resources. A very economic activity is directly or indirectly channeled through the bank. Bank is the only one perfect institution which makes easier the investment. So we can say the bank plays a crucial role in the process of economic development and its importance is as a means of achieving economic growth and prosperity within the country. In the process of providing financial services, they assume various kinds of risk. Risk is defined as conduction in which exists an exposure to adversity. In addition, there is an expectation of what the outcome should look like. Therefore, risk is defined here as a conduction in which there exist a possibility of deviation from a desired outcome that is expected or hoped for. Other definitions include the restriction the restriction that risk is based on real world events, including a combination of circumstance in the external environment. We do not agree with this limitation. Potential risk that might occur in the future is excluded. In addition, we do not limit the range of risk to circumstance in the external environment. The term risk is linked to the possibility of deviation. This means that the possibility of risk can be expressed as a probability, ranging from 0 to 100 percent. Therefore, the probability is neither impossible nor definite. This definition does not the probability is neither impossible nor definite mentioned Books definition. This definition does not require that the probability be quantified, only that it must exist. The probability of the adverse outcome must be between 0 to 100 percent.

Risk management has become a non delegable part top management's function and thus a non delegable responsibility and liability. Driven by law, the financial sector has developed overview the past years strategies, culture and considerable technical and management known–how relating to risk management, which represents a competitive

advantage against the manufacturing and insurance sectors. Risk management is an integrated part of upper management's responsibilities or an independent control and oversight function. Risk management is not a new function or gadget in the financial industry. However, based on recent events, regulators and the media have increasingly scrutinize risk management, is not a new function grade get in the financial industry. However, based on a recent events, regulators and the media have increasingly scrutinized risk management practices and techniques, A closer look at some of the accidents makes it apparent that managers, regulators and investor have partially lost control of risk management, overestimated their own capabilities, and brought companies and entire markets to the edge of the abyss. Therefore, risk management is the good topic for the researcher. Commercial banks have to assume different kind of risk: market risk, operational risk, credit risk and other of them credit risk cover the significant risk to the total risk. Though the banking sector has been facing different types of risk, major banking problem have been either explicitly or indirectly caused by the weaknesses in credit risk management, in this study, the researcher has focused mainly on the credit risk management of the commercial banks in Nepal. However, the brief introduction of other risks like liquidity risk, interest risk, operation risk and foreign exchange risk is also included. In addition to the credit risk the bank faces other risks. According to the Nepal Rastra Bank unified directives 2010, the major source of risk is credit risk, liquidity risk, foreign exchange risk, and interest rate risk etc.

1.2 Profile of Everest Bank Limited

Everest Bank Limited was registered on November 17, 1992 and come into operation on October 18, 1994 with an objective of extending professionalized and efficient banking services to various segments of the society. The bank had an initial paid up capital of Rs. 3 Core. Today the bank has grown to become one of the leading banks in Nepal.

Panjab National Bank (PNB) joined hands with EBL as a Joint Venture in 1997 and turned it around to a highly profitable bank. There has been no looking back since then. PNB provides top management support under the Technical Service Agreement. PNB joint venture partner of EBL one of the largest nationalized bank in India having 114 years of banking history, holds 20% equity.

Everest Bank has recognized the value of offerings a complete range of services and has pioneered in extending various customer friendly products such as home loan, education loan, EBL flexi loan, EBL property plus (future lease rental), Home equity loan, vehicles

loan, Loan against share, loan against life insurance policy and loan for professional. The bank is providing customer friendly services through a network of 22 branches.

Everest Bank Limited was the first bank to introduce Any Branch Banking System (ABBS) in Nepal. All the branches of the bank are connected with ABBS which enables the customers to do all their transactions from any branches other than where they have their account. Everest Bank has introduced the Mobile Vehicle Banking System to see the segment deprives of proper banking facilities through Birtamod branch, which is the first of its kind.

The bank has committed to provide excellent professional services & improve its position as a leader in the field of financial related services, use latest technology aimed at customer satisfaction & act as an effective catalyst for socio-economic developments. The bank was bestowed with the "NICCI Excellence award "twice in 1999 and 2003 by Nepal India chamber of commerce for its spectacular performance under finance sector and the bank has been conferred with "Bank of the Year 2006, Nepal" by the banker, a publication of financial times, London

Table: 1.1

Present Share Capital of EBL

Share Capital	Amount in NRS.
Authorized Capital	2,00,00,00,000
Issued Capital	1,28,14,06,500
Paid up Capital	1,27,96,09,490
Proposed Bonus Share	11,19,60,949

Source: Annual Report of EBl 2067/068

Table: 1.2

Detail of Share Ownership of EBL

Owners	**Figure in %**
General Public (Nepali)	68
Promoters:	
Foreign (Panjab National Bank India)	20
Nepali (Institutions)	12
Total	**100**

Source: Annual Report of EBL 2067/68

1.3 Focus of the Study

This study is mainly focused on the analysis of risk associated with the EBL. The study also tries to focus on the analysis of price movement of the shares of individual stock. It tries to evaluate companies on the basis of risk analysis.

Banking sector is vital sector for economic growth in a country. For the growth and development of this sector proper management of risk by considering the return is required. In today's competitive scenario, several macro economic factors such as political, economical, social and technological factors have increased the challenges to the banking sector. Banking sector also involves several risks, which need to be handled promptly for the survival and growth. As this study is made mainly to analyze the various risks and their management in reference to NRB directives and measures, it will provide valuable insight to different stakeholders about the major problems of commercial banks and theirs action for its management.

1.4 Statement of the problems

.Various issues are to deal for the purpose of this study. Some among the various issue but important ones are as follows:

- How for EBL been able to meet its current obligation when liquidity they become due?
- What are the major factors effecting the financials performance of EBL?
- What are the risks dealt by the EBL in the market and within the organization?
- Has EBL been able to avoid or manage those risks that come in the way to its destination?
- What is the strength and weakness of the EBL? In other words whether the earning power and operating efficiency is satisfactory or not?

1.5 Objective of the Study

The main objective of the study is to find out the credit and liquidity risk management efficiency of EBL and other specific objectives are as follows.

1. To assess the financial performance of EBL
2. To analyze the level of different types of risk faced by EBL.
3. To assess the Liquidity Position of EBL

1.6 Limitation of the Study

There will be some limitations while undergoing this study. The main limitation of this study will be;

1. The study period covers data for only five fiscal years from2062/063 to2066/067.
2. The study will be done mostly on the basis of secondary data collected.
3. The study will be done for the partial fulfillment of MBS programs of T.U.
4. Although there are many Joint venture Banks, the study limits to only one bank EBL.
5. This study only cover the risk management part of the EBL.

1.7 Significance of the Study

Financial ratio analysis is a reliable way to understand how a company is performing financially. By applying ratios to an organizations financial statements managers are able to better evaluate its short and long term financial performance. Equally important, manager can evaluate the financial performance of their competitors in order to further understand their relative performance in the market place.

Besides this study will be useful to more people and organization such as:

- Government
- Trade creditors
- Investors
- Stock brokers
- Police formulators
- General public

1.8 Organization of the Study

The whole study is divided in to five different chapters as below.

The chapter-One: "Introduction" provides the introduction of EBL, background of study, introduction of banking, statement of the problems, objective of the study, limitation of the study, significance of the study, current status, future program.

Chapters-Two: Is the "Review of literature" in the conceptual frame work; risk management, types, Resin & financial statement analysis are discussed with reference to the review of the related books and study. Similarly different articles and books Nepalese legislation and regulation relating to banking activities are also reviewed.

Chapter-Three: Explains the "Research methodology" used in the study which includes introduction, research designs, and sources of data, population and sample and methods of data analysis techniques.

Chapter-Four: Is the heart of the study .This chapter includes "Presentation and analysis of data" using financial tools such as ratio analysis and statistical tools i.e. coefficient of correlation of different variables and standard deviation. It also includes major findings of the study.

Chapter-Five: Revolves with "suggestions" which include the summary, conclusion and recommendations for further improvement and conclusions of the study.

Similarly, at the front part of the study table of contents, recommendation sheet, viva voice sheet, acknowledgement, list of table and figure and abbreviation are presented and bibliography and appendices are presented at the end of the study.

CHAPTER - TWO

REVIEW OF LITERATURE

This chapter is basically concerned with review of literature relevant to the topic risk management. The purpose of reviewing of literature is to develop some expertise in one's area, to see what new contribution has made and to receive some ideas for developing a research design. Thus, previous studies cannot be ignored as they provide the foundation of the present study. This chapter highlights the literature that is available in concerned subject as to my knowledge, research work, and relevant study on this topic, review of journals and articles and review of thesis work performed previously.

2.1 Conceptual Framework

Other definitions include the restriction that risk is based on real world events, including a combination of circumstances in the external environment Risk management is the process of measuring are assessing risk strategies. In ideal risk management, a prioritization process is followed whereby the risks with the greatest loss and the greatest probability of occurring are handled first, and risks with lower probability of occurrence and lower loss are handled later. In practice, the process can be very difficult and balancing risks with a high probability of occurrence but lower loss vs. a risk with high loss but lower probability of occurrence can after be mishandled. Risk refers to certainty on the investment faced by the investors. It is the possibility that actual outcomes may be different from those expected. Risk can be defined as the possibility of deviation of the actual return from the expected return (1950: p 134. Money market)

Risk is defined as "a condition in which there exists an exposure to adversity.(1999: p 234. Financial Institution and Marketing) .In addition, there is an expectation of what the outcome should look like. Many definitions of risk include the term adverse deviation to express the negative dimension of the expected or hoped-for outcome. Therefore, risk is defined here as: risk is a condition in which there exists a possibility of deviation from a desired outcome that is expected or hoped for. Different investors define risk in different ways. In general, risk can be defined as the likelihood that actual return from an investment will be less than the forecast return. Stated differently, it is the variability of return from an investment. (2002: p: 200 Kothari)

Risk management is the process of measuring, or assessing risk and then developing strategies to manage the risk. In ideal risk management, a prioritization process is followed whereby the risks with the greatest loss and the greatest probability of occurring are handled first, and risks with lower probability of occurrence and lower loss are handled later. In practice the process can be very difficult, and balancing between risks with a high probability of occurrence but lower loss vs. a risk with high loss but lower probability of occurrence can often be mishandled.

Risk management also faces a difficulty in allocating resources properly. This is the idea of opportunity cost. Resources spent on risk management could be instead spent on more profitable activities. Again, ideal risk management spends the least amount of resources in the process while reducing the effects of risks as much as possible.

Santomero (1997), views credit risk is generally made up of transaction risk or default risk and portfolio risk. The portfolio risk in turn comprises intrinsic and concentration risk. The portfolio risk depends on both external and internal factors. The external factors are the state of the economy, wide swings in commodity/equity prices, foreign exchange rates and interest rates, trade restrictions, economic sanctions, Government policies, etc. The internal factors are deficiencies in loan policies/administration, absence of prudential credit concentration limits, inadequately defined lending limits for Loan officers/Credit Committees, deficiencies in appraisal of borrowers' financial position, excessive dependence on collaterals and inadequate risk pricing, absence of loan review mechanism and post sanction surveillance, etc. Another variant of credit risk is counterparty risk. Counterparty risk comes from non-performance of a trading partner.

Financial risk management is the practice of creating economic value in a firm by using financial instruments to manage exposure to risk, particularly credit risk and market risk. Other types include Foreign exchange, Shape, Volatility, Sector, Liquidity, Inflation risks, etc. Similar to general risk management, financial risk management requires identifying its sources, measuring it, and plans to address them. Financial risk management can be qualitative and quantitative. As a specialization of risk management, financial risk management focuses on when and how to hedge using financial instruments to manage costly exposures to risk.

In the banking sector worldwide, the Basel Accords are generally adopted by internationally active banks for tracking, reporting and exposing operational, credit and market risks. Finance theory (i.e., financial economics) prescribes that a firm should take on a project when it increases shareholder value. Finance theory also shows that firm managers cannot create value for shareholders, also called its investor, by taking on projects that shareholders could do for themselves at the same cost. When applied to financial risk management, this implies that firm managers should not hedge risks that investors can hedge for themselves at the same cost. This notion was captured by the prefect marker the firm cannot create value by hedging a risk when the price of bearing that risks within the firm is the same as the price of bearing it outside of the firm. In practice, financial markets are not likely to be perfect markets. This suggests that firm managers likely have many opportunities to create value for shareholders using financial risk management. The trick is to determine which risks are cheaper for the firm to manage than the shareholders. A general rule of thumb, however, is that Marker risk that result in unique risks for the firm are the best candidates for financial risk management. The concepts of financial risk management change dramatically in the international realm. Multinational Corporations are faced with many different obstacles in overcoming these challenges. Research by many, including Raj Agarwal has started to disclose much of the decisions and impacts firms must make when operating in many countries. Research has specifically identified three kinds of foreign exchange exposure for various future time horizons, transactions "Risk as the volatility of corporation's market value" *(Kupper; 2000:150).*

Risk management, on the other hand, is the process of measuring or assessing risk and then developing strategies to manage the risk. In general, the strategies employed include transferring the risk to another party, avoiding the risk, reducing the negative effect of the risk, and accepting some or all of the con sequences of a particular risk.

2.1.1 Types of Risk Faced by Commercial Banks

Risk and uncertainties are the integral part of banking business. In banking sector, risk refers to the possibility that the bank will turn into liquidation there are several inherent risks in banking which can be classified into three broad categories i.e. Credit Risk, Market Risk and Operational Risk. Primarily, risk in the banking context is credit risk through lending, which occupies about 60% of total risk portfolio. Therefore, this study is mainly focused on the credit risk. However, the brief introduction of Market Risk and

operational Risk has also been included. The major sources of risk in banking business are briefly discussed as below.

1. **Credit Risk**

Credit risk is most simply defined as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms**.** Anthony Saunders defines the credit risk as "the risk that the promised cash flows from loans and securities held by FIs (Financial Institutions) may not be paid in full". Credit risk involves inability or unwillingness of a customer or counterparty to meet commitments in relation to lending, trading, hedging, Settlement and other financial transactions

The non-performance may arise from counterparty's refusal to perform due to an adverse price movement caused by systematic factors, or from some other political or legal constraint that was not anticipated by the principals. Diversification is the major tool for controlling nonsystematic counterparty risk. Counterparty risk is like credit risk, but it is generally viewed as a more transient financial risk associated with trading than standard creditor default risk. In addition, counterparty's failure to settle a trade can arise from other factors beyond a credit problem. So, the goal of credit risk management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Bank should also consider the relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization**.** *(Bhandari, 2003:44).*

2. **Market Risk**

Market risk is the risk that the value of a portfolio, either an investment portfolio or a trading portfolio, will decrease due to the change in value of the market risk factors. The four standard market risk factors are stock prices, interest rates, foreign exchange rates, and commodity prices. The associated market risks are as with other forms of risk, the potential loss amount due to market risk may be measured in a number of ways or conventions. Traditionally, one convention is to use Value at Risk. The conventions of using Value at risk are well established and accepted in the short-term risk management practice.

However, it contains a number of limiting assumptions that constrain its accuracy. The first assumption is that the composition of the portfolio measured remains unchanged

over the specified period. Over short time horizons, this limiting assumption is often regarded as reasonable. However, over longer time horizons, many of the positions in the portfolio may have been changed. The Value at Risk of the unchanged portfolio is no longer relevant.

In addition, care has to be taken regarding the intervening cash flow, embedded options, changes in floating rate interest rates of the financial positions in the portfolio. They cannot be ignored if their impact can be large. Market risk is the risk incurred in the trading of assets and liabilities due to changes in interest rates, exchange rates, and other asset prices. So, Market risk is exposure to the uncertain market value of the firm's asset. Major factors affecting Market risk are:

a. Liquidity Risk
b. Interest Rate Risk
c. Foreign Exchange Risk

3. **Liquidity Risk**

Anthony Saunders says, **"**Liquidity risk arises whenever financial institutions' liability holders, such as depositors or insurance policyholders, demand immediate cash for their financial claims". When liability holders demand cash immediately – that is, put their financial claims back to the FI – the FI must either borrow additional funds or sell off assets to meet the demand for the withdrawal of funds. An institution is said to have liquidity if it can easily meet its liability holders' demand for cash either because it has cash on hand or can otherwise raise or borrow cash. In banking sector, Liquidity risk is created when banks hold different sizes of assets and liabilities and mismatch occurs in maturity of the assets and liabilities. Extreme illiquid asset in bank may result in bankruptcy where as excess liquid asset may carry interest rate risk over the period of time. As it is fatal risk, prudent liquidity management is the primary function of banking sector. Liquidity management is also to make sure that expected shortfall amounts are funded at a reasonable cost, ensure excess fund are invested properly with reasonable returns and without carrying any interest rate risk to the bank

4. Interest Rate Risk (IRR)

Interest rate risk is the risk incurred by a financial institution when the maturities of its assets and liabilities are mismatched. Interest Rate Risk is the probability of decline in earnings, due to the adverse movements of the interest rates in various markets. The applicable interest earned on assets and liabilities and hence net interest margin is the function of market variables and it may get changed overnight or over a period of time

according to the market situation. Changes in the interest rate can significantly alter net interest income depending on the mismatch of assets and liabilities held by the bank. Changes in interest rates also affect the market value of bank's equity.

5. **Foreign Exchange Risk**

Foreign exchange risk is the risk that exchange rate changes can affect the value of a bank's assets and liabilities denominated in foreign currencies. The bank is also exposed to foreign exchange risk, which arises from the maturity mismatching of foreign currency positions. In the foreign exchange business, banks also face the risk of default of the counterparties or settlement risk. While such type of risk crystallization will not cause principal loss, banks may have to undertake fresh transactions in the cash/spot market to replace the failed transactions. Thus, the bank may incur replacement cost, which depends upon the currency rate movements.

6. **Operational Risk**

Operational risk *is* associated with the problems of accurately processing, settling, and taking or making delivery on trades in exchange for cash. It also arises in record keeping, processing system failures and compliance with various regulations. The Basel Committee on Banking Supervision (2000), defines operational risk as "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events." Operational risk arises from inadequate control systems, operational problems and breaches in internal controls, fraud and unforeseen catastrophes leading to unexpected losses for a bank. Many of the operational-risk-related functions such as regulatory compliance, finance management, frauds, IT, legal, and insurance are carried out by the staff and thus human resources itself becomes a cause for operational risk.

2.1.2 Sources of Risk

An investment is commitment of money that is expected to generate addition money. Every investment entails some degree of risks. A major objective of financial institution is to increase the returns for its owner by taking minimum risk. The effective management of the risk is central to its performance. Indeed, it can be argued that the main business function of financial institution is managing these risks through the consumption of maximum time and efforts in understanding and managing the various source and kinds of risks factors with its different natures and complexities. The primary risks factors that create investment uncertainties are as follows: *(Leippoldy, 2003:155).*

1. **Interest Rate Risk**:- It is defined as the potential variability of return caused by changes in the market interest rates. In more general terms, if market interest rates

rise, then investment values and market prices will fall, and vice versa. The variability of return is the result of change in interest rate. This interest rate risk affects the prices of bonds, stocks, real estate, gold, puts, calls, future contracts and other investment as well.

