COMPARATIVE FINANCIAL ANALYSIS OF COMMERCIAL BANKS IN THE FRAMEWORK OF BASEL II: REFERENCE TO NEPAL INVESTMENT BANK AND EVEREST BANK LIMITED

A Thesis Submitted

By

Surya Prasad Gautam

Nepal Commerce Campus

Roll No. 1732/064

T. U. Reg. No.: 30561-90

Exam Roll No.251786

Submitted to:

Office of the DeanFaculty of Management

Tribhuvan University

In partial fulfillment of the Requirements of the Degree of

Master of Business Studies

New Baneshwor, Kathmandu

September, 2012

RECOMMENDATION

This is to certify that the thesis

Submitted by:

Surya Prasad Gautam

Entitled

COMPARATIVE FINANCIAL ANALYSIS OF COMMERCIAL BANKS IN THE FRAME WORK OF BASEL II: REFERENCE TO NEPAL INVESTMENT BANK AND EVEREST BANK LIMITED

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

……..……. …….	……..……..…….
Dr.Sushil Bhakta Mathema	Madhav Prasad Neupane
Head of Research Department	Campus Chief
……..…….	……..…….
Thesis Supervisor	Thesis Supervisor
Krishna Prasad Ojha	Manoj Bhattarai

Date: 2069/ /

VIVA-VOICE SHEET

We have conducted the viva –voice examination of the thesis presented by

Surya Prasad Gautam

Entitled

COMPARATIVE FINANCIAL ANALYSIS OF COMMERCIAL BANKS IN THE FRAME WORK OF BASEL II: REFERENCE TO NEPAL INVESTMENT BANK AND EVEREST BANK LIMITED

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 ***Master's Degree in Business Studies (M.B.S.)***

Viva-Voice Committee

Chairperson, Research Department …….……

Member (Thesis supervisor) …..……..

Member (Thesis supervisor) …..……..

Member (External Expert) …….. ……

Date:- 2069/ /

DECLARATION

I hereby declared that the thesis **" COMPARATIVE FINANCIAL ANALYSIS OF COMMERCIAL BANKS IN THE FRAME WORK OF BASEL II: REFERENCE TO NEPAL INVESTMENT BANK AND EVEREST BANK LIMITED"** submitted to Nepal Commerce Campus, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master's Degree in Business Studies (MBS) under the supervision of Mr. Krishna Prasad Ojha and Mr. Manoj Bhattarai, lecturer of Nepal Commerce Campus.

…….

Surya Prasad Gautam
Campus Roll No. 1732/064
T.U. Reg. No. 30561-90
Nepal Commerce Campus

ACKNOWLEDGEMENTS

This research study Comparative Financial Analysis of Commercial Banks in the Frame Work of Base II: Reference to Nepal Investment Bank and Everest Bank Limited .First of all, I would like to express my sincere gratitude to my thesis supervisor Lecturer Mr. Krishna Prasad Ojha for his constant encouragement, patient guidance, and supervision on several aspects of this study. Similarly, I would like to express my deep gratitude to Head of Research Department, Associate Prof. Dr. Sushil Bhakta Mathema for his valuable suggestions. I am very much obliged to the personnel of Nepal Rastra Bank, Nepal Investment Bank Limited and Everest Bank Limited. I am equally thankful to all the concerned officials for their valuable assistance. I would like to give thank to the all persons for their kind cooperation during entire study period for this research in a way or the other.

I would also like to express special thanks to Mr. Ganesh Parajuli, Photo and Computer Services, Kathmandu for computer assistance.

September, 2012 Surya Prasad Gautam

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

Avg.	:	Average
BCBS	:	Basel Committees on Banking Supervision
C.V.	:	Coefficient of Variation
CAR	:	Capital Adequacy Ratio
CCAR	:	Core Capital Adequacy Ratio
CRM	:	Credit Risk Mitigates
EBL	:	Everest Bank Limited
ICAAP	:	Internal Capital Adequacy Assessment Process
LA	:	Loan and Advance
LLP	:	Loan Loss Provision
Max.	:	Maximum
Min.	:	Minimum
NIBL	:	Nepal Investment Bank Limited
No.	:	Number
NPL	:	Non Performing Loan
NRB	:	Nepal Rastra Bank
Req.	:	Requirement
S.D.	:	Standard Deviation
SCAR	:	Supplementary Capital Adequacy Ratio
SSA	:	Simplified Standardized Approach