2. **Purchasing power Risk**:- It is the variability of return an investor suffers because of inflation. The rate of inflation is measured by using a consumer price index (CPI). The percentage change in the CPI is a widely followed measure of the rate of inflation.
3. **Bull-Bear Market Risk:-** Bull-Bear market risk arises from the variability in market return resulting from alternating bull and bear market forces. When a security index rises fairly consistently form a low point called a trough, for a period of time, this upward trend is called a bull market. The bull market ends when the market index reaches a peak and starts a downward trend. The period during which the market declines to the next trough is called bear market.
4. **Default Risk:-** It is the portion of an investment's total risk that results from changes in the financial integrity of the investment. Default risk is the variability of return that investors experience as a result of changes in the creditworthiness of a firm in which they invest. Investor losses from default risk usually result from security prices falling as the financial integrity of a firm weakness. By the time an actual bankruptcy occurs, the market prices of the troubled firm's securities will already have declined to near zero.
5. **Liquidity Risk:-** It is that portion of an asset's total variability which results from price discounts given or sales commissions paid in order to sell the asset without delay. Perfectly liquid are highly marketable and suffer no liquidation costs. Liquid assets are not readily marketable – either price discounts must be given or sales commissions must be paid, or both of these costs must be incurred by the seller. Hence, the more liquid an asset is, the larger the price discounts and/or commissions which must be given up by the seller in order to affect a quick sale.
6. **Callability Risk:-** Some bonds and preferred stocks are issued with a provision that allows the issuer to call them in for repurchase. The portion of a security's total variability of return that derives from the possibility that the issue may be called is the callability risk. Callability risk command a risk premium that comes the form of a slightly higher average rate of return. This additional return should increase as the risk that the issue will be called increases.

7. **Convertibility Risk:-** Convertibility risk is that portion of the total variability of return from a convertible bond or a convertible preferred stock that reflects the possibility that the investment may be converted into the issuer's common stock.
8. **Political Risk:-** The portion of an asset's total variability of return cased by changes in the political environment that affect the asset's market value. Whether the changes that cause political risk are sought by political or by economic interests, the resulting variability of return is called political risk.
9. **Industry Risk:-** An industry may be viewed as a group of companies that compete with each other in a market of homogenous product. Industry risk is that portion of an investment's total variability of return caused by events that affect the products and firms that make up an industry. The stage of the industry's life cycle, international tariffs and/or quotas on the products produces by an industry, product or industry related taxes; industry wide labour union problems, environmental restrictions, raw material availability, and similar factors interact and affect all the firms in an industry simultaneously. As a result of these commonalities, the process of the securities issued by competing firms tends to rise and fall together.
10. **Other Risks: -** Besides these above mentioned risks, there are other risks like off balance sheet risk, technological and operational risk, country and sovereign risk, insolvency risk etc.

2.2 Capital Adequacy Framework

2.2.1 Introduction

Prior to 1988, there was no uniform international regulatory standard for setting bank capital requirements. In 1988, the Basel Committee on Banking Supervision (BCBS) developed the Capital Accord, which is known as Basel I, to align the capital adequacy requirements applicable especially to banks in G-10 countries. Basel I introduced two key concepts. First, it defined what banks could hold as capital, as well as designating capital as Tier 1 or Tier 2 according to its loss-absorbing or creditor-protecting characteristics. The second key concept introduced in Basel I was that capital should be held by banks in relation to the risks that they face. The major risks faced by banks relate to the assets held on balance sheet. Thus, Basel I calculated banks' minimum capital requirements as a percentage of assets, which are adjusted in accordance to their riskiness and assigning risk

weights to assets. Higher weights are assigned to riskier assets such as corporate loans, and lower weights are assigned to less risky assets, such as exposures to government.

The BCBS released the "International Convergence of Capital Measurements and Capital Standards: Revised Framework", popularly known as Basel II, on June 26, 2004. This framework was updated in November 2005 and a comprehensive version of the framework was issued in June 2006. Basel II builds significantly on Basel I by increasing the sensitivity of capital to key bank risks. In addition, Basel II recognizes that banks can face a multitude of risks, ranging from the traditional risks associated with financial intermediation to the day-to-day risks of operating a business as well as the risks associated with the ups and downs of the local and international economies. As a result, the new framework more explicitly associates capital requirements with the particular categories of major risks that banks face.

The new capital framework also recognizes that large, usually internationally active banks have already put in place sophisticated approaches to risk measurement and management based on statistical inference rather than judgement alone. Thus, the framework allows banks, under certain conditions, to use their own 'internal' models and techniques to measure the key risks that they face, the probability of loss, and the capital required to meet those losses. In developing the new framework, the Basel Committee wanted to incorporate many elements that help promote a sound and efficient financial system over and above the setting of minimum capital requirements. With this in mind, the Basel II framework incorporates three complementary 'pillars' that draw on the range of approaches to help ensure that banks are adequately capitalised in commensurate with their risk profile.

The Basel Committees on Banking Supervision's (BCBS) recommendations on capital accord are important guiding framework for the regulatory capital requirement to the banking industry all over the world and Nepal is no exception. Realizing the significance of capital for ensuring the safety and soundness of the banks and the banking system, at large, Nepal Rastra Bank (NRB) has developed and enforced capital adequacy requirement based on international practices with appropriate level of customization based on domestic state of market developments. The existing regulatory capital is largely based on the Basel committee's 1988 recommendations. With a view of adopting the international best practices, NRB has already expressed its intention to adopt the Basel II

framework, albeit in a simplified form. In line with the international development and thorough discussion with the stakeholders, evaluation and assessment of impact studies at various phases, this framework has been drafted. This framework provides the guidelines for the implementation of Basel II framework in Nepal. Reminiscent of the International convergence of capital measurements and capital standards, this framework also builds around three mutually reinforcing pillars, viz. minimum capital requirements, supervisory review process and disclosure requirements.(2068: P 16. NRB Directive)

2.2.2 Objectives

The main objective of this framework is to develop safe and sound financial system by way of sufficient amount of qualitative capital and risk management practices. This framework is intended to ensure that each commercial banks maintain a level of capital which,

- Is adequate to protect its depositors and creditors,
- Commensurate with the risk associated activities and profile of the commercial bank.
- Promotes public confidence in the banking system.

The Basel Committee on Banking Supervision is a committee of banking supervisory authorities that was established by the central bank governors of the Group of Ten countries in 1975. It consists of senior representatives of bank supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom, and the United States. It usually meets at the Bank for International Settlements in Basel, Switzerland where its permanent Secretariat is located.

2.2.3 Pre-Requisites

The effective implementation of this framework is dependent on various factors. Some such pre-requisites are:

- Implementation of Basel Core Principles for effective Banking Supervision
- Adoption of the sound practices for the management of Operational Risk
- Formulation and adoption of comprehensive risk management policy
- Adherence to high degree of corporate governance

2.2.4 Responsibility

The board of directors of each bank shall be responsible for establishing and maintaining, at all times, an adequate level of capital. The capital standards herein are the minimum that is acceptable for banks that are fundamentally sound, well managed, and which have no material financial or operational weaknesses. Thus, the banks are generally expected to operate above the limits prescribed by this framework.

2.2.5 Scope of Application

This framework shall be applicable to all "A" Class financial institutions licensed to conduct banking business in Nepal under the Bank and Financial Institution Act, 2063. This capital adequacy framework shall be applicable uniformly to all "A" class financial institutions on a stand-alone basis and as well as on a consolidated basis, where the bank is member of a consolidated banking group. For the purpose of capital adequacy, the consolidated bank means a group of financial entities, parent or holding company of which a bank is a subsidiary. All banking and other relevant financial activities (both regulated and unregulated) conducted within a group including a bank shall be captured through consolidation. Thus, majority owned or controlled financial entities should be fully consolidated. If any majority owned subsidiaries institutions are not consolidated for capital purposes, all equity and other regulatory capital investments in those entities

attributable to the group will be deducted and the assets and liabilities, as well as third party capital investments in the subsidiary will be removed from the bank's balance sheet for capital adequacy purposes. (2068: P 17. NRB Directive)

2.2.6 Approaches to Implementation

"International Convergence for Capital Measurements and Capital Standards: Revised Framework" alias Basel II under Pillar 1, provides three distinct approaches for computing capital requirements for credit risk and three other approaches for computing capital requirements for operational risk. These approaches for credit and operational risks are based on increasing risk sensitivity and allow banks to select an approach that is most appropriate to the stage of development of bank's operations. The product and services offered by the Nepalese Banks are still largely primitive and conventional, in comparison to other economies. This coupled with the various inherent limitations of our system like the absence of credit rating agencies makes the advanced approaches like Internal Ratings Based Approach or even Standardized Approach impractical and

unfeasible. Thus, at this juncture, this framework prescribes Simplified Standardized Approach (SSA) to measure credit risk while Basic Indicator Approach and an indigenous Net Open Position Approach for measurement of Operational Risk and Market Risk respectively.

2.2.7 Implementation of Advanced Approaches

This framework prescribes the most simplest of the available approaches at the initial phase with a vision to move onto more complex and risk sensitive approaches as the market gradually gains maturity. However, banks willing to adopt advanced approaches, even for internal purposes, should obtain prior written approval from Nepal Rastra Bank on providing evidences that they have the resource and the capability to adopt the proposed approaches.

A bank will not be allowed to choose to revert to a simpler approach once it has been approved for a more advanced approach without supervisory approval. However, if a supervisor determines that a bank using a more advanced approach no longer meets the qualifying criteria for advanced approach, it may allow the bank to revert to a simpler approach for some or all of its operations, until it meets the conditions specified by the supervisor for returning to a more advanced approach.

2.3 Eligible Capital Funds

2.3.1 Core Capital (Tier 1)

The key element of capital on which the main emphasis should be placed is the Tier 1 (core) capital, which comprises of equity capital and disclosed reserves. This key element of capital is the basis on which most market judgments of capital adequacy are made; and it has a crucial bearing on profit margins and a bank's ability to compete. The BCBS has therefore concluded that capital, for supervisory purposes, should be defined in two tiers in a way, which will have the effect of requiring at least 50% of a bank's capital base to consist of a core element comprised of equity capital and published reserves from post-tax retained earnings. In order to rank as Tier 1, capital must be fully paid up, have no fixed servicing or dividend costs attached to it and be freely available to absorb losses ahead of general creditors. Capital also needs to have a very high degree of permanence if it is to be treated as Tier 1.

2.3.2 Supplementary Capital (Tier 2)

The Supplementary (Tier 2) Capital includes reserves which, though unpublished, have been passed through the profit and loss account and all other capital instruments eligible and acceptable for capital purposes. Elements of the Tier 2 capital will be reckoned as capital funds up to a maximum of 100 percent of Tier 1 capital arrived at, after making adjustments referred to in 2.4. In case, where the Tier 1 capital of a bank is negative, the Tier 2 capital for regulatory purposes shall be considered as zero and hence the capital fund, in such cases, shall be equal to the core capital.

2.3.3 Elements of Tier 1 Capital

1. Paid up Equity Capital.
2. Irredeemable non-cumulative preference shares which are fully paid-up and with the capacity to absorb unexpected losses. These instruments should not contain any clauses whatsoever, which permit redemption by the holder or issuer upon fulfillment of certain condition. Banks should obtain prior approval of NRB for this kind of instruments to qualify as a component of core capital.
3. Share Premium
4. Proposed Bonus Equity Share
5. Statutory General Reserve.
6. Retained Earnings available for distribution to shareholders.
7. Un-audited current year cumulative profit, after all provisions including staff bonus and taxes. Where such provisions are not made, this amount shall not qualify as Tier 1 capital.
8. Capital Redemption Reserves created in lieu of redeemable instruments.
9. Capital Adjustment reserves created in respect of increasing the capital base of the bank.
10. Dividend Equalization Reserves.
11. Any other type of reserves notified by NRB from time to time for inclusion in Tier 1 capital

2.3.4 Elements of Tier 2 Capital

1. Cumulative and/or redeemable preference shares with maturity of five years and above.
2. Subordinated term debt fully paid up with a maturity of more than 5 years; unsecured and subordinated to the claim of other creditors, free of restrictive

clauses and not redeemable before maturity. Since, subordinated term debt is not normally available to participate in the losses; the amount eligible for inclusion in the capital adequacy calculations is limited to 50% of core capital. Moreover, to reflect the diminishing value of these instruments as a continuing source of strength, a cumulative discount (amortization) factor of 20% per annum shall be applied for capital adequacy computations, during the last 5 years to maturity. The banks should obtain written approval of NRB for including any subordinated debt instruments (like Debenture/Bonds) in supplementary (Tier-2) capital.

3. Hybrid capital instruments. Those instruments which combine certain characteristics of debt and certain characteristics of equity. Each such instrument has a particular feature, which can be considered to affect its quality as capital. Where these instruments have close similarities to equity, in particular when they are able to support losses on an ongoing basis without triggering liquidation, they may be included in Tier 2 capital with approval from Nepal Rastra Bank.
4. General loan loss provision limited to a maximum of 1.25% of total Risk Weighted Exposures. General loan loss provision refers to the provisions created in respect of Pass Loans only and it does not include provisions of rescheduled/restructured and classified loans. The additional loan loss provisions created in respect of Personal Guarantee loans and loans in excess of Single Obligor Limits are specific provisions and hence cannot be included under this category. Such provisions however can be deducted from the gross exposures while calculating risk weighted exposures for credit risk. However, provisions created in excess of the regulatory requirements or provisions which is not attributable to identifiable losses in any specific loans shall be allowed to be included in the General Loan Loss Provision and shall be eligible for Tier II capital subject to a maximum of 1.25% of total risk weighted exposures.
5. Exchange equalization reserves created by banks as a cushion for unexpected losses arising out of adverse movements in foreign currencies.
6. Investment adjustment reserves created as a cushion for adverse price movements in bank's investments falling under “Available for Sale” category.
7. Revaluation reserves often serve as a cushion against unexpected losses but may not be fully available to absorb unexpected losses due to the subsequent deterioration in market values and tax consequences of revaluation. Therefore, revaluation reserves will be eligible up to 50% for treatment as Tier 2 capital and

limited to a maximum of 2% of total Tier 2 capital subject to the condition that the reasonableness of the revalued amount is duly certified by the internal auditor of the bank.

8. Any other type of reserves notified by NRB from time to time for inclusion in Tier 2 capital

2.3.5 Deductions from Core (Tier 1) Capital

Banks shall be required to deduct the following from the Tier 1 capital for capital adequacy purposes. The claims that have been deducted from core capital shall be exempt from risk weights for the measurement of credit risk.

- Book value of goodwill.
- Miscellaneous expenditure to the extent not written off. e.g. VRS expense, preliminary expense, share issue expense, deferred revenue expenditure, etc. However, software expenditure or software development expenditure, research and development expenditure, patents, copyrights, trademarks and lease hold developments booked as deferred revenue expenditure are subject to 100% risk weight and may not be deducted from Tier 1 capital.
- Investment in equity of financial institutions licensed by Nepal Rastra Bank .
- All Investments in equity of institutions with financial interest.
- Investments in equity of institutions in excess of the prescribed limits.
- Investments arising out of underwriting commitments that have not been disposed within a year from the date of commitment.
- Reciprocal crossholdings of bank capital artificially designed to inflate the capital position of the bank.
- Any other items as stipulated by Nepal Rastra Bank, from time to time.

2.3.6 Capital Funds

The capital fund is the summation of Tier 1 and Tier 2 capital. The sum total of the different components of the tier 2 capitals will be limited to the sum total of the various components of the Tier 1 capital net of deductions as specified in 2.4. In case the Tier 1 capital is negative, Tier 2 capital shall be considered to be "Nil" for regulatory capital adequacy purposes and hence, in such a situation, the capital fund shall be equal to the Tier 1 capital.

2.3.7 Minimum Capital Requirements

Unless a higher minimum ratio has been set by Nepal Rastra Bank for an individual bank through a review process, every bank shall maintain at all times, the capital requirement set out below:

- A Tier 1 (core) capital of not less than 6 per cent of total risk weighted exposure;
- A total capital fund of not less than 10 per cent of its total risk weighted exposure.

The Capital Adequacy Ratio (CAR) is calculated by dividing eligible regulatory capital by total risk weighted exposure. The total risk weighted exposure shall comprise of risk weights calculated in respect of bank's credit, operational and market risks. The methodologies to calculate RWE for each of these risk categories are described in detail in subsequent chapters.

2.4 Credit Risk

2.4.1 General

Credit risk is the major risk that banks are exposed to during the normal course of lending and credit underwriting. Within Basel II, there are two approaches for credit risk measurement: the standardized approach and the internal ratings based (IRB) approach. Due to various inherent constraints of the Nepalese banking system, the standardized approach in its simplified form, Simplified Standardized Approach (SSA), has been prescribed in the initial phase.

2.4.2 Simplified Standardized Approach (Ssa)

In comparison to Basel I, SSA aligns regulatory capital requirements more closely with the key elements of banking risk by introducing a wider differentiation of risk weights and a wider recognition of credit risk mitigation techniques. The advantage of implementing this approach is twofold. This approach allows transitional advantage for countries like us by avoiding excessive complexities associated with the advanced approaches of Basel II while at the same time it will produce capital ratios more in line with the actual economic risks that banks are facing, compared to the present Accord. Under this approach commercial banks are required to assign a risk weight to their balance sheet and off-balance sheet exposures. These risk weights are based on a fixed weight that is broadly aligned with the likelihood of a counterparty default. As a general rule, the claims that have already been deducted from the core capital shall be exempt

from risk weights for the measurement of credit risk. Claims on foreign government, their central banks as well as foreign corporates shall be generally risk-weighed on the basis of the consensus country risk scores of export credit agencies (ECA) . Wherever there are claims relating to unrated countries, they shall generally be risk weighed at 100 percent. However, these claim shall be subject to supervisory review and higher risk weight shall be assigned where the review process deems appropriate. All kinds of claims including loans & advances as well as investments shall be risk weighed net of specific provisions. Generally provision related to any receivable or investment is not defined as general or specific. In such situation, the total provision against any claim/exposure (other than the loans and advances) shall be considered as specific provision. However, provisions eligible for the supplementary capital shall not be allowed for netting while calculating risk weighted exposures. In case of loans, advances and bills purchased the provisions created in lieu of Pass loans only are classified as General loan loss provision. All other provisions are components of specific loan loss provision. Hence, general loan loss provision doesn't comprise provisions created in respect of rescheduled/restructured and non performing loans. It also doesn't include additional provisions created for personal guarantee loans or lending in excess of Single Obligor Limits. However, provisions created in excess of the regulatory requirements and not attributable to identifiable losses in any specific loans shall be allowed to be included in the General Loan Loss Provision. In order to be consistent with the Basel-II framework, the credit risk for the regulatory capital purpose shall be computed by segregating the exposure in the following 11 categories.

- Claims on government & central bank
- Claims on other official entities
- Claims on banks
- Claims on corporate & securities firms
- Claims on regulatory retail portfolio
- Claims secured by residential properties
- Claims secured by commercial real state
- Past due claims
- High risk claims
- Other assets
- Off balance sheet items

2.4.3 Risk Measurement and Risk Weights

A. Claims on government & central bank

1. All claims on Government of Nepal and Nepal Rastra Bank shall be risk weighed at 0 %.
2. Claims on foreign government and their central banks shall be risk-weighted on the basis of the consensus country risk scores as follows:

ECA risk Sector	0-1	2	3	4-6	7
Risk Weights	0%	20%	50%	100%	150%

B. Claims on other official entities

1. Claims on the Bank for International Settlements, the International Monetary Fund, the European Central Bank and the European Community will receive a 0% risk weight.
2. Following Multilateral Development Banks (MDBs) will be eligible for a 0% risk weight.
   - World Bank Group, comprised of the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC),
   - Asian Development Bank (ADB),
   - African Development Bank (AfDB),
   - European Bank for Reconstruction and Development (EBRD),
   - Inter-American Development Bank (IADB),
   - European Investment Bank (EIB),
   - European Investment Fund (EIF),
   - Nordic Investment Bank (NIB),
   - Caribbean Development Bank (CDB),
   - Islamic Development Bank (IDB), and
   - Council of Europe Development Bank (CEDB).
3. The standard risk weight for claims on other Multilateral Development Banks will be 100%.
4. Claims on public sector entities (PSEs) will be risk-weighed as per the ECA country risk scores.

ECA Risk Sector	0-1	2	3-6	7
Risk Weights	20%	50%	100%	150%

C. Claims on banks

1. All claims, irrespective of currency, excluding investment in equity shares and other instruments eligible for capital funds, on domestic banks/financial institutions that fulfill Capital Adequacy Requirements will be risk weighed at 20% while for the rest, it will be 100%. Banks should make use of the publicly available information of the immediately preceding quarter of the respective banks to gauge their status on capital adequacy.
2. Claims on a foreign bank excluding investment in equity shares and other instruments eligible for capital funds shall be risk weighed as per the ECA Country risk score subject to the floor of 20%. The primary basis for applying the ECA Country Risk score shall be the country of incorporation of the bank. Where the bank is a branch office, the ECA score of the country where the corporate office is located shall be used while in the case of a subsidiary the basis shall be the country where the subsidiary is incorporated.

ECA Risk Sector	0-1	2	3-6	7
Risk Weights	20%	50%	100%	150%

However, the claims on foreign banks incorporated in the SAARC region and which operate with a buffer of 1% above their respective regulatory minimum capital requirements may be risk weighed at 20%. The banks shall be responsible to submit the latest capital adequacy position of such banks and demonstrate that they fulfill the eligibility requirements. Such capital adequacy position submitted by the banks should not be prior to more than one financial year. Moreover, such claims shall be subject to a supervisory review and supervisors may require the bank to risk weigh the claims on ECA country risk scores where the review process deems necessary.

D. Claims on corporate & securities firms

1. The risk weight for claims on domestic corporates, including claims on insurance companies and securities firm will be 100%. The domestic corporates includes all firms and companies incorporated in Nepal as per prevailing Acts and regulations.
2. The claims on foreign corporate shall be risk weighed as per the ECA Country risk score subject to the floor of 20% as follows:

ECA Risk Sector	0-1	2	3	4-6	7
Risk Weights	20%	50%	100%	100%	150%

E. Claims on regulatory retail portfolio

1. Claims that qualify all criteria listed below may be considered as regulatory retail portfolio and risk weighed at 75%, except for past due loans. Such claims however, have to be in strict compliance with the Product paper developed by the bank and approved by their respective board of directors.

Criteria

- **Orientation criteria :-** exposure is to an individual person or persons or to a small business. Bank should obtain written declaration from the borrower to the effect that their indebtedness is within the threshold across all banks and FIs..
- **Product criteria :-** The exposure takes the form of any of the following:
  - Revolving credits and lines of credit, (including overdraft, hypothecation etc.)
  - Term loans and leases (e.g. hire purchase, auto loans and leases, student and educational loans) and,
  - Small business facilities and commitments,
  - Deprived sector loans upto a threshold of Rs.10 million (Ten Million only)
- **Granularity criteria:-** NRB must be satisfied that the regulatory retail portfolio is sufficiently diversified to a degree that reduces the risks in the portfolio, warranting the 75% risk weight. No aggregate exposure to one counterpart can exceed 0.5 % of the overall regulatory retail portfolio.
- **Low value individual criteria :-** The total aggregated exposure to one counterpart cannot exceed an absolute threshold of Rs.10 million (Nepalese Rupees Ten Million only)

2. Banks which have claims that fulfill all criterion except for granularity may risk weigh those claims at 100%

3. **Claims secured by residential properties**

Lending to individuals meant for acquiring or developing residential property which are fully secured by mortgages on residential property, that is or will be occupied by the borrower or that is rented, will be risk-weighed at 60%. However, banks should ensure the existence of adequate margin of security over the amount of loan based on strict valuation rules. Banks have to develop product paper and get it approved from the board

of directors to regulate this kind of lending. The claims in order to be eligible for this category have to be in strict compliance with this product paper

- Where the loan is not fully secured, such claims have to risk weighed at 150%
- When claims secured by residential properties are or have been past due at any point of time during the last two years, they shall be risk-weighed at 100%, net of specific provisions.

4. Claims secured by commercial real estate

Claims secured by mortgages on commercial real estate, except past due, shall be risk-weighed at 100%. Commercial real estate hereby refers to mortgage of Office buildings, retail space, multi-purpose commercial premises, multi-family residential buildings, multi-tenanted commercial premises, industrial or warehouse space, hotels, land acquisition, development and construction etc.

5. Past due claims

Any loan, except for claim secured by residential property, which is or has been past due at any point of time during the last two years, will be risk-weighed at 150% net of specific provision.

6. High risk claims

a. 150% risk weight shall be applied for venture capital and private equity investments.
b. Exposures on Personal loan in excess of the threshold of regulatory retail portfolio and lending against securities (bonds and shares) shall attract a risk weight of 150%. Similarly, exposures on credit card shall also warrant a risk weight of 150%.
c. Investments in the equity and other capital instruments of institutions, which are not listed in the stock exchange and have not been deducted from Tier 1 capital, shall be risk weighed at 150% net of provisions.
d. Investments in the equity and other capital instruments of institutions, which are listed in the stock exchange and have not been deducted from Tier 1 capital, shall be risk weighed at 100% net of provisions.
e. The claims which are not fully secured or are only backed up by personal guarantee shall attract 150% risk weight.

f. Where loan cannot be segregated/or identified as regulatory retail portfolio or qualifying residential mortgage loan or under other categories, it shall be risk weighed at 150%.

7. Other assets

With regard to other assets, following provisions have been made;

- Interest receivable/claim on government securities will be risk-weighed at 0%.
- Investments in equity or regulatory capital instruments issued by securities firms will be
- risk-weighed at 100%.
- Cash in transit and other cash items in the process of collection will be risk-weighed at 20%. For this purpose, cash items shall include Cheque, Draft, and Travellers Cheques.
- Fictitious assets that have not been deducted from Tier 1 capital shall be risk weighed at
- 100%.
- All Other assets will be risk-weighed at 100% net of specific provision.

8. Off balance sheet items

Off-balance sheet items under the simplified standardized approach will be converted into equivalent risk weight exposure using risk weight as follows:

Off Balance Sheet Exposure	**Risk Weights**
Any commitments those are unconditionally cancelable at any time by the bank without prior 0% notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness (for example bills under collection)	0%
Forward exchange contracts	10%
Short Term Trade-related contingencies; Contingent liabilities arising from trade-related obligations, which are secured against an underlying shipment of goods for both issuing and confirming bank and are short term in nature. This includes documentary letters of credit, shipping guarantees issued and any other trade-related contingencies with an original maturity up to six months.	20%
Undertaking to provide a commitment on an off-balance sheet items	20%
Unsettled securities and foreign exchange transactions between bank to	20%

bank and between bank and customer	
Long Term Trade-related contingencies; Contingent liabilities arising from trade-related obligations, which are secured against an underlying shipment of goods for both issuing and confirming bank and are long term in nature. This includes documentary letters of credit, shipping guarantees issued and any other trade-related contingencies with an original maturity of over six months	50%
Performance-related contingencies Contingent liabilities, which involve an irrevocable obligation to pay a third party in the event that counterparty fails to fulfill or perform a contractual non-monetary obligation, such as delivery of goods by a specified date etc. This includes issue of performance bonds, bid bonds, warranties, indemnities, underwriting commitments and standby letters of credit in relation to a non-monetary obligation of counterparty under a particular transaction.	50%
Long term irrevocable Credit Commitments Any un-drawn portion of committed credit lines sanctioned for a period of more than 1 year. This shall include all unutilized limits in respect of revolving working capital loans except for trade finance exposures e.g. Overdraft, Cash credit, working capital loan etc.	50%
Short term irrevocable Credit Commitments Any un-drawn portion of committed credit lines sanctioned for a period of upto 1 year. This shall include all unutilized limits in respect of revolving working capital loans except for trade finance exposures e.g. Overdraft, Cash credit, working capital loan etc.	20%
Repurchase agreements, securities lending, securities borrowing, reverse repurchase agreements and equivalent transactions.This includes sale and repurchase agreements and asset sales with recourse, where the credit risk remains with the purchasing bank.	100%
Direct credit substitutes Any irrevocable off-balance sheet obligations which carry the same credit risk as a direct extension of credit, such as an undertaking to make a payment to a third party in the event that a counterparty fails to	100%

meet a financial obligation or an undertaking to a counterparty to acquire a potential claim on another party in the event of default by that party, constitutes a direct credit substitute. This includes potential credit exposures arising from the issue of financial guarantees and credit derivatives, confirmation of letters of credit (acceptances and endorsements), issue of standby letters of credit serving as financial guarantees for loans, securities and any other financial liabilities, and bills endorsed under bill endorsement lines (but which are not accepted by, or have the prior endorsement of, another bank).	
UNPLid portion of partly paid shares and securities	100%
Other Contingent Liabilities	100%

Source: NRB Directives 2067/068

2.5 Credit Risk Mitigation

Banks may use a number of techniques to mitigate the risks to which they are exposed. The prime objective of this provision is to encourage the banks to manage credit risk in a prudent and effective manner. As such, credit risks exposures may be collateralized in whole or in part with cash or securities, or a loan exposure may be guaranteed by a third party. Where these various techniques meet the minimum conditions mentioned below, banks which take eligible financial collateral are allowed to reduce their credit exposure to counterparty when calculating their capital requirements to take account of the risk mitigating effect of the collateral. However, credit risk mitigation is allowed only on an account by account basis, even within regulatory retail portfolio. As a general rule, no secured claim should receive a higher capital requirement than an otherwise identical claim on which there is no collateral. Similarly, the effects of the CRM shall not be double counted and capital requirement will be applied to banks on either side of the collateralized transaction: for example, both repos and reverse repos will be subject to capital requirements.

Those portions of claims collateralized by the market value of recognized collateral receive the risk weight applicable to the collateral instrument. The remainder of the claim should be assigned the risk weight appropriate to the counter party. Where the same security has been pledged for both the funded and non funded facilities, banks should clearly demarcate the value of security held for funded and non funded facility. In cases

where the bank has obtained same security for various forms of facilities; banks are eligible to claim the CRM benefit across all such exposures upto the eligible value of CRM.

2.5.1 Minimum conditions for eligibility

In order to obtain capital relief towards credit risk mitigation, there are certain basic condition that needs to be fulfilled. Supervisors will monitor the extent to which banks satisfy these conditions, both at the outset of a collateralized transaction and on an on-going basis.

1. **Legal certainty:-** Collateral is effective only if the legal mechanism by which collateral is given is robust and ensures that the lender has clear rights over the collateral to liquidate or retain it in the event of default. Thus, banks must take all necessary steps to fulfill local contractual requirements in respect of the enforceability of security interest. The collateral arrangements must be properly documented, with a clear and robust procedure for the timely liquidation of collateral. A bank's procedures should ensure that any legal conditions required for declaring the default of the customer and liquidating the collateral are observed. Where the collateral is held by a custodian, the bank must seek to ensure that the custodian ensures adequate segregation of the collateral instruments and the custodian's own assets. Besides that, banks must obtain legal opinions confirming the enforceability of the collateral arrangements in all relevant jurisdictions.
2. **Low correlation with exposure:-** In order for collateral to provide protection, the credit quality of the obligor and the value of the collateral must not have a material positive correlation. For example, securities issued by the collateral provider - or by any related group entity – would provide little protection and so would be ineligible.
3. **Maturity Mismatch:-** The maturity of the underlying exposure and the maturity of the hedge should both be defined conservatively. The effective maturity of the underlying should be gauged as the longest possible remaining time before the obligor is scheduled to fulfill itsobligation. The collateral must be pledged for at least the life of the exposure. In case of mismatches in the maturity of the underlying exposure and the collateral, it shall not be eligible for CRM benefits.

4. **Currency Mismatch:-** Ideally the currency of the underlying exposure and the collateral should be the same. Where the credit exposure is denominated in a currency that differs from that in which the underlying exposure is denominated, there is a currency mismatch. Where mismatches occur, it shall be subject to supervisory haircut of 10%.
5. **Risk Management:-** While CRM reduces credit risk, it simultaneously may increase other risks to which a bank is exposed, such as legal, operational, liquidity and market risks. Therefore, it is imperative that banks employ robust procedures and processes to control these risks, including strategy; consideration of the underlying credit; valuation; policies and procedures; systems; control of roll-off risks; and management of concentration risk arising from the bank's use of CRM techniques and its effect with the bank's overall credit profile. In case where these requirements are not fulfilled, NRB may not recognize the benefit of CRM techniques.
6. **Qualifying criteria for guarantee:-** A guarantee (counter guarantee) to be eligible must represent a direct claim on the protection provider and must be explicitly referenced to specific exposures or a pool of exposures, so that the extent of the cover is clearly defined and irrefutable. Other than non-payment by a protection purchaser of money due in respect of the credit protection contract it must be irrevocable in that there must be no clause in the contract that would increase the effective cost of cover as a result of deteriorating credit quality in the hedged exposure. It must also be unconditional in that there should be no clause in the protection contract outside the control of the bank that could prevent the protection provider from being obliged to pay out in a timely manner in the event that the original counter party fails to make the payments due. On the qualifying default or non-payment of the counter party, the bank may in a timely manner pursue the guarantor for any monies outstanding under the documentation governing the transaction. The guarantor may make one lump sum payment of all monies under such documentation to the bank, or the guarantor may assume the future payment obligations of the counter party covered by the guarantee. The bank must have the right to receive any such payments from the guarantor without first having to take legal actions in order to pursue the counter party payment.

2.5.2 Eligible Collaterals

1. Cash deposit (as well as certificates of deposit or fixed deposits or other deposits) with the bank. The banks may only claim these as CRM only if it has specific authority to recover the amount from this source in case of default.
2. Fixed Deposit Receipts/Certificates of deposits/other deposits of other Banks and FIs, who fulfill the capital adequacy requirements, subject to a 20% supervisory haircut.
3. Gold.
4. Securities issued by the Government of Nepal and Nepal Rastra Bank.
5. Guarantee of the Government of Nepal
6. Financial guarantee/counter guarantee of domestic banks and FIs who meet the minimum
7. capital adequacy requirements subject to a haircut of 20%.
8. Securities/Financial guarantee/Counter guarantee issued by sovereigns.
9. Securities/Financial guarantee/Counter guarantee issued by banks with ECA rating 2 or better. The supervisory haircut shall be 20% and 50% for the banks with ECA rating of 0-1 and respectively.

2.5.3 Methodology for using CRM

Step 1: Identify the accounts eligible for capital relief under credit risk mitigation.

Step 2: Assess the value of the exposure and the eligible collateral. The value of the eligible collateral is the lower of the face value of the instrument or the outstanding amount of exposure

Step 3: Adjust the value of the eligible collateral in respect of the supervisory haircut in terms of currency mismatch and other eligibility requirements.

Step 4: Compare the adjusted value of the collateral with the outstanding exposure.

Step 5: The value of the eligible CRM is the lower of the adjusted value of the collateral and the outstanding exposure.

Step 6: Plot the eligible CRM in the appropriate category of credit risk.

2.6 Operational Risk

2.6.1 General

Operational risk is the risk of loss resulting from inadequate internal processes, people, and systems, or from external events. Operational risk itself is not a new concept, and

well run banks have been addressing it in their internal controls and corporate governance structures. However, applying an explicit regulatory capital charge against operational risk is a relatively new and evolving idea. Basel II requires banks to hold capital against the risk of unexpected loss that could arise from the failure of operational systems.

The most important types of operational risk involve breakdowns in internal controls and corporate governance. Such breakdowns can lead to financial losses through error, fraud, or failure to perform in a timely manner or cause the interests of the bank to be compromised in some other way, for example, by its dealers, lending officers or other staff exceeding their authority or conducting business in an unethical or risky manner. Other aspects of operational risk include major failure of information technology systems or events such as major fires or other disasters.

2.6.2 Basic Indicator Approach

Under the basic indicator approach, banks must hold capital for operational risk equal to the average over the previous three years of a fixed percentage (denoted alpha) of positive annual gross income.

The capital charge for operational risk may be expressed as follows:

$$KBIA = [\sum(GI_{1..n} \times \alpha)]/N$$

where:

KBIA = capital charge under the Basic Indicator Approach

GI = annual gross income, where positive, over the previous three years

N = number of the previous three years for which gross income is positive

α = 15 percent.

NRB shall review the capital requirement produced by this approach for general credibility, especially in relation to a bank's peers and in the event that credibility is lacking, appropriate supervisory action under Review Process shall be considered.

Figures for the year, in which annual gross income is negative or zero, should be excluded from both the numerator and denominator while calculating the average. In case where the gross income for all of the last three years is negative, 5% of total credit and investments net of specific provisions shall be considered as the capital charge for operational risk. For this purpose investments shall comprise of money at call, placements, investment in government securities and other investments irrespective of currency.

Similarly, in case of new banks who have not completed an year of operation and hence whose average gross income cannot be measured reliably, they shall also be required to compute their capital charge for operational risk vide the same approach as prescribed for banks with negative gross income. These banks may use the gross income approach from second year onwards. But, based on the reasonableness of the so computed capital charge for Operation Risk, during the first three years of operation, review process may require additional proportion of capital charge if deemed necessary.

2.6.3 Gross Income

Gross income is defined as "net Interest Income" plus "non interest income". It is intended that this measure should:

a. be gross of any provisions (e.g. for uNPLid interest) and write-offs made during the year;
b. be gross of operating expenses, exclude reversal during the year in respect of provisions and write-offs made during the previous year(s);
c. exclude income/gain recognized from the disposal of items of movable and immovable property;
d. exclude realized profits/losses from the sale of securities in the “held to maturity” category;
e. exclude other extraordinary or irregular items of income and expenditure

Thus, for the purpose of capital adequacy requirements, gross income shall be summation of:

a. Total operating income as disclosed in Profit and Loss account prepared as per NRB directive no.4. The total operating income comprises of:
    - Net Interest Income
    - Commission and Discount Income
    - Other Operating Income
    - Exchange Fluctuation Income
b. Addition/deduction in the Interest Suspense during the period.

Banks shall use the annual audited financials of the last three years for the computation of gross income under this approach. Hence, the capital requirement for operational risk for a whole financial year shall remain constant. Until the accounts are finalized for the

financial year, banks shall use the provisional figures for the period, which should be validated by the internal auditor of the bank.

2.6.4 Computation of Risk Weight

Operational risk-weighted assets are determined by multiplying the operational risk capital charge by 10 (i.e., the reciprocal of the minimum capital ratio of 10%) and adding together with the risk weighted exposures for credit risk.

2.7 Market Risk

2.7.1 Definition of Market Risk

Market risk is defined as the risk of losses in on-balance sheet and off-balance sheet positions arising from adverse movements in market prices. The major constituents of market risks are:

- The risks pertaining to interest rate related instruments;
- Foreign exchange risk (including gold positions) throughout the bank; and
- The risks pertaining to investment in equities and commodities.

2.7.2 Segregation of Investment Portfolio

Banks will have to segregate their investment portfolio into any of following three categories:

a. Held for Trading

An investment that is made for the purpose of generating a profit from short term fluctuations in price should be classified under this category. An asset should be classified as held for trading even if it is a part of a portfolio of similar assets for which there is a pattern of trading for the purpose of generating a profit from short term fluctuations in price. These investments should be marked to market on a daily basis and differences reflected in the profit and loss account.

b. Held to Maturity

The investments made with positive intent and ability of the bank to hold till maturity should be classified as held to maturity investments. The bank does not have the positive intent to hold an investment to maturity, if any of the following conditions are met:

1. Bank has the intent and the ability to hold the asset for only an undefined period; or

2. Bank stands ready to sell the asset (other than if a situation arises that is non-recurring and could not have been reasonably anticipated) in response to changes in market interest rates or risks, liquidity needs, changes in the availability of and the yield on alternative investments, changes in financing sources and terms, or changes in foreign currency risk.

The held to maturity investments should be valued at amortised cost i.e. the cost price less any impairments (if applicable). The impairments should be included in the profit and loss accounts for the period.

c. Available for Sale

All other investments that are neither "held for trading" nor "held to maturity" should be classified under this category. These investments should be marked to market on a regular basis and the difference to be adjusted through reserves. Banks are required to maintain Investment Adjustment Reserve (eligible as Tier 2 capital) to the extent of 2% of available for sale portfolio.

2.7.3 Net Open Position Approach

Out of the various components of market risk, foreign exchange risk is the predominant risk in our country. The effects of other forms of market risk are minimal. Thus, a net open position approach has been devised to measure the capital requirement for market risk. As evidenced by its name, this approach only addresses the risk of loss arising out of adverse movements in exchange rates. This approach will be consolidated over time to incorporate other forms of market risks as they start to gain prominence. The designated Net Open Position approach requires banks to allocate a fixed proportion of capital in terms of its net open position. The banks should allocate 5 percentage of their net open positions as capital charge for market risk.

2.7.4 Net Open Position

Net open position is the difference between the assets and the liability in a currency. In other words, it is the uncovered volume of asset or liability which is exposed to the changes in the exchange rates of currencies.

For capital adequacy requirements the net open position includes both net spot positions as well as net forward positions.

For capital adequacy purposes, banks should calculate their net open position in the following manner:

a. Calculate the net open position in each of the foreign currencies.
b. Convert the net open positions in each currency to NPR as per prevalent exchange rates.
c. Aggregate the converted net open positions of all currencies, without paying attention to long or short positions.
d. This aggregate shall be the net open position of the bank.

2.7.5 Computation of Risk Weight

Risk-weighted assets in respect of market risk are determined by multiplying the capital charges by 10 (i.e., the reciprocal of the minimum capital ratio of 10%) and adding together with the risk weighted exposures for credit risk.

2.8 Review of Journals and Articles

Sharma (2005) in their article *"priority sector"* has presented the commercial bank should take care of board national interest and they showed not confine their lending activities only to commercial area providing quick interest if some proportion could be directed to the area conclusive to build economic infrastructures of the country it would create atmosphere conductive to their investment in future. In our society where ignorance and literacy is in wide scale, it is necessary that the bank search entrepreneurs instead of entrepreneurs searching banks. so they have opined that the priority sector program is a timely and appropriate will designed to create additions productive employment opportunities there by increasing production and the general living standard of rural poor. But the success of the program largely depends upon the integrated operation with other programs designs for rural development. Further they argue that various programmers VIZ. Rural development land reform SAJHA, Back to the village national Champaign. Adult literacy etc. Could not materials their objective despite their some theoretically philosophy and good objectives

Shrestha (2006) in her article *"Lending Operation of Commercial Banks of Nepal and its Impact on GDP"* has made an analysis of contribution of commercial banks, lending to the Gross Domestic Product (GDP) of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to the GDP, in research methodology; she

has considered GDP as the dependent variable and various sector of lending like agriculture, industrial, commercial service and general social sectors as independent variables. A multiple regression techniques have been applied to analyze the contribution.

The analysis shows that the entire variable except service sector lending has positive impact on GDP. Thus, in the conclusion she had accepted the hypothesis i.e. there has been positive impact on GDP and also she has accepted the hypothesis i.e. there has been positive impact by the lending of Commercial Banks in various investment. (Shrestha: 23-27)

2.9 Review of Thesis

Shrestha Kalpana (2006) has conducted a study on *"A Study of Nonperforming Loan & loan loss Provision of Commercial Bank, A case study of NABIL, SCB and NBL"* has made study about a part of credit risk associated with those banks.

The main objectives of her study were;

- To find out the proportion of non-performing loan in the selected commercial banks.
- To find out the factors leading to accumulation of nonperforming loan in commercial banks.
- To find out the relationship between loan and loan loss provision in the selected commercial bank.
- To study and the impact of loan loss provision on the profitability of the commercial banks.

The major finding in her study was that the NBL has the highest portion of the loan in total asset followed by NABIL and SCBNL. She concludes that the SCBL shows the risk-averse attitude. Likewise the non-performing loan to total loan is found highest in NBL, NABIL and SCBNL. Likewise the Loan Loss Provision is also highest in NBL where as the SCBL has the least Loan Loss Provision.

Likewise, the NBL has the highest portion of Loss loan followed by NABIL and SCBL. This study is more concentrated on non-performing loans; however, there exist lots of areas in credit risk management where further research is called for. In context of credit risk, collateral risk, concentration risk, organization risk management system can be studied.

Subba Nikesh (2007) has carried out the study on *"Risk Analysis of Machchhapuchhre Bank Ltd. and Lumbini Bank Ltd".* To analyze how the selected commercial banks (i.e. Machchhapuchhre Bank Ltd. and Lumbini Bank Ltd.) have managed different types of risk in this competitive Nepalese banking Industry.

The major objective of this thesis was:

- To analyze the following types of risk of selected commercial banks in Nepal
- Credit Risk
- Market Risk
- Operation Risk.

The major finding of his study was that in commercial banks, minimizing the risk is the major challenge. For minimizing the risk, both the banks have taken several measures. One of the major measures is capital adequacy ratio. The capital adequacy ratio depicts that both EBL and MBL has higher CAR than statutory requirement.

He concludes that: For credit risk management, both banks have Credit Policies Guidelines (CPG). Similarly, NPL is regularly monitored by both the banks on regular basis and provisioning is done on quarterly basis by categorizing the loan as per NRB guidelines. Similarly, sector wise and security wise lending is being analyzed by these banks on monthly basis. Gap analysis of both types of asset and liabilities (i.e. Rate Sensitive and Fixed Rate) is required for the interest rate risk management. Besides, analysis of cost of fund, yield on loan & spread is made continuously in these banks to ensure that banks have competitive interest rate, which is profitable for the banks.

In regard to operational risk, the major steps banks are taking to reduce it are preparing and implementing the different operational guidelines and policies & frequently monitoring their compliance. Most of these policies are prepared as per NRB guidelines. Similarly, employees' training is also the major tools for minimizing the operation risk in these banks. For minimizing the loss arising due to occurrence of the above risks, capital and reserve have been maintained by these banks within the standard prescribed by NRB.

However, the trend of Capital Adequacy ratio of these banks suggests that both the banks need to increase their capital fund, which is possible mainly by issuing shares, debentures or preference share. The major gap in this study is the focus on the credit risk. This

research has been made on the study on different types of risk including market risk and operational risk.

Pandey Smiriti (2008) has conducted a study on *"Risk and Return Analysis of Common Stock Investment"* by taking six insurance companies as sample. She has used analytical tools like rate of return, standard deviation, coefficient of variance, beta coefficient and t-test has used.

The main objectives of his study are to calculate the risk and return of the common stocks and portfolio and also to understand and identify the problem faced by the individual investor and insurance companies.

The major findings of the study are generally public have least understanding about the risk of the investments which may be due to poor education, lack of adequate information, etc., that may obstruct the development of stock market.

There is no significant different between the performance of common stock of insurance companies and overall market portfolio. The study has covered five years period

As a recommendation given by Chand, ADB/N should play a significant role in such direction as to fulfill the credit demands of rural areas. For effective credit recovery from the borrowers or clients, credit should be channeled through the borrower groups.

Karki Manoj (2009) has conducted a study on "*Risk Management of Himalayan Bank Ltd. (A Case Study of Himalayan Bank Ltd.)"* In order to achieve the following basic objectives;

- To analyze the level of different types of risk faced by Himalayan Bank Ltd.
- To assess the financial performance of HBL through the help of financial ratios and standards.

Major findings;

- Proper policies, procedures, guidelines and tools have been developed with appropriate triggers. That forms the guiding pillars for its operations.
- The banks believe in corporate culture that emanates from the "Think Customers" philosophy at all levels of the banks. Teamwork, camaraderie, sincerity, dedication, trust, respect, equality, dignity and valuing each

contribution are key pillars on which the corporate culture of the banks thrives on.

- The banks have a competitive salary package in place that is revised on a regular basis to reward strong performance. The employees are also provided with early bonus other facilities on a requirement basis.

Chand Chodaraj (2010) has conducted a study on *"Credit Disbursement and Repayment of Agriculture Development Bank Nepal"*. Major objectives of the study are;

- To see the repayment situation.
- To find out the growth rate of investment.
- To explain possible causes of none and delay repayment.

Major findings:

- There is systematic relationship between credit disbursement and repayment .The coefficient of correlation value as calculated is 0.94 which shows significance relationship.
- Repayment situation is satisfactory on production and agro-based industry, warehouses and farm mechanization, irrigation, tea horticulture, livestock, poultry and fisheries is less satisfactory.

As a recommendation given by Chand, ADB/N should play a significant role in such direction as to fulfill the credit demands of rural areas. For effective credit recovery from the borrowers or clients, credit should be channeled through the borrow

Shrestha Yamuna (2011) has submitted her thesis on *"Credit Risk Management of Commercial Bank in Nepal "by* taking two sample banks in order to achieve the following basic objectives;

- To evaluate the status of the loan portfolio of the banks.
- To evaluate problems and weakness in credit risk management.
- To review the prevailing laws rules and regulation enforced by Nepal Rastra Bank and assess its impact on profitability and liquidity of bank.

Major findings;

- NABIL and NIB have increasing trend in collecting deposit the rate of increment of total deposit for NIB seems to be higher than that of NABIL Here NIB has better position in collecting deposit than NABIL.
- The total investment trend line of NABIL and NIB is upward slopping where as NABIL has little high upward slopping of total investment trend line than NIB. It refers that NABIL has better increasing trend of total investment than NIB.
- The trend line of Net profit for NABIL and NIB is upward slopping, But NIB has little high than NABIL. NABIL has smoothly increasing trend. The position of NIB is better in order to generate profit than NABIL.

2.10 Research Gap

From the review of various literatures, it has been found many research work have been done on the study of NRB Directives and its compliance and analysis of credit management through loan loss provision, non-performing loans and capital adequacy; however, very few thesis have been found on the credit risk management which is the most important aspect of the banking sector. So, the researcher can make further research on capital adequacy, concentration risk, collateral risk, and the actual practices followed by the management of Nepalese commercial banks from its own side besides the NRB directives to manage and control the credit risks etc. The purpose of research is to develop some expertise in one's area, to see what new contribution can be made and to receive some ideas, knowledge and suggestions in relation to risk management of Everest Bank Limited. Thus previous studies can't be ignored because they provide the foundation to the present study. In other word, there should be continuity in research. This continuity in research is ensured by linking the present study with past research study and try to fulfill the gap of the research. Hence the researcher had attempted to fill this gap by measuring the credit risk of EBL by studying its credit risk management system. This study also aims to find out the organizational structure of EBL for the proper implementation

CHAPTER - THREE

RESEARCH METHODOLOGY

A systematic study needs to follow a proper methodology to achieve pre determine objective. Research methodology may be defined as "a systematic process that is adopted by the researcher in studying problem with certain objective and view". In other word, research methodology describes the methods and process applied in the entire aspect of the study focus of data, data gathering instrument and procedure, data tabulating and processing and methods of analysis. It is really a method of critical thinking by defined and redefining the problems, formulating hypothesis or suggested solution and collecting and organizing and evaluating data, making deduction and making conclusions.

Research methodology is a path from which we can solve research dilemma systematically to accomplish the basic objective of the study. It consists of a brief explanation of research design, nature and sources of data, method of data collection and methods of tools used for analyzing data.

3.1 Research Design

A research design is the arrangement of conditions for collection and analysis of data that aim to combine relevance to the research purpose with economy in procedure. Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to objective of this study. To achieve the objective of this study, descriptive and analytical research design has been used.

It is the process which gives us an appropriate way to reach research goal. It includes definite procedures and techniques which guide in sufficient way for analyzing and evaluating the study. This study is carried out by using both quantitative and qualitative analysis methods. Mostly, secondary data has been used for analysis, but the discussion and personal interview with the concerned employees of the selected bank is also used for qualitative analysis. Hence, research design of this study is based on descriptive and analytical method.

3.2 Population and Sampling

The principle objective of sampling is to get maximum information about the population with minimum effort or with limited resources such as time, money and personnel. The

small group that is chosen for study is called a sample and the whole group which it is believed to represent is called population. The number of observation in the sample is termed the sample size. Sampling refers to the choosing of a sample from a population. Since the research topic is about risk management of EBL, all the commercial banks of Nepal form population of the study. The sampling allows the researcher more time to make an intensive study of a research problem. The population for the study comprises all the Nepalese commercial banks and among the total population only one commercial bank under the study constitutes the sample for the study. The sample is chosen with an objective to find out the risk management system of commercial bank. EBL is taken for the study this bank has appropriate information about many respects such as capital base, profit, deposit, lending and date of establishment etc.

3.3 Nature and Source of Data

For the purpose of this study, data are collected mainly from the secondary source. The secondary data are based on the second hand information. Secondary data were gathered much more quickly than primary. Secondary source are bulletins and newspapers of selected banks, annual reports, official document, reference material collected from library.

3.4 Method of Data Collection

It indicates the sources of data and how they collected. In this study data are collected through published sources. They were collected from the correspondent offices and their respective websites. The annual reports of EBL, NRB publications, the data regarding the profile of EBL and other related documents were collected from internet websites. Unpublished master's thesis, books, research papers, articles, journals have been collected mainly form Centre Library of Tribhuvan university, library of Shanker Dev Campus and NRB Magazines and newspapers were from concerned authorities.

After collecting data, as necessarily required, they were separated and analyzed presentation and analysis of the collected data is the main theme of the research work. Collected data were first presented in systematic manner in tabular forms and then analyzed by applying different financial and statistical tools to achieve the research objectives. Besides these, some graph, charts and tables have been presented to analyze and interpret the finding of the study.

3.5 Data Analysis Tools

In order to get the concrete results from the research, data are analyzed by using different types of tools. As per topic requirements, emphasis is given on statistical tools rather than financial tools. So for this study following statistical tools are used.

3.5.1 Financial Ratio Analysis

Financial Ratio Analysis is a tool, through which economic and financial position of organization can be fully to x-rayed. It is the indicated quotient of two mathematical expressions, and as the relationship between two or more things. Therefore, to find out the liquidity position of the sampled commercial banks, the following ratios are examined.

a. **Current Ratio:-** It is a test of liquidity. It measures short-run debt paying ability of the firm. In other words, it measures the availability of current assets for meeting current liabilities. It is computed by dividing current assets by current Liabilities.

$$\text{Current Ratio} = \frac{Current\ Assets}{Current\ Liabilities}$$

b. **Cash and Bank Balance to Current Deposit Ratio**:- This ratio is designed to measure the bank's ability to meet the immediate obligations. This ratio is obtained by dividing cash and bank balance by current deposits i.e.

$$\text{Cash and Bank Balance to Current Deposit Ratio} = \frac{Cash\ \&\ bank\ Balance}{Current\ Deposit}$$

c. **Loans and advances to Total Risk Weighted Assets Ratio:-** The ratio of loans, advances and bills purchased to total risk weighted assets measures the volume of loans and advances in the structure of total risk weighted assets (i.e. the total assets after the adjustment of certain degree of risk or the risk assets).

Loans and advances to Total Risk Weighted Assets Ratio

$$= \frac{\text{Loans and advances}}{\text{Total Risk Weighted Assets}}$$

d. **Non-performing Loan to Total Loans and advances Ratio: -** This ratio determines the proportion of non-performing loans in the total loan portfolio. As

per Nepal Rastra Bank directives the loans falling under category of substandard, doubtful and bad loan are regarded as non-performing loan. Higher the ratio implies the bad quality of assets of banks in the form of loans and advances. Hence the lower NPL to total credit ratio is preferred.

Non-performing Loan to Total Loans and advances Ratio

$$= \frac{\text{Non-performing Loan}}{\text{Total Loans and advances}}$$

e. **Loan Loss Provision to Non Performing Loan Ratio: -** This ratio determines the proportion of provision held to non-performing of bank. This ratio measures up to what extent of risk inherent in NPL is covered by total loan loss provision.

Loan Loss Provision to Non Performing Loan Ratio $= \frac{\text{Loan Loss Provision}}{\text{Non Performing Loan}}$

f. **Loan Loss Provision to Total Loans and Advances: -** This ratio indicates the amount of Loan Loss Provision, a cushion for the possibility of default, to total loans and advances of a bank. Since high provision has to be made for non-performing loan, higher provision for loan loss reflects increasing non performing loan in volume of total loans and advances.

Loan Loss Provision to Total Loans and Advances Ratio

$$= \frac{\text{Loan Loss Provision}}{\text{Total loan and advances}}$$

3.5.2 Statistical Tools

Statistical tools are used to analyze the relationship between two or more variables and to find how these variables are related. In this study, following statistical tools are used.

a. **Arithmetic Mean or Average**:-The mean or average value is a single value within the range of the data that is used to represent all the values in the series. Since an average is somewhere within the range of the data, it is also called a measure of central value. It is calculated by;

$$\text{Mean } (\bar{X}) = \frac{\sum X}{N}$$

Where,

$\overline{X}$ = Arithmetic Mean

$\sum X$ = Sum of values of all items, and,

N = Number of items

b. Standard Deviation:- The standard deviation is the measure that is most often used to describe variability in data distributions. It can be thought of as a rough measure of the average amount by which observations deviate on either side of the mean. Denoted by Greek letter's (read as sigma), standard deviation is extremely useful for judging the representatives of the mean. Standard deviation is calculated as;

$$\text{Standard deviation}(\sigma) = \sqrt{\frac{\sum(\mathbf{X}-\bar{\mathbf{x}})^2}{\mathrm{N}}}$$

Where,

$\boldsymbol{\sigma}$ = Standard deviation

$\sum(\mathbf{X}-\bar{\mathbf{x}})^2$ = Sum of squares of the deviations measured from arithmetic average.

N = Number of items

c. **Coefficient of Correlation**: - Correlation is a statistical tool design to measure the degree of association between two or more variables. In other word if the changes in one variable affects the changes in other variable, then the variable are said to be co-related when it is used to measure the relationship between two variables, then it is called simple correlation. The coefficient of correlation measures the degree of relationship between two sets of figures. Among the various methods of finding out coefficient of correlation, Karl Pearson's method is applied in the study. The result of coefficient of correlation is always lie between +1 and -1.The formula for the calculation of coefficient of correlation between X and Y is given below.

$$r = \frac{\sum x_1 x_2}{\sqrt{\sum x_1^2 \sum x_2^2}}$$

Where,

r = Correlation coefficient

$\sum x_1 = X_1 - \overline{X}_1$

$\sum x_2 = X_2 - \overline{X}_2$

The interpretation of calculated valve of correlation coefficient by following way.

- If r = 0, then there is no correlation between variables.
- If r > 0, then there is positive correlation between variables.
- If r < 0, then there is negative relation between variables.
- If r = +1, then there is perfect positive correlation.
- If r = -1, then there is perfect negative correlation.

d. **Least Square Linear Trend Analysis:-** Trend analysis has been a very useful and commonly applied statistical tool to forecast the future events in quantitative terms. On the basis of tendencies in the dependent variables in the past periods, the future trend is predicted. This analysis takes the historical data as the basis of forecasting. This method of forecasting the future trend is based on the assumptions that the past tendencies of the variable are repeated in the future or the past events affect the future events significantly The future trend is forecasted by using the following formula.

$Y = a + bx$

where,

Y = the dependent variable

a = the origin i. e. arithmetic mean

b = the slope coefficient i. e. rate of change

X= the independent variable

CHAPTER - FOUR

PRESENTATION AND ANALYSIS OF DATA

The analysis is fully based on secondary data. In presentation section, data are presented in terms of table and charts. The presented data are then analyzed using different statistical tools mentioned in chapter three. At last the results of analysis are interpreted. Though there is no distinct line of demarcation for each section (like presentation section, analysis section & interpretation section). The main purpose of analyzing data is to change it from an unprocessed from to an understandable presentation which consists of organizing, tabulating and performing the statistical data. The presentation of data is the basic organization and classification of the data for analysis. This is the section where, the filtered data are presented and analyzed. This is one of the major chapters of this study because it includes detail analysis and interpretation of data from which concrete result can be obtained. This chapter consists of various calculation made for the analysis of credit risks of the sample bank. To make our study effective, precise and easily understandable, this chapter is categorized in three parts; presentation, analysis and interpretation. In this thesis primary data, which is collected through questionnaires and personal interview with the various staffs, are also used equally.

4.1 Risk Management Function

For each separate risk area (Credit, Market and Operational risk), bank must describe their risk management objectives and policies, including:

- Strategies and processes
- The structure and organization of the relevant risk management function;
- The scope and nature of risk reporting and/or Write off of Loans and Interest Suspense: measurement systems; and
- Policies for hedging and/or mitigating risk and strategies, and processes for monitoring the continuing effectiveness of hedges/mitigants.

4.1.1 Credit Risk

Strategies

Main focus is given on medium sized entity. Maximum percentage of sectorial exposure in terms of capital funds for a particular financial year is fixed at the beginning of a financial year and approved by the Board. Loaning power to concerned official at branch

level has been fixed comparatively at lower level with a view to have strong appraisal system at corporate level. Manuals relating to credit is in place. Every aspect relating to credit such as procedure, documentation etc. are clearly defined. Credit Policy of the Bank has also been put in place.

Process

- **Pre sanction**: Each credit limit is approved after due scrutiny by two layer of authority in branch level of their limit. Loans are approved after due scrutiny of background of the promoter, nature of business , turnover in the account, cash flows, debt/equity ratio, income or profit, value of primary and collateral security. Loans above branch power are recommended to Head Office for consideration on merit.
- **Post sanction monitor/follow up:-** Concerned branch obtains regular returns from the borrower as stipulated in the sanctioned letter on regular interval. Drawing power in case of revolving type of loan is calculated to keep the exposure within its drawing power. Business place of the borrower is visited, physical stock level is being interval checked on a time bound basis. In case there is symptom of any slippage in a particular account, steps are taken for regularizing or repayment or exit. Loans more than Rs. 1 Lac which are either irregular or likely irregular are reported to Board on regular basis and discussed about the course of action. Credit related returns such as Credit Officer's Report, Review Sheet etc. Are submitted to H.O. in a specified time interval on regular basis.

4.1.2 Credit Risk Management

Financial analysis is the process of identifying the financial strength and weakness of a firm by properly establishing relationship between the items of the financial statements. Analysis and the interpretation of the various ratios should give experienced, skilled analyst and a better understanding of the financial condition and performance of the firm than they would obtain from the analysis of the financial data alone.

Credit Deposit Ratio is calculated as total loans & advances to total deposit ratio. Banks receive fund as deposits from the public so that to mobilize it in terms of loans & advances to generate the interest as income. It is the ratio that measures the banks efficiency in mobilizing deposit collected from public. In another word, CD ratio is the fundamental parameter to ascertain fund deployment efficiency of commercial banks.

Greater the CD ratio implies better the mobilization of deposits and vice-versa. Hence, higher the ratio is preferred as per the directives issued by the NRB; commercial banks should classify their loan in terms of pass loan, substandard loan, doubtful loan and loss loan. Hence, the loans falling in the category of substandard, doubtful and the loss loan are considered as non-performing loan. Increase in the NPL results higher volume of loan loss provision and of course deduction in the banks profit. That's why, NPL could not only affect the banking operation but also it has serious implication in the economic performance of the country. This ratio NPL to total loan & advances implies the proportion of the NPL in the bank's loan portfolio. Meaning that, higher the ratio represents higher portion of NPL and vice-versa. Hence, lower the ratio preferred the best.

4.1.3 Analysis of Credit Position

Total credit is the amount of loans, advances & investments. The bank provides loan by accepting different collateral securities of the general public. The general public gets attracted to take loan and advances from the bank if the interest rate is lower. The bank provides loan to the general public for different purposes like industry, trade, commerce etc.

Table: 4.1

Credit Position of EBL

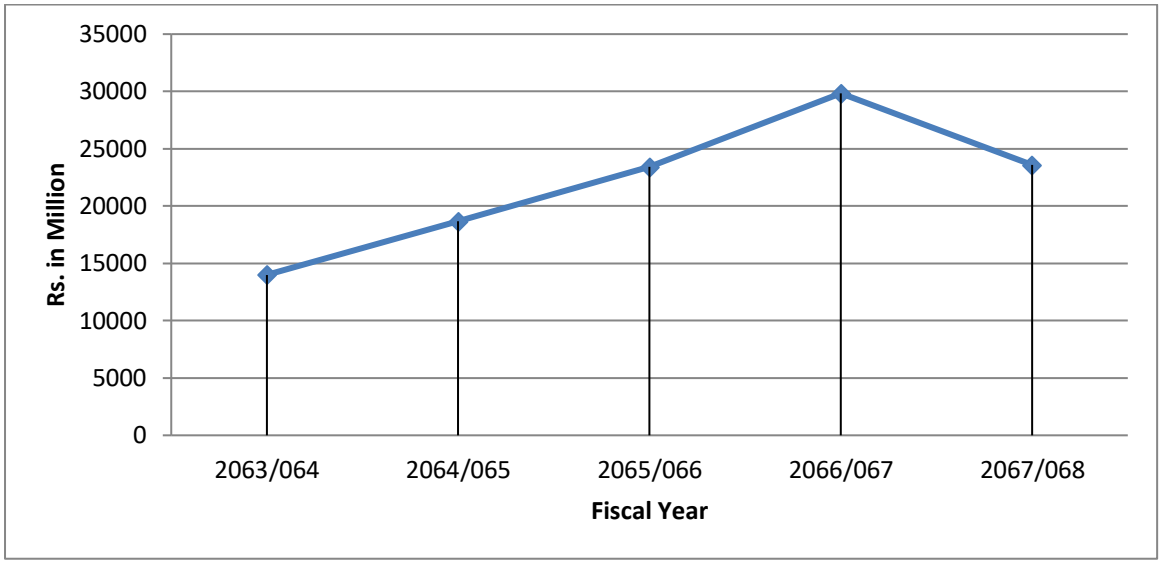
Year	Total Credit (Rs. In Millions)	% Changes
2063/064	14001.82	-
2064/065	18648.41	24.92
2065/066	23398.66	20.30
2066/067	29833.15	21.57
2067/068	23564.67	-26.6

Source: Annual Reports of EBL from 2063/064 to 2067/068

The above table shows the overall credit position of EBL till the year end 2066/67, the trend of credit is increasing. There is a notable increment of 24% in the year 2064/65. But the year 2067/68, the credit disbursement decrease by 26.6% than previous year.

Figure: 4.1

Trend of Credit Position of EBL



4.1.4 Credit Deposit Ratio

Credit disbursement and deposit collection are the major functions of a commercial bank. The most important feature of a commercial bank is to collect the scattered & small deposits of general public and use these deposits to grant loan & advances to the needy people. Here, Credit Deposit ratio has been used to find out the effective utilization of the available resource of the bank. It also shows the efficiency, ability and idle resource of the bank. The ratio of credit & deposit declares the effective utilization of the collected resources. Generally increase in deposit leads to increase in credit.

Table: 4.2

Credit Deposit Ratio

Year	Total Credit (Rs. In Millions)	Total Deposit (Rs. In Millions)	CD Ratio (%)
2063/064	14001.82	13802.44	101.45
2064/065	18648.41	18186.2	102.54
2065/066	23398.66	23976.3	97.57
2066/067	29833.15	33322.95	89.53
2067/068	23564.67	36932.31	62.82

Source: Annual Reports of EBL from 2063/064 to 2067/068

Credit Deposit ratio is the highest in the year 2064/65 i.e. 102.54% which is extremely higher. But the ratio is the lowest in the year 2067/68 i.e. 62.82% which is extremely lower over the study period.CD ratio is in decreasing trend it is not in satisfactory

condition. From the above analysis, it can be said that there is greater relationship between credit and deposit. Increase in deposit leads to increase in credit but sometimes even the deposit is increasing, the credit may be seen in decreasing trend due to various causes.

Figure: 4.2

Credit Deposit Position of EBL

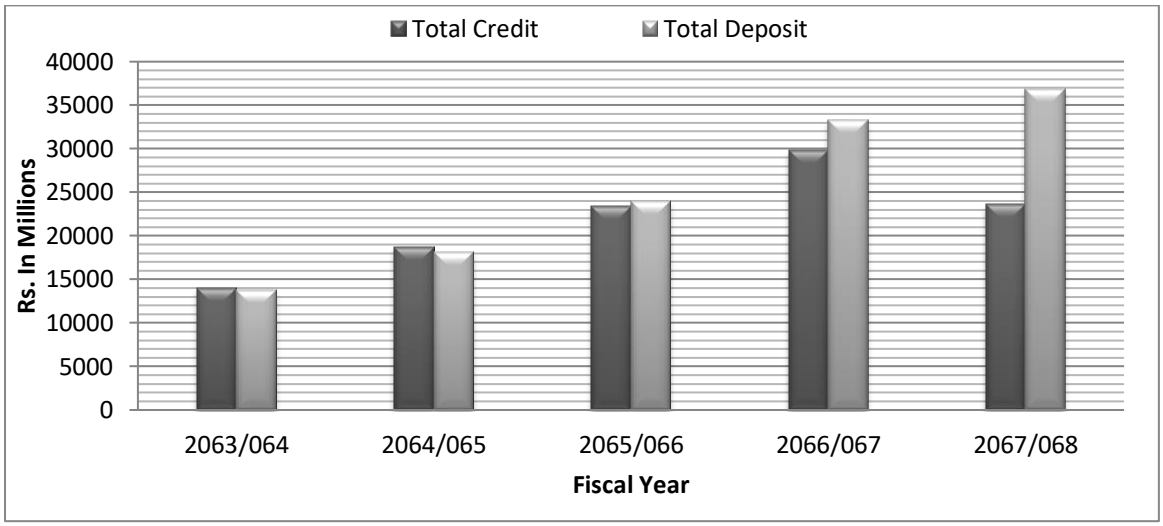
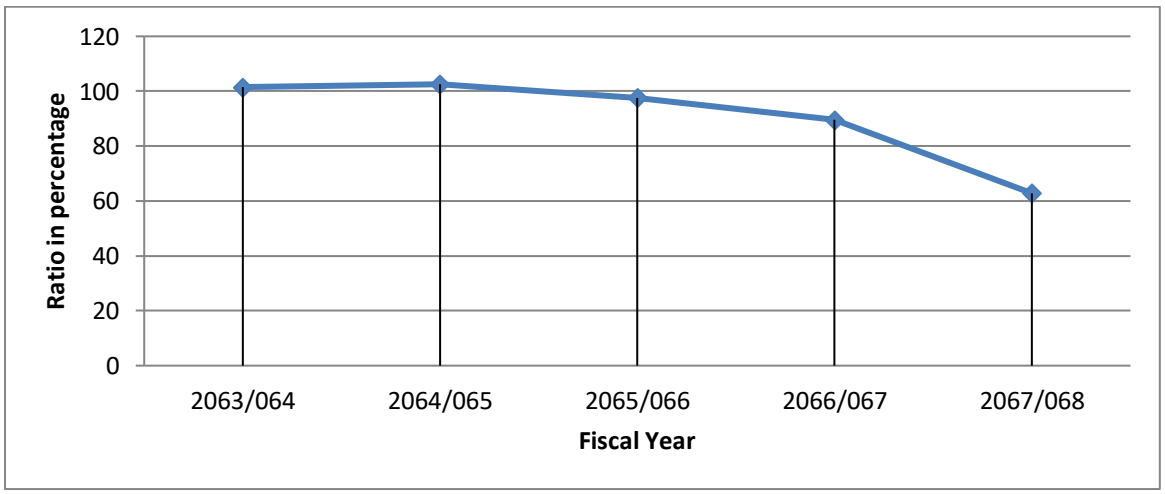


Figure: 4.3

Trend of Credit Deposit Ratio of EBL



4.1.5 Loans and Advances to Total Risk Weighted Assets Ratio

The ratio of loans, advances and bills purchased to total risk weighted assets measures the volume of loans and advances in the structure of total risk weighted assets (i.e. the total assets after the adjustment of certain degree of risk or the risk assets). The total RWA do not include the risk-free assets like cash because they hold 0% risk. The high degree of

ratio of Total loans & advances to Total RWA indicates the proportion of the loans and advances in the total RWA. This indicates the high degree of risks for the bank because loans and advances except against Fixed Deposit Receipt, government securities and against guarantees of internationally rated banks are considered as 100% risky assets. Further, the high degree of the ratio is representative of low liquidity ratio. Granting Loans and advances always carry a certain degree of risk. Thus this asset of banking business is regarded as risky assets. Hence this ratio measures the management attitude towards risky assets. The lower ratio is indicative of lower proportion of income generating assets, high degree of safety in liquidity and low degree of risk and vice versa.

Table 4.3

Loans, Advances to Total Risk Weighted Asset Ratio

Fiscal Year	Loan & Advance (Rs. In Millions)	Total Risk Weight Asset (Rs. In Millions)	Ratio (%)
2063/064	13664.08	14099.27	96.91
2064/065	18339.08	19472.33	94.18
2065/066	23884.67	22003.84	108.55
2066/067	27556.36	25087.52	109.84
2067/068	31057.69	25087.52	123.80
Mean			106.65
Standard Deviation			11.81

Source: Annual Reports of EBL from 2063/064 to 2067/068

Figure: 4.4

Loans &Advances and Total Risk Weighted Assets Position

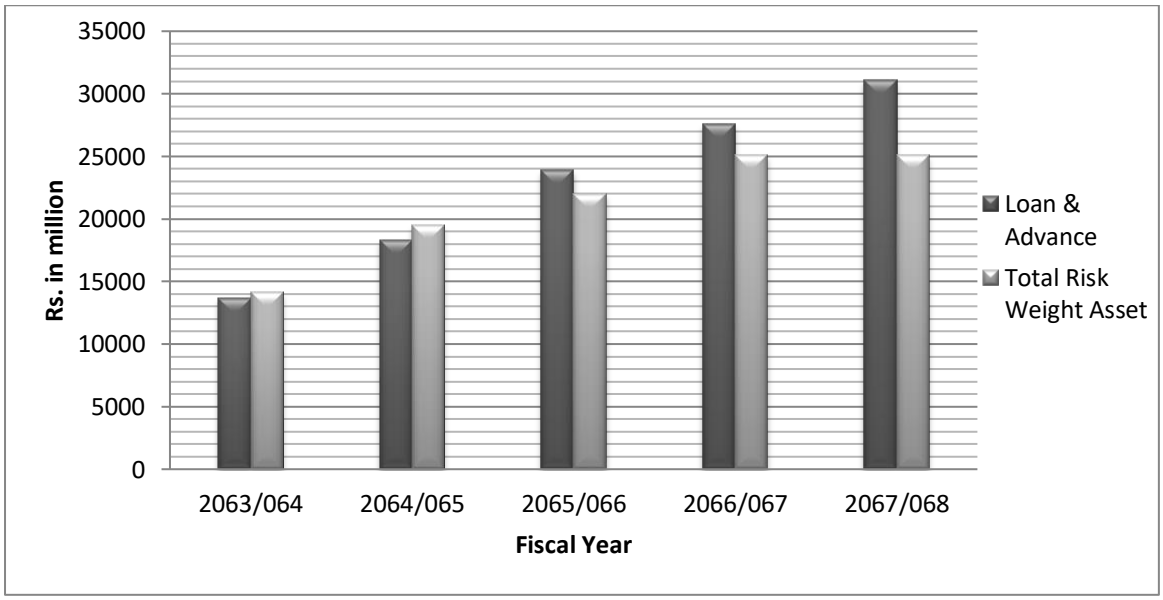
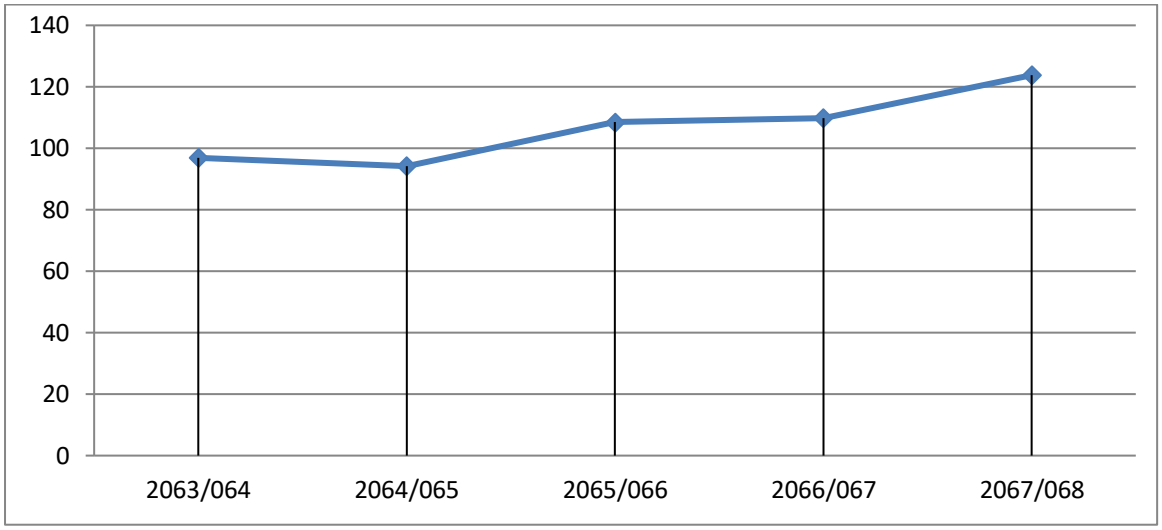


Figure: 4.5

Trend of Loans & Advances to Total Risk Weighted Assets Ratio



Above table and figures exhibits the loans and advances to total risk weighted assets of one commercial bank for five consecutive years. This ratio shows the fluctuating trend of EBL the overall ratio of EBL is 106.65%. From this, it is clear that out of total risk weighted assets in balance items the proportion of loans and advances of EBL is 106.65%. This means that the credit risk in EBL. Likewise, the standard deviation of EBL is 11.81. This indicates that the ratio deviate more from the average in case of EBL.

4.1.6 Non-Performing Assets /Loan

Non Performing Assets [NPA] means the assets that the bank takes against the securities for loan provided by commercial bank and the consumer has not paid it until the time is already matured. Once the distributed loan is not returned timely by clients and becomes overdue then, the assets taken by the bank against the securities of loan is known as Non Performing Assets for the bank. Non-performing assets also includes the suspend interest. It is the interest, which become receivable unutilized assets and those investment which don't generated any cash or those assets to generate income is known as management of nonperforming assets. Reduction of NPA has always been a significant problem for every commercial bank. NPA may be defined broadly as the Bad Debt; however, it in terms of banking sector consists of those loans and advances which are not performing well and likely to be turn as bad debt. NPA as per the current directives of Nepal Rastra Bank, NRB, has been categorized as classified loans and advances. NPA has several impacts on the financial institutions. On the one hand, the Investment becomes worthless as expected return cannot be realized and on the other, due to the provision required for the risk

mitigation the profitability is directly affected. The existence of the bank can be questioned in this situation. Thus, interest along with principal has to be recovered timely and without any obstacles.

Non-performing loan (NPL) can be defined as the non-productive assets of the banks. In other words, it is the loan or bad and doubtful debts that doesn't repay timely. Generally the loan, which doesn't repay within three months, is known as non-performing loan. Non-performing loan (NPL) can be defined as the non-productive assets of the banks. Generally the loan, which doesn't repay within three months, is known as non-performing loan. The loan amount that doesn't covered by the collateral after selling is known as non-banking assets (NBA). Increasing NPLs is the emerging problem of the banks. We know that the some banks are closed shown due to the uncontrollable NPLs. IN USA, 1016 commercial banks were declared as unsuccessful (bankruptcy) from 1985 to 1990 and 31 banks from 2005 to 2010.however, Nepalese commercial Banks face this type of problem till now but they have to take step towards it. For this, appropriate among o bad and doubtful debts is made provision from their incomes profits. (Regmi, 2063:75).

According to current Banking Act, the Banks have to make provision for bad and doubtful debts. After deducting the debt and doubtful debts from the non-performing assets, net non-performing assets can be achieved.

NPL= (NPL+NBA+RNPL+SI+UA)

Where;

NPL=Non-performing Assets

NPL =Non-performing Loan

NBA=Non-Banking Assets

RNPL=Remaining non performing loan

SI=Suspend Interest

UA=unutilized Assets

Causes of occurring NPL

There are various causes to increase the NPLs. The major causes are as follows.

- Lack of transparent and clear policy to mobilize the productively.
- Lack of effective forecasting or deviation between expectation and actual outcomes of the business.
- Wrong choose of project and business to lend the fund.

- Lack of supervision, monitoring and control.
- Lack of information and communication between bank and customer.
- Lack of closed relationship between banker and customer.
- Lack of proper information about the situation and transaction of the customer at the time of rendering loan.
- Lack of proper policy and act to return the expired loan.(Shrestha,2007:27)

Effect of NPL: - NPLs has affected the profitability liquidity and competitive functioning of public and private sector banks and finally the psychology of the bankers in respect of their disposition towards, credit delivery and credit expansion. Increasing Non-performing (Assets NPLs) has the direct effects to banks, investors and customers. It has also negative impact to the economic health and business of country. It has two types of effects (Shrestha, 2004:19)

Internal effect

The bank for increasing the profitability can't mobilize the non-performing assets. In the other hand, the banks have to make provision doubtful debts from their profit and other sources. That's why the profit of the banks decreases or may occur losses. As a result, share capital also becomes capital erosion and capital inadequacy. In the present context, capital adequacy ratio of Nepal, India, UAE, and Indonesia are 11%, 12.6% 12.7 and 21.4% respectively. The central bank of the country can take action to bank, which banks have lower capital or capital adequacy ratio. For example, Nepal Development Bank Ltd is suffering the same problem that can't take deposit due to the action taken by Nepal Rastra bank.

When the non-performing assets increase, the banks have to increase the amount of provision for doubtful debts and when the loan is repaid, the profit treated as profit. If the provision for doubtful debts crosses 5% of the total loan amount, the bank have to pay income tax as profit. So, it has direct effect of the cash flow of banks a result, the employment of human resources and profit of the bank has also affected.

External Effect

The banks accept deposits from the public and provide loan to the operation of business and other purposes. When the loan does not return with its interest, it become non-performing assets and banks will not able to return the deposited among to their customer. If the banks is unable to return the deposited among, the banks will lose public supports and faiths. The banks have to take loan at a higher rate to pay deposit, which directly

affects the profitability of banks that's leads to bank bankruptcy. It also affects the monetary system sand economy of the country.

4.1.7 Non-Performing Loan to Total Loans and Advances Ratio

This ratio determines the proportion of non-performing loans in the total loan portfolio. As per Nepal Rastra Bank directives the loans falling under category of substandard, doubtful and bad loan are regarded as non-performing loan. Higher the ratio implies the bad quality of assets of banks in the form of loans and advances. Hence the lower NPL to total credit ratio is preferred.

Table 4.4

Non-Performing Loan to Total Loans and Advances Ratio

Fiscal Year	NPL (Rs. In Millions)	Loan & Advance (Rs. In Millions)	Ratio (%)
2063/064	140.35	13664.08	1.03
2064/065	127.31	18339.08	0.69
2065/066	117.98	23884.67	0.49
2066/067	43.706	27556.36	0.16
2067/068	108.51	31057.69	0.35
Mean			0.54
Standard Deviation			0.30

Source: Annual Reports of EBL from 2063/064 to 2067/068

Figure: 4.6

Non-Performing Loan and Total Loans and Advances

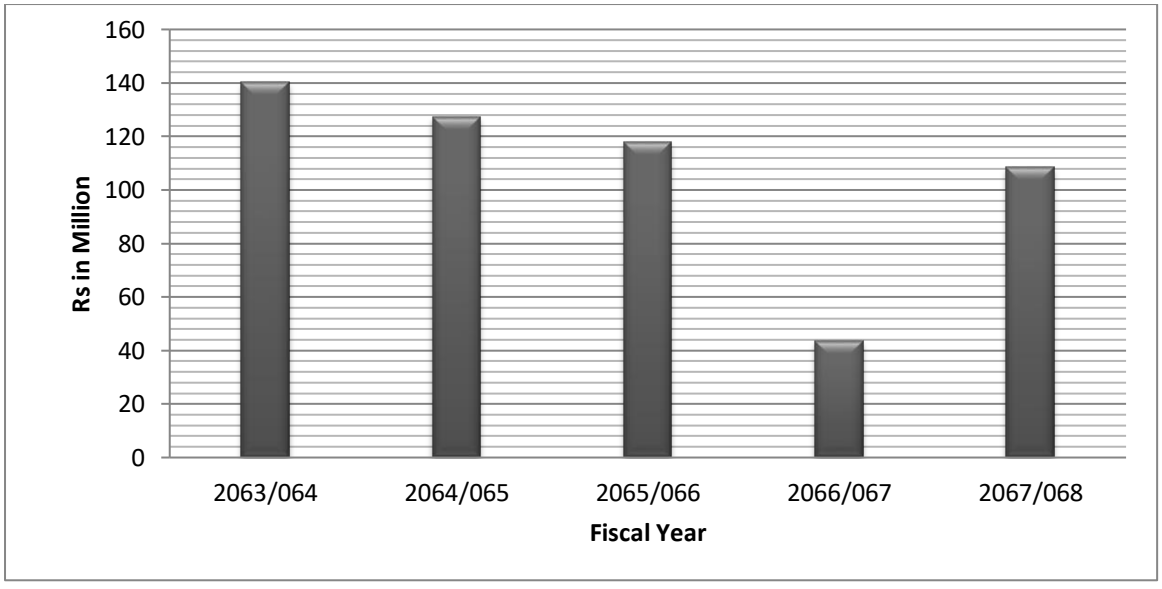
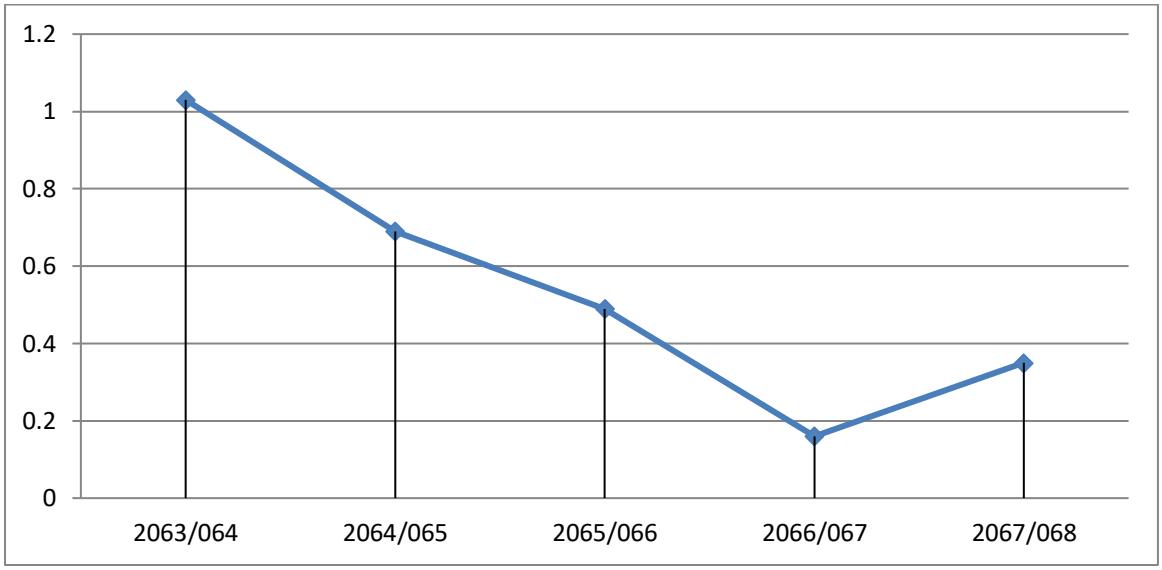


Figure: 4.7

Trend of Non-Performing Loan and Total Loans and Advances Ratio



The above table 4.4 and figures 4.6 & 4.7 exhibits the ratio of non-performing loans to total loans and advances of EBL for five consecutive years. It is found that the NPL of EBL is in decreasing trend though the loans and advances are in increasing trend. The average NPL ratios of EBL are 0.54%. The highest amount of NPL in fiscal year 2063/064 (i.e.140.35 million). But in more recent years the NPL of the EBL has been decreasing significantly. The standard deviation of EBL is 0.30% Fig 4.1. is the graphical presentation of the Table No. 4.2 which shows that the ratio of NPL to Total loans and advances of EBL was very high in the FY 2063/064 but after that it is in a significantly decreasing trend and has reduced significantly to 0.16% in the FY 2066/067 from 1.03% of FY 2063/064. However, the ratio of EBL is in a fluctuating trend.

4.1.8 Loan Loss Provision to Non Performing Loan (NPL) Ratio

This ratio determines the proportion of provision held to non-performing of bank. This ratio measures up to what extent of risk inherent in NPL is covered by total loan loss provision. The higher the ratio, the better cushion that the bank provides for recovering from loss caused by NPL. Hence higher ratio signifies the better arrangement for the credit risk of a bank.

Table 4.5

Loan Loss Provision to Non-Performing loan Ratio

Fiscal Year	LLP (Rs. In Millions)	NPL (Rs. In Millions)	Ratio (%)
2063/064	113.06	140.35	80.56
2064/065	103.25	127.31	81.10
2065/066	93.085	117.98	78.90
2066/067	77.01	43.706	176.20
2067/068	56.32	108.51	51.90
Mean			93.73
Standard Deviation			47.71

Source: Annual report of EBL from 2063/064 to 2067/068

Table 4.5 shows the ratio of provision held to non- performing loan of EBL for five consecutive years. The figure represented in the table depicts that the EBL has the higher ratio in all fiscal year. The NPL ratio of EBL is fluctuating. The NPL ratio of or the provisioning of EBL is highest of 176.20% in fiscal year 2066/067. The overall ratios of LLP to NPL of EBL are 93.73%. This ratio shows that EBL the degree of cushion of provisioning to non-performing loan. The standard deviation of EBL is 47.71%. This means that there exists deviation in the ratio from the average ratio in EBL.

Figure: 4.8

Loan Loss Provision and Non-Performing loan

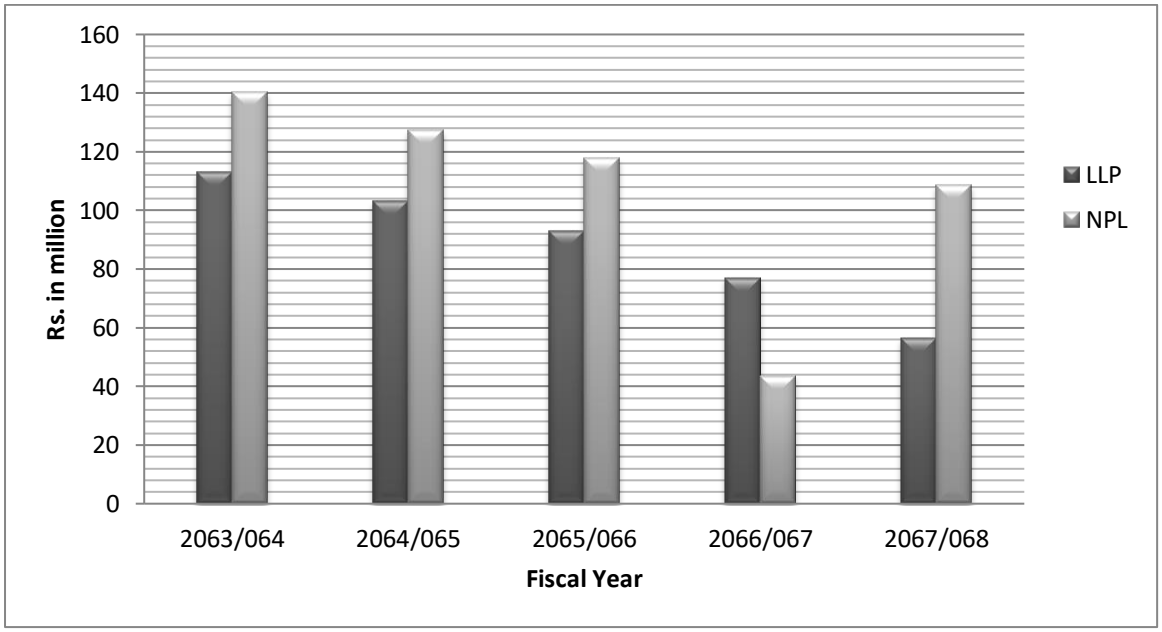
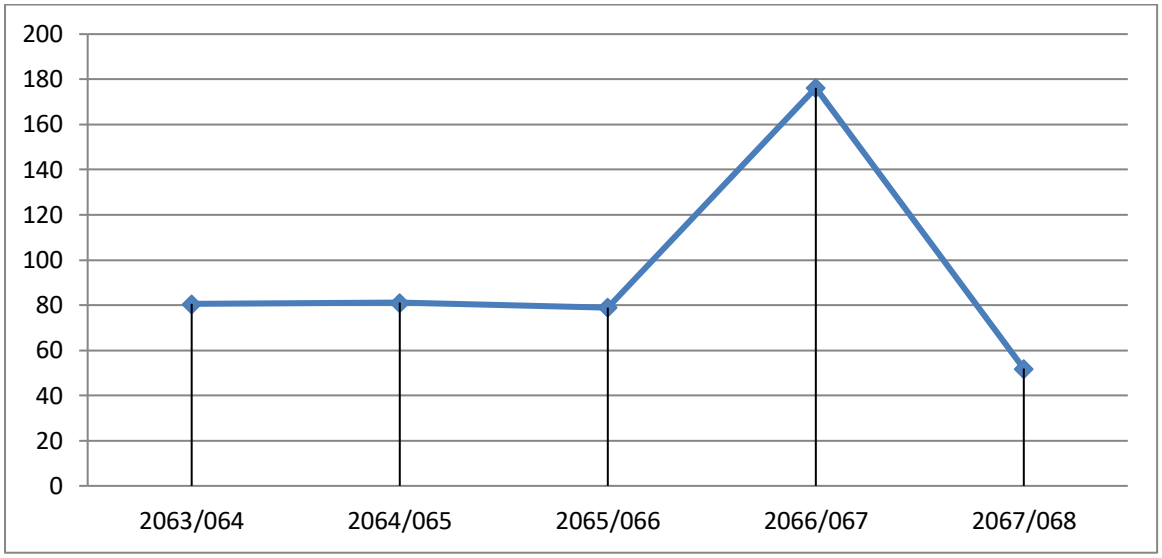


Figure: 4.9

Trend of Loan Loss Provision to Non-Performing loan Ratio



4.1.9 Loan Loss Provision to Total Loans and Advances Ratio

This ratio indicates the amount of Loan Loss Provision, a cushion for the possibility of default, to total loans and advances of a bank. Since high provision has to be made for non-performing loan, higher provision for loan loss reflects increasing non-performing loan in volume of total loans and advances. The low ratio signifies the good quality of assets in the volume of loans and advances and makes efforts to cope with probable loan loss. Higher ratio implies that the bank has the higher proportion of NPL in bank loan portfolio and thus the bank is greater exposed to the credit risk.

Table: 4.6

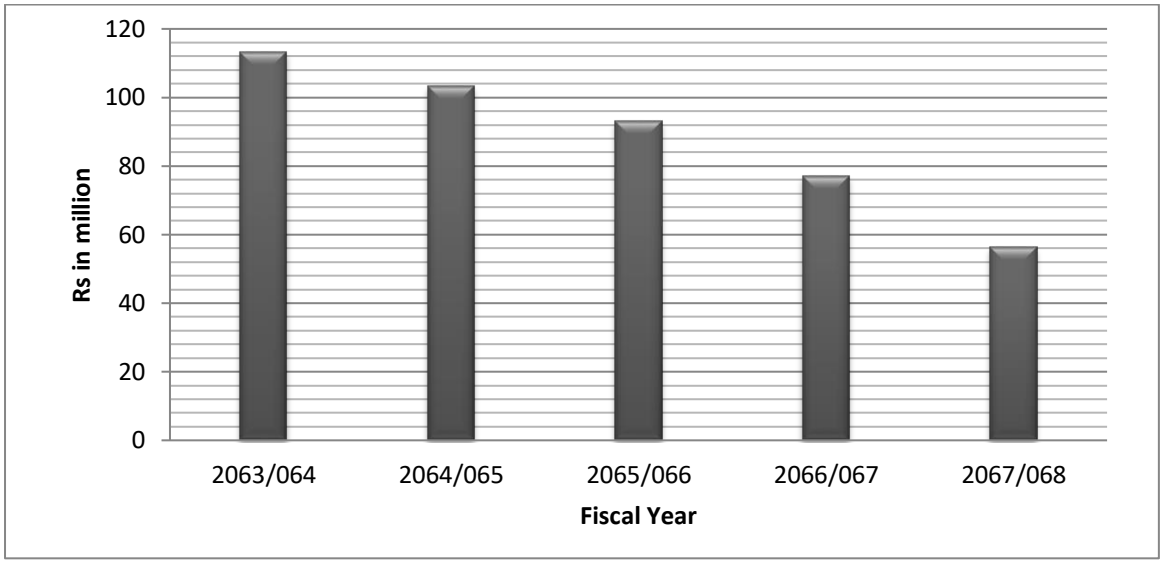
Loan Loss Provision to Total Loan and Advances Ratio

Fiscal Year	LLP (Rs. In Millions)	Loan &Advance (Rs. In Millions)	Rate (%)
2063/064	113.06	13664.08	0.83
2064/065	103.25	18339.08	0.56
2065/066	93.085	23884.67	0.39
2066/067	77.01	27556.36	0.28
2067/068	56.32	31057.69	0.18
Mean			0.45
Standard Deviation			0.25

Source: Annual Reports of EBL from 2063/064 to 2067/068

Figure: 4.10

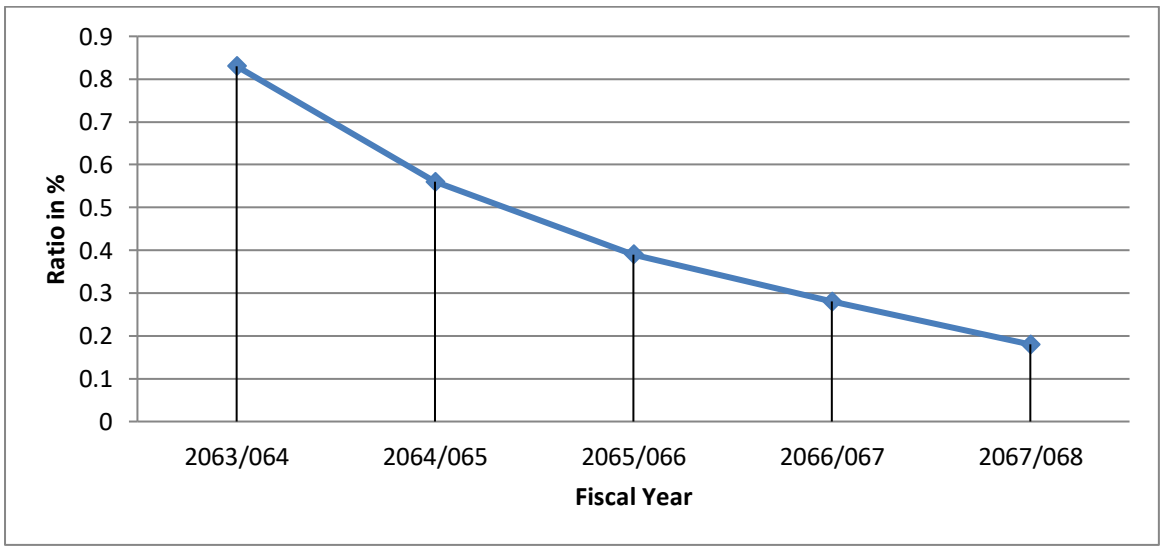
Loan Loss Provision and Total Loan and Advance



From the above table and figures, it is found that the bank have least portion of loan loss provision. This means that bank have least amount of non-performing loan. The average LLP to total loan and advances ratio is 0.45% of EBL. This reflects the proportion of loan loss provision to loan and advance of EBL. Likewise the Standard deviation of EBL is 0.25%, from this, it portray the ratio of EBL deviation from its average ratio. It shows in the following figure.

Figure: 4.11

Trend of Loan Loss Provision to Total Loan & Advance ratio



4.2 Risk Weighted Lending Analysis

The lending against own bank Fixed deposit receipt and government securities are considered as risk free lending or possess 0% risk weight. Similarly, the loan against other banks Fixed Deposit Receipt and Counter guarantee of internationally rated banks are considered as moderate level risk lending, and the loan against all other securities or without collateral are taken as high level risk lending. Risk Weighted lending refers to weight provided to the bank loan according to the level of risk. The inherent risk level of the loan can be categorized on the basis of the collateral. The risk weighted for moderate level and high-level risk lending is 20% and 100% respectively. The higher the risk-free and moderate-level lending, the lower is the credit risk of the bank and vice versa. The loan has been categorized on the basis of NRB Risk weighted Asset basis. The proportion of different category of risk weighted lending of the bank is presented below:

Table 4.7

Proportion of different category of risk weighted lending of EBL

Security	Risk Weight %	063/64	064/65	065/66	066/67	067/68	Average %
Risk Free Lending	0	1.65	3.21	0.86	0.42	0.33	1.29
Moderate Level risk Lending	20	0.95	0.76	0.80	0.90	0.92	0.85
High Level Risk Lending	100	96.25	95.51	99.07	98.77	98.82	97.68

Source: Annual Reports of EBL from 2063/064 to 2067/068

Table 4.7 exhibits the percentage of different categories of risk lending of EBL for 5 years. The table further reveals that EBL has the highest lending on 100% risk weighted lending i.e. on high-risk category lending. The bank has extended 1.65, 3.21, 0.86, 0.42 and 0.33 of total lending against the risk-free collateral (i.e. own banks FDRs and Government bonds) in fiscal year 2063/064, 2064/065, 2065/066, 2066/067 and 2067/068 respectively. Likewise the bank has extended 0.95, 0.76, 0.80, 0.90 and, 0.92 percent of total loan against the moderate-level risk collateral in the fiscal year 2063/064, 2064/065, 2065/066, 2066/067 and 2067/068 respectively. In five years, the bank has made lower amount of high-level risk lending (i.e. 95.51%) in fiscal year 2064/065. The average lending in 5 years on risk free, moderate level and high risk level lending is 1.29 %, 0.85% and 97.68 % respectively. It can also be said that EBL has been providing more loan against own & other banks FDRs and government bonds.

4.3 Liquidity Risk Analysis

Liquidity means allocation of funds in close relation to their respective sources. Liquidity is the status and part of the assets which can be used to meet the obligation inthe commercial banks. Liquidity can be viewed in terms of liquidity stored in the balance sheet and in terms of liquidity available through purchased funds. Liquidity is the ability of a bank to pay cash to depositors on demand. It is the arrangement and the allocation of funds in such a way that can be drawn immediately without any loss of principle.

At present, there is no secured investment opportunity for the Nepalese commercial banks. The banks are facing the problem of vague liquidity in term of monetary firm.The idle money does not make any return. Therefore, the high liquidity may cause of low profitability and inefficient performance of the overall Banking sector. It may cause failure of banking performance in long term.

High liquidity is not good for the commercial Banks and the crisis of liquidity too isnot good. How much liquidity exists in the economy in a particular period depends onthe policy of the central bank, the commercial banks, common people and thegovernment. The directives made by the central bank to fix the standard of money.What amount of money the commercial bank should keep as liquid assets or give loan and advance, or more much amount is to be invested.

The following ratios are to be used in liquidity position analysis.

4.3.1 Current Ratio: - It is a test of liquidity. It measures short-run debt paying ability of the firm. In other words, it measures the availability of current assets for meeting current liabilities. It is computed by dividing current assets by current Liabilities.

$$\text{Current Ratio} = \frac{Current\ Assets}{Current\ Liabilities}$$

4.3.2 Cash and Bank Balance to Current Deposit Ratio: - This ratio is designed to measure the bank's ability to meet the immediate obligations. This ratio is obtained by dividing cash and bank balance by current deposits i.e.

$$\text{Cash and Bank Balance to Current Deposit Ratio} = \frac{Cash\ \&\ bank\ Balance}{Current\ Deposit}$$

4.3.3 Liquid Funds to Total Deposit Ratio: - This ratio is designed to see what portion of the total deposits accepted by commercial banks is kept as liquid funds. This ratio is calculated by dividing total liquid fund by total deposit.

$$\text{Liquid Funds to Total Deposit Ratio} = \frac{Total\ Liquid\ Fund}{Total\ Deposit}$$

4.3.4 Cash Reserve Ratio (CRR):- Commercial banks are directed by Nepal Rastra Bank, the central bank to maintain certain percentage of their deposits liabilities with NRB in own account in order to enable them to maintain the sound liquidity position. Cash reserve ratio (CRR) describes whether the commercial banks have met the liquidity requirement as prescribed by NRB or not. In 2003 NRB issued notice in monetary policy and prescribed CRR rate as 6% of total deposit but it was revised in 2004 as 5% of total deposit. Since 2003 NRB has withdrawn the other reserve ratio for liquidity purpose like statutory liquidity ratio. Presently commercial banks have to maintain 5.5% of their total deposit in NRB and own in hand. It is computed by dividing the cash reserve of commercial banks by total deposit.

$$\text{Cash Reserve Ratio (CRR)} = \frac{Cash\ in\ Researve}{Total\ Deposit}$$

Table: 4.8

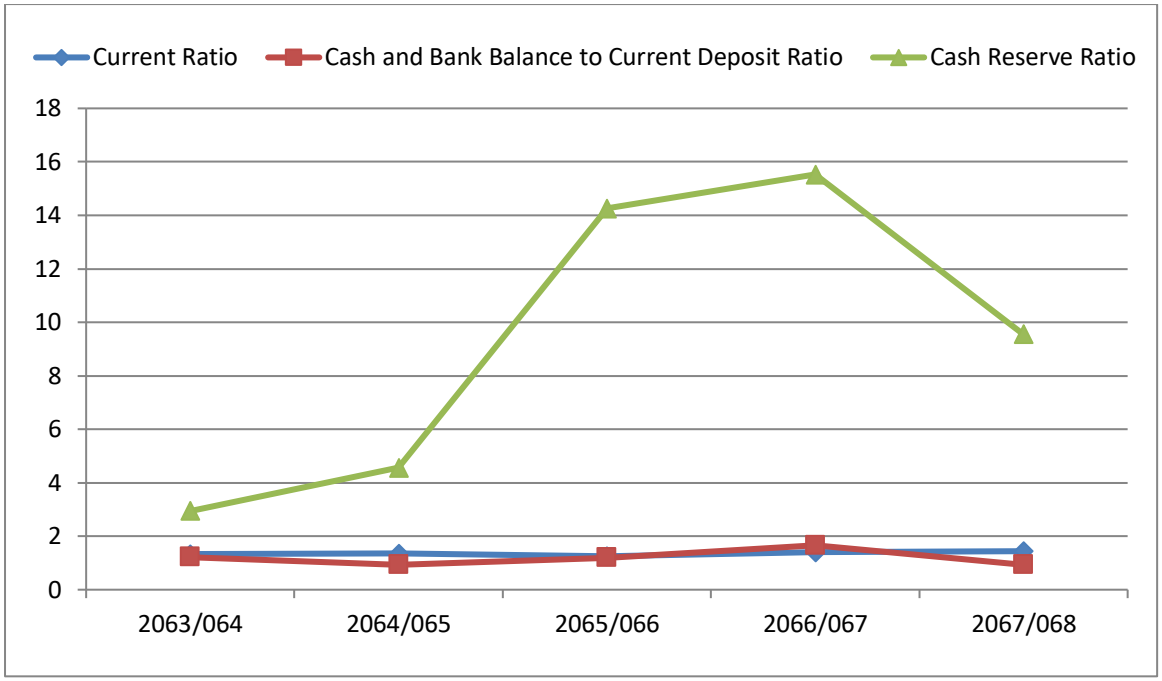
Liquidity ratios of EBL

Fiscal Year	Current Ratio (Times)	Cash and Bank Balance to Current Deposit Ratio (Times)	Liquid Funds to Total Deposit Ratio (%)	Cash Reserve Ratio (%)
2063/064	1.33	1.22	22.17	2.94
2064/065	1.35	0.93	37.07	4.56
2065/066	1.25	1.19	30.11	14.26
2066/067	1.40	1.66	40.74	15.53
2067/068	1.44	0.93	44.82	9.55
Mean($\bar{X}$)	1.35	1.19	34.98	9.37
S.D(σ)	0.07	0.30	8.97	5.62

Source: Annual Reports of EBL from 2063/064 to 2067/068 and Appendix-V & VI

Figure: 4.12

Trend of Liquidity ratios of EBL



From the table and figure 4.8 & 4.12, it shows that Current ratio of EBL is in fluctuating trend over the study period.The current ratio of EBL is 1.35 times in average and this is the lowest than standard measure. The standard deviation of Current Ratio of EBL is 0.07 which indicate that the low variability in the value of current ratio of each year.

Cash and Bank Balance to Current Deposit Ratio EBL is in fluctuating trend over the study period. This ratio of EBL is 1.19 times in average. The standard deviation of cash and bank balance to current deposit ratio EBL is 0.30 which indicate that the low variability in the value of cash and bank balance to current deposit ratio each year.

Liquid funds to total deposit ratio designed to see what portion of the total deposits accepted by commercial banks is kept as liquid funds. Liquid funds to total deposit ratio of EBL is in fluctuating trend over the study period.The liquid funds to total deposit ratio of EBL is 34.98% in average.

CRR is in fluctuating trend over the study period. The average CRR of EBL is more than the standard set by NRB i.e. 5.5%. This shows that the bank has tied up the fund in excess deposit in NRB, other banks and hold in cash, which ultimately affects the profitability negatively. The standard deviation of CRR of EBL is 5.62 which indicate that the high variability in the value of CRR of each year.

4.4 Correlation Analysis

4.4.1 Correlation Coefficient between Total Non Performing Loan & Loan Loss Provision: - Correlation coefficient between total NPL and total LLP measures the degree of relationship between total NPL and total LLP. Here, the total NPL is the amount of loan and advances granted and not collected in the maturity period. For the analysis of coefficient correlation, NPL is an independent variable (X) while LLP is dependent variable(Y).

Table: 4.9

Correlation Coefficient between Total Non Performing Loan & Loan Loss Provision

Evaluation Criteria						
Name	R	r^2	P.E (r)	6 P.E (r)	Remarks	Relationship
EBL	0.548	0.300	0.312	1.872	insignificant	Moderate Degree of Positive Correlation

Source: Appendix-I

The above table describes the relationship between total NPL and total LLP during the period of study. The coefficient of correlation (r) between total NPL and total LLP is 0.548 this figure shows the positive association between total NPL and total LLP. It means total NPL and total LLP both move towards same direction.

The coefficient of determination (r^2) is 0.30 it shows that 30 % of the variation in the dependent variable (i.e. LLP) has been explained by the independent variable (i.e. NPL).

The value of P.E. (r) is 0.312 and 6.P.E (r) is 1.872. The value of correlation coefficient (r) is less than six times of probable error, 6.P.E (r). Therefore true value of 'r' is insignificant. It reveals that there is insignificant relationship total NPL and total LLP.

There is positive relationship between total NPL and total LLP. It shows that by increasing the NPL, the amount of LLP can be increased. Therefore both the total NPL and total LLP are very much interrelated.

4.4.2 Correlation Coefficient between Total Loan & Advance and Risk Weighted Assets: - Correlation coefficient between total LA and total RWA measures the degree of relationship between total LA and total RWA. Here, the total LA is the amount of loan

and advances granted. For the analysis of coefficient correlation, LA is an independent variable (X) while RWA is dependent variable (Y).

Table: 4.10

Correlation Coefficient between Total Loan & Advance and Risk Weighted Assets

Evaluation Criteria						
Name	R	r^2	P.E (r)	6 P.E (r)	Remarks	Relationship
EBL	0.967	0.935	0.029	0.174	significant	High Degree of Positive Correlation

Source: Appendix- II

The above table describes the relationship between total LA and total RWA during the period of study. The coefficient of correlation (r) between total LA and total RWA is 0.967 this figure shows the positive association between total LA and total RWA. It means total LA and total RWA both move towards same direction.

The coefficient of determination (r^2) is 0.935 it shows that 93.5 % of the variation in the dependent variable (i.e. RWA) has been explained by the independent variable (i.e. LA).

The value of P.E. (r) is 0.029 and 6.P.E (r) is 0.174. The value of correlation coefficient (r) is greater than six times of probable error (6.P.E (r)). Therefore true value of 'r' is significant. It reveals that there is significant relationship total LA and total RWA.

There is positive relationship between total LA and total RWA. It shows that by increasing the LA, the amount of RWA can be increased. Therefore both the total LA and total RWA are very much interrelated.

4.5 Trend Analysis

Trend Analysis shows the relationship between two variables on a single period. It helps in future forecasting and planning with the help of past and present data and the factors affecting them will make possible to forecast the future magnitude. Trend Analysis is an analysis of bank's financial figure over a period of time in order to determine the improvement, deterioration or stability of its financial situation.

Under this topic, trend analysis of total risk weighted assets and non performing loan of EBL are studied during the period of time. The objective of this topic is to forecast the total RWA and NPL for the next five years.

The projections are based on the following assumptions:

- The bank will run in the present style.
- Nepal Rastra Bank and the Government of Nepal will not make any amendments in the guidelines for the operation of commercial banks.
- Other all the things also remain constant.

Simple linear trend line of the form 'y = a + bx' is used where 'x' and 'y' are considering variables. Here, 'x' denotes time, 'b' measures the increase and decrease in the value of 'y' due to unit change in 'x' and 'y' denotes the total RWA and the total NPL. Here, the method of lease square has been used for the analysis of total RWA and total NPL of EBL.

4.5.1 Trend Analysis of Total Risk Weighted Assets and Non Performing Loan:-

Under this topic, trend values of the total RWA and total NPL of EBL, for the period of study has been calculated and forecasted for the next 5 years, from 2068/69 and 2072/73. The following table presents the trend value of RWA and NPL.

Table: 4.11

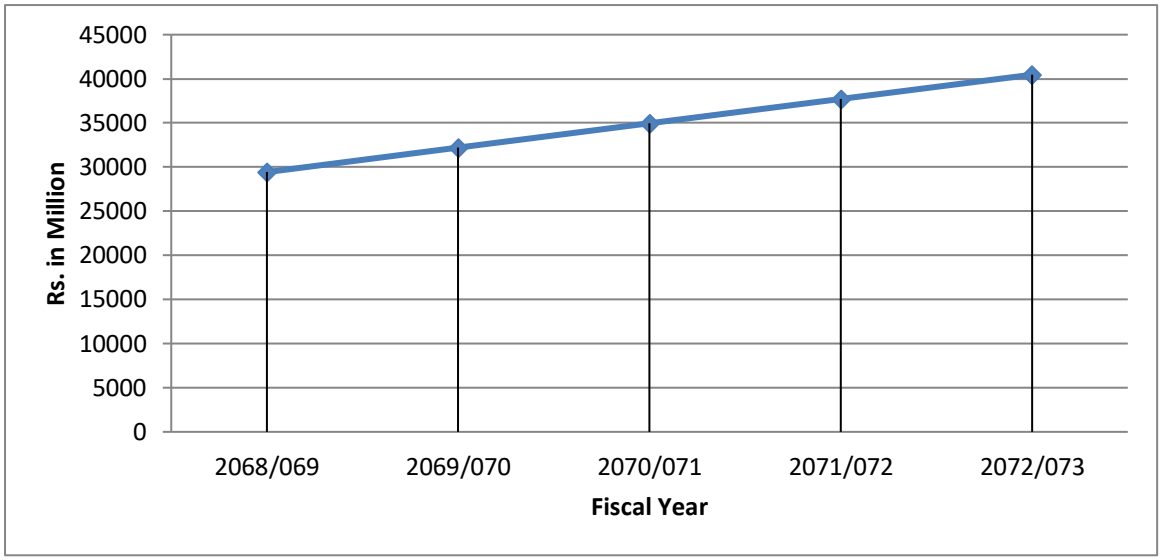
Forecasted Trend Value of Risk Weighted Assets & Non Performing Loan

Year	X	Trend Line & Trend Value (Rs. In Millions)	
		RWA (Y) = 21150.1 + 2759.16 X	**NPL (Y) = 107.572 – 14.73 X**
2068/069	3	21150.1 + 2759.16 × 3 = 29427.58	107.572 – 14.73 × 3 = 63.38
2069/070	4	21150.1 + 2759.16 × 4 = 32186.74	107.572 – 14.73 × 4 = 48.65
2070/071	5	21150.1 + 2759.16 × 5 = 34945.9	107.572 – 14.73 × 5 = 33.92
2071/072	6	21150.1 + 2759.16 × 6 = 37705.06	107.572 – 14.73 × 6 = 19.192
2072/073	7	21150.1 + 2759.16 × 7 = 40464.22	107.572 – 14.73 × 7 = 4.462

Source: Appendix-III & IV

Figure: 4.13

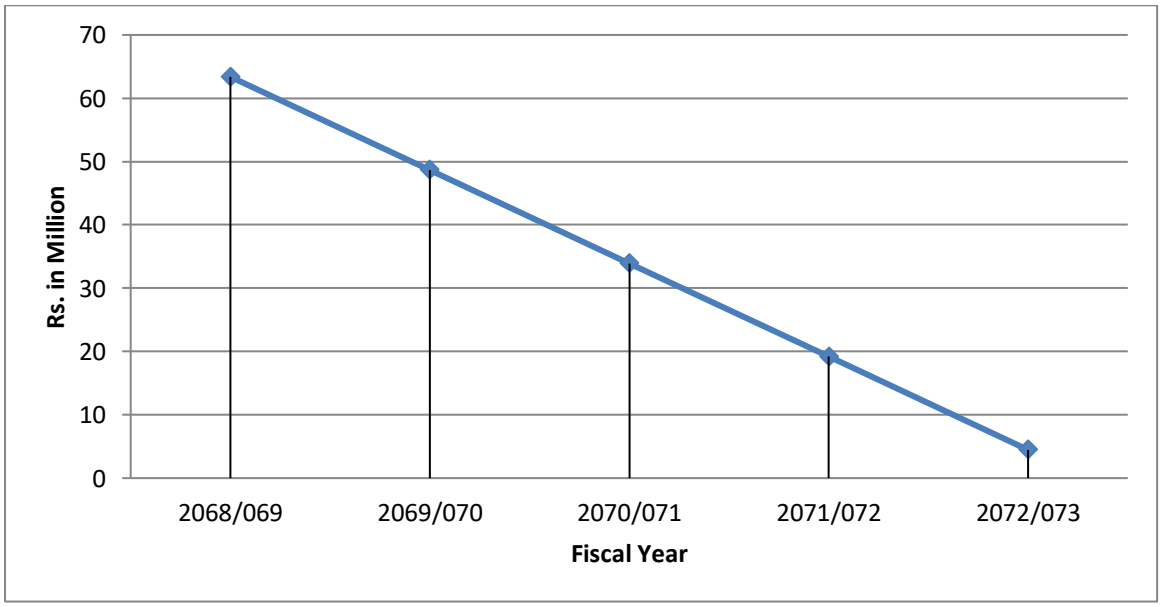
Forecasted Trend Line of Risk Weighted Assets



The above figure show the increasing trend of total RWA and decreasing trend of NPL of EBL. In the figure 4.12, 'Y' has shown the trend value of total RWA. Since, the calculated value of 'b' is positive, it is found that the bank's RWA is increasing with time. It shows that the RWA increasing by Rs. 2759.16 million every year. On the basis of this calculation, it can be forecasted that the bank's total RWA will be Rs. 29427.58 million in the year 2068/69 and it will be Rs. 40464.22 million in the year 2072/073.

Figure: 4.14

Forecasted Trend Line of Non Performing Loan



In the above figure 'Y' has shown the trend value of total NPL. Since, the calculated value of 'b' is negative; it is found that the bank's investment is decreasing with time. It shows that the NPL decreasing by Rs. 14.73 million every year. On the basis of this calculation, it can be forecasted that the bank's total NPL will be Rs. 63.38 million in the year 2068/69 and it will be Rs. 4.462 million in the year 2072/073. Negative value of NPL means there will be no non performing loan in these years.

4.6 Major Findings

- The overall credit position of EBL till the year end 2066/67, the trend of credit is increasing. There is a notable increment of 24% in the year 2064/65. But in the year 2067/68, the credit disbursement decrease by 26.6% than previous year.
- Credit Deposit ratio is the highest in the year 2064/65 i.e. 102.54% which is extremely higher. But the ratio is the lowest in the year 2067/68 i.e. 62.82% which is extremely lower over the study period.CD ratio is in decreasing trend it is not in satisfactory condition.
- The Loans & Advances to Total Risk Weighted Asset Ratio shows the fluctuating trend of EBL the overall ratio of EBL is 106.65%. From this, it is clear that out of total risk weighted assets in balance items the proportion of loans and advances of EBL is 106.65%. This means that the credit risk in EBL. Likewise, the standard deviation of EBL is 11.81. This indicates that the ratio deviate more from the average in case of EBL.
- The ratio of NPL to Total loans and advances of EBL was very high in the FY 2063/064 but after that it is in a significantly decreasing trend and has reduced significantly to 0.16% in the FY 2066/067 from 1.03% of FY 2063/064. However, the ratio of EBL is in a fluctuating trend.
- The NPL ratio of EBL is fluctuating. The NPL ratio of or the provisioning of EBL is highest of 176.20% in fiscal year 2066/067. The overall ratios of LLP to NPL of EBL are 93.73%. This ratio shows that EBL the degree of cushion of provisioning to non-performing loan. The standard deviation of EBL is 47.71%.
- The bank has least amount of non-performing loan. The average LLP to total loan and advances ratio is 0.45% of EBL. This reflects the proportion of loan loss provision to loan and advance of EBL.

- The bank has extended 1.65, 3.21, 0.86, 0.42 and 0.33 of total lending against the risk-free collateral (i.e. own banks FDRs and Government bonds) in fiscal year 2063/064, 2064/065, 2065/066, 2066/067 and 2067/068 respectively. Likewise the bank has extended 0.95, 0.76, 0.80, 0.90 and, 0.92 percent of total loan against the moderate-level risk collateral in the fiscal year 2063/064, 2064/065, 2065/066, 2066/067 and 2067/068 respectively. In five years, the bank has made lower amount of high-level risk lending (i.e. 95.51%) in fiscal year 2064/065. The average lending in 5 years on risk free, moderate level and high risk level lending is 1.29 %, 0.85% and 97.68 % respectively.
- The current ratio of EBL is 1.35 times in average and this is the lowest than standard measure. Cash and Bank Balance to Current Deposit Ratio EBL is in fluctuating trend over the study period. This ratio of EBL is 1.19 times in average. Liquid funds to total deposit ratio of EBL is in fluctuating trend over the study period.The liquid funds to total deposit ratio of EBL is 34.98% in average. The average CRR of EBL is more than the standard set by NRB i.e. 5.5%. This shows that the bank has tied up the fund in excess deposit in NRB, other banks and hold in cash, which ultimately affects the profitability negatively.
- There is positive relationship between total NPL and total LLP. It shows that by increasing the NPL, the amount of LLP can be increased. Therefore both the total NPL and total LLP are very much interrelated.
- There is positive relationship between total LA and total RWA. It shows that by increasing the LA, the amount of RWA can be increased. Therefore both the total LA and total RWA are very much interrelated.
- The calculated value of 'b' is positive; it is found that the bank's RWA is increasing with time. It shows that the RWA increasing by Rs. 2759.16 million every year. On the basis of this calculation, it can be forecasted that the bank's total RWA will be Rs. 29427.58 million in the year 2068/69 and it will be Rs. 40464.22 million in the year 2072/073.
- The NPL decreasing by Rs. 14.73 million every year. On the basis of this calculation, it can be forecasted that the bank's total NPL will be Rs. 63.38 million in the year 2068/69 and it will be Rs. 4.462 million in the year 2072/073. Negative value of NPL means there will be no non performing loan in these years.

CHAPTER - FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter includes summary conclusion & recommendation of the study. The final and most important task of the researchers is to enlist fact findings of the study and give suggestion for further improvement. The analysis is performed with the help of financial tools and statistical tools. The analysis is associated with comparison and interpretation. Under financial analysis, various financial ratios related to the risk management are used and under statistical analysis some relevant statistical tools are used.

5.1 Summary

A substantial degree of standardization of process and documentation has been set in the bank to make decision in a consistent manner and for the resultant aggregate reporting of credit risk exposure to be meaningful. Similarly, the position for managing the credit risk as well as jurisdiction limit is also set. Investment policy is prepared in consistent with the NRB guidelines and this is the major guideline for making investment decisions. Considering the importance of credit risk management in commercial banks, this research aimed at studying the credit risk management system of selected commercial banks. For this purpose, descriptive cum analytical research design was adopted. Out of total population of 32 commercial banks, one bank has taken as sample using judgmental sampling method. EBL have been taken for the study because of its appropriate data in terms of business size, date of establishment, capital size etc.

The data of five consecutive years of the Everest bank have been analyzed to meet the objective of the study. Banks are the institutions, which collect the scattered small savings from the public and invest them into productive sector that ultimately contributes to economic development of a country. Besides providing the services for economic development, they are established to earn profit. In the context of current competitive scenario, banks need to face challenges from all around. Primary data has been collected mainly from personal interview with key position staff, telephone interview & structured questionnaire. Annual reports and other publication of these banks and NRB directives and reports are the bases of secondary data. The data collection from various sources are recorded systematically & presented. Appropriate statistical and financial tools have been applied to analyze the date. One of the major challenges for Nepalese commercial banks is to properly manage the risk, especially the credit risk as it covers about 60% of the total

risk that a bank face. The major risk in EBL is associated with credit decision as the proportion of credit risk on total risk is high. Based on the response of structured questionnaire, it has been found that the proportion of credit risk on total risk is more than 60%. The credit risk of the banks mainly arises due to non-payment of loan by borrowers, poor appraisal of borrowers' financial condition and substandard collateral. Poor tracking of borrowers and improper diversification of lending across industries also result in higher credit risk in commercial banks. The major problems in credit risk can be categorized into three areas of concentrations; credit processing, and market- and liquidity-sensitive credit exposures.

Collateral is also one of the important factors while extending credit. When the borrowers default, collateral is the only means to cover such losses. 100% of provision is to be made for this sort of loan, which reduces the bank's profit, and also bank doesn't have any asset to claim on in case of default. This sort of practice is not found in case of EBL.

Similarly, credit concentration on single sector of EBL shows that the bank have very high amount of concentration in single sector. In production sector, EBL has 1058.9 million of total loan exposure, which is the sign of putting all the eggs in one basket. Improper portfolio management also remains one of the significant problems in credit management of these banks.

The bank has Credit Policies Guidelines (CPG) and well-defined organizational structure for proper management of credit risk. The organizational structure of EBL is found more stringent & advanced. In EBL, Asset Liabilities Management Committee (ALCO) is concerned with all types of risks management including credit risk. There is also an Executive Sub Committee to review credit facilities in timely and accurate manner. In EBL, Credit Committee, which includes the members of board of directors and management, is the main body for managing credit risk. Similarly, the establishment of Recovery Department and Risk Approval Department under Risk Assessment Division in EBL portrays that EBL has been giving more importance to the recovery aspects of the loan as well as credit risk rating of borrowers. In commercial banks, minimizing the credit risk is the major challenge. For combating the credit risk, both the banks have taken several measures. One of the major measures is capital adequacy ratio. The capital adequacy ratio depicts that EBL has higher CAR than statutory requirement. However in recent years, the CAR is in decreasing trend. Similarly, in total capital fund, the portion of

supplementary capital in both banks is low. Therefore these banks are fulfilling the capital fund requirement mainly from the core capital. In risk-weighted asset, the bank have higher portion of on-balance sheet assets than off-balance sheet assets. The lower amount of off-balance sheet assets means the bank need to increase the off-balance sheet items, which helps to diversify bank's source of income. The credit risk management procedure in the bank includes four basic procedures. The major outlines for credit risk management include setting standards for all the transactions such as lending, borrowing etc, and preparing financial reports.

The Audit department also audits the functioning of credit departments continuously to ensure that organization is functioning professionally and in consistent with bank's internal policy as well as NRB policy. In the Everest Bank, Internal Audit Department reports to the Audit Committee, this includes both the top level management and board of directors.

5.2 Conclusion

Commercial banking sectors have made a significant mark with the establishment of 32 commercial banks. Though banking sector developed rapidly in quantity, it has remained far behind in terms of quality compared to international banks. Commercial banks are established with an objective to maximize the shareholders' value by performing the function of mobilizing the idle funds collected from the society to productive sector, which will help to achieve the economic development of a country. Bank needs proper handling of several problem and challenges likewise the market-sensitive and Liquidity-sensitive exposures also increase the credit risk of the bank. Similarly, it is found that the bank has their own rating system of the credit client and the sectors. The bank has ranked 1st to the manufacturing sector where as the Agriculture sector has been ranked the last on the basis of priority. EBL has chosen others sector and real estate business in 2nd and 3rd position respectively. Likewise, EBL has ranked Character, Collateral and Capacity of borrower first, second and third criterion for granting credit. Nepalese government has started to liberalize the financial sector since 1980s to streamline the financial sector of the country. Prior to liberalization, there were 2 commercial banks, 1 central bank, and 2 development banks. After the adoption of financial sector liberalization policy, the financial sector widened with more banks and financial institutions.

In current scenario, the major challenge of commercial banks is keen competition among 32 commercial banks. Proper risk management is required to remain competitive in the market & achieve the goals. The major banking risks include credit risk, market risk (i.e. liquidity risk, interest risk, operation risk etc). Among these risks, credit risk has the major impact on banking (i.e. more than 60%). Because of the credit risk, the Non Performing Loan (NPL) of bank will increase. With the increase in NPL, the loan loss provisioning will also increase simultaneously leading to decrease in profit. The decrease in profit results in low dividend to shareholder and bonus to employees. To remain alert and prepare plans and policies to tackle unpredictable factors such as violence riots, natural disaster, technology and employees, fault and fraud of customers and outsiders are the challenges for these commercial banks.

For proper management of the credit risk, the banks have their own set of policies and practices, which is in consistence with NRB guidelines. For credit risk management, both banks have Credit Policies Guidelines (CPG). Similarly, NPL is regularly monitored by the banks on regular basis and provisioning is done on quarterly basis by categorizing the loan as per NRB guidelines. Similarly, sector wise and the bank on monthly basis is analyzing security wise lending. Organizational structure of the bank is frequently restructured for proper credit risk management as per requirement. For minimizing the loss arising due to occurrence of the credit risks, capital adequacy have been maintained by the bank within the standard prescribed by NRB. However, the trend of Capital Adequacy ratio of these banks suggests that the bank need to increase their capital fund, which is possible mainly by issuing shares, debentures or preference share. Though the bank have their own set of procedures for assessing various risks and their management, problems are still prevalent in the bank. In credit risk, single sector loan concentration is the main problem in the bank. In EBL, with the increase in total loan, NPL is also increasing. So, proper adjustment is needed for managing the NPL.

5.3 Recommendations

From the above analysis of the credit risk management procedure of EBL following recommendations are made to the bank, NRB and Nepal government in respect to credit risk management.

The bank has been applying old techniques for managing the credit risk. These techniques should be changed with changes in the environmental forces. It can also conduct

comprehensive stress and scenario testing on all of their portfolios and counter parties to measure the credit risk. The bank needs to upgrade the credit risk analysis system with the changes in both level and pace of technological changes in external environment. The credit risk management should be used as a strategic management tool to align Risk Adjusted Return on Economic Capital (RAROC) with ROE. These are the key tools for credit that can enable banks to select optimal portfolios and allocate their resources locally into branches, regionally and globally. The bank should believe that credit risk management is really about maximizing shareholder value and that NRB Directives and the Basel II are "compliance".

This policy outlines the amount to be invested in various sectors such as loan and advances, government bonds, shares and debentures of corporation, placements etc. Likewise, to ensure the proper implementation and functioning of credit policies of the bank, the monitoring and controlling body of the bank frequently monitors all the jobs performed. The main body for monitoring & controlling the credit facilities is Credit Administration and Control Department and there is also an Internal Audit and Compliance Department. They should believe that credit risk management is critically important so as to ensure that they do not get downgraded by rating agencies There is WTO deadline of 2010, by which Nepal's Banking Sector will have to allow foreign banks to open their branches here. Therefore, the bank that still continues the old banking paradigm will be the targets for acquisitions by larger banks that have stronger credit risk management policies in place. The only key to survival and sustainable success is to reengineer and reform the credit risk strategy that maximizes shareholder value. The banker should be able to think that Basel II and NRB Directives are not just a compliance issue but rather an opportunity to use credit risk management as a cornerstone of strategic decision making. Following the directives of NRB and acting upon it also reduces bank's risk. Therefore, both the banks are recommended to adhere to the directives and come up with a stronger internal audit and compliance to ensure that the directives are properly followed up. It is often said, "Prevention is better than cure". Hence it is recommended for the bank to take preventive measures before the risk occur and will suffer loss. The bank is recommended to develop an information system to gather all the possible information and activities to take timely precaution.

Specific Recommendations to EBL

Specific recommendations suggested to the bank under study (EBL) are as follows

- **Establishing an appropriate credit risk environment**

  The strategy should reflect the bank's risk tolerance and the level of profitability the bank expects to achieve for incurring various credit risks. Senior management should have responsibility for implementing the credit risk strategy approved by the board of directors and for developing policies and procedures for identifying, measuring, monitoring and controlling credit risk. Such policies and procedures should address credit risk in all the bank's activities and at both the individual credit and portfolio levels. The bank should identify and manage credit risk inherent in all products and activities. The bank should ensure that the risks of products and activities new to them are subject to adequate credit risk management procedures and controls before being introduced or undertaken, and approved in advance by the board of directors or its appropriate committee.

- **Operating under a sound credit granting process**

  These criteria should include a clear indication of the bank's target market and a thorough understanding of the borrower or counterparty, as well as the purpose and structure of the credit, and its source of repayment. The bank should establish overall credit limits at the level of individual borrowers and counterparties, and group of connected counterparties that aggregate in a comparable and meaningful manner for different types of exposures, both in the banking and trading book and on and off the balance sheet. A clearly established process in place for approving new credits as well as the amendment, renewal and re-financing of existing credits is the need for the bank. All extensions of credit must be made on an arm's-length basis. In particular, credits to related companies and individuals must be authorized on an exception basis, monitored with particular care and other appropriate steps taken to control or mitigate the risks of non-arm's length lending.

- **Maintaining an appropriate credit administration, measurement and Monitoring process**

  The bank should have in place a system for the ongoing administration of their various credit risk-bearing portfolios. The bank must have in place a system for monitoring the condition of individual credits, including determining the adequacy of provisions and reserves. Bank encouraged developing and utilizing an internal

risk rating system in managing credit risk. The rating system should be consistent with the nature, size and complexity of a bank's activities. The bank must have information systems and analytical techniques that enable management to measure the credit risk inherent in all on and off-balance sheet activities. The management information system should provide adequate information on the composition of the credit portfolio, including identification of any concentrations of risk.

- **Ensuring adequate controls over credit risk**

  The bank must establish a system of independent, ongoing assessment of the bank's credit risk management processes and the results of such reviews should be communicated directly to the board of directors and senior management. The bank must ensure that the credit-granting function is being properly managed and that credit exposures are within levels consistent with prudential standards and internal limits. Bank should establish and enforce internal controls and other practices to ensure that exceptions to policies, procedures and limits are reported in a timely manner to the appropriate level of management for action. The bank must have a system in place for early remedial action on deteriorating credits, managing problem credits and similar workout situations.

- **Capital Adequacy Measure**

  The bank required to focus on their supplementary capital as the proportion of supplementary capital on total capital fund is very low.

Specific Recommendations to Nepal Government and NRB

From 2009/10, Nepal Government has allowed to establish banks in Nepal by foreigners without joint venture of Nepalese investors. This will certainly provide threat to Nepalese banks. So, Nepal Government should provide some incentives to local banks to face the competition of foreign banks. Nepal Government should provide adequate measures for taking action against the willful defaulters. NRB, in addition to imposing directives, needs to provide training for commercial banks to apply new methods and system.

NRB should make a clear cut policies related to banking supervision. Confusing policies need to be removed. NRB needs to establish a separate Credit Rating Organization, which will help to minimize bank's credit risk.

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