CHAPTER-I

INTRODUCTION

1.1 Background of the study

Banking sector is the backbone of developing as well as growing industries. Banking infrastructure of the economy consists of financial institution, financial intermediation and financial market. Development of banking infrastructure is one of the strategic variables to uplift the economy. Banking institutions play vital role in the progress of economic growth of the country. Financial institution helps the process of resource mobilization. It collects funds from the public and put them in financial assets, such as deposits, loan and bonds rather than tangible property. Financial institutions provide service as intermediaries of the debt and capital markets. They are responsible for transferring funds from lenders to borrowers, in need of those funds. The presence of financial institution makes easy the flow of money through the economy. One of the important financial institutions in the economy is bank and the banking sectors play an important role in the development of the economy of the nation. Commercial banks are the largest group of depository institutions appraised from assets size and play a significant role in economic growth and development of under developed countries like Nepal. Commercial banks are the nerve center of the capital market, industrial and trading activities of a country *(Singh, 2005:11)*.

For the economic development of the country commercial banks play vital role by helping mobilization of saving, helping in the development of the priority sector. Banking system occupies an important place in a nation's economy. A banking institution is indispensable in a modern society. It plays vital role in the development of economy of the country and forms the core of the money market in an advanced country. In the current background of the rapid

expansion of the banks, financial intuitional networks as well as financial sector liberalization have integrated the global economy.

Nepal Rastra Bank has been implementing the policy of monetary so as to provide dynamism to the economy. In the light of the global a strong, well managed and efficient financial system would contribute positively to the sustainable development of the economy. The Nepal Rastra Bank (NRB) has set its priority in devising and implementing appropriate legal, regulatory, managerial and supervisory policies and provisions aimed at building a sound and stable financial sector. The implementation of this monetary policy will enhance the effectiveness of the NRB to undertake appropriate regulation, supervision and monitoring responsibilities for the qualitative development of the financial sector. For supervision, regulation and monitoring of banks and financial institutions, NRB has issued NRB Directives. NRB has set down various rules and regulation for banks and the banks has to follow them. If the banks do not follow the rules and regulations issued by the central bank, the bank will be obliged to pay penalties. Generally, bringing uniformity and to amend the rules and regulation for sound economy. NRB issues directives to the commercial banks from time to time and amends them on 'need bases'. The commercial banks have to modify their functions accordingly Commercial bank came into existence mainly with the objectives of collecting the idle funds, mobilizing them into productive sector and overall economic development. But along with the objective to earn profit and serve the customers, the commercial banks have to function in compliance with the directives of NRB. The Present study compares financial analysis of two commercial banks Nepal Investment Bank Limited (NIBL) and Everest Bank Limited (EBL) in the framework of Basel II.

1.1.1 Profile of Selected banks

a) Nepal Investment Bank Limited

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one the largest banking group in the world. With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, had acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd.

The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure.

- A group of companies holding 50% of the capital
- Rashtriya Banijya Bank holding 15% of the Capital.
- Rashtriya Beema Sansthan holding 15% of the Capital.
- The remaining 20% being held by the General Public.

NIBL, which is managed by a team of experienced bankers and professionals having proven track record, can offer you what you're looking for. The banks ensure that one's choice of a bank will be guided among other things by its reliability and professionalism. The vision of the bank is to be the most preferred provider of Financial Services in Nepal.

b) Everest Bank Limited

Everest Bank Limited (EBL) started its operations in 1994 with a view and objective of extending professionalized and efficient banking services to various segments of the society. Punjab National Bank (PNB) is a joint venture partner

of Everest Bank Limited which holding 20% equity in the bank. PNB is the largest nationalized bank in India. With its presence virtually in all the important centers at India, Punjab National Bank offers a wide variety of banking services which include corporate and personal banking, industrial finance, agricultural finance, financing of trade and international banking. Among the clients of the Bank are Indian conglomerates, medium and small industrial units, exporters, non-resident Indians and multinational companies. The large presence and vast resource base have helped the Bank to build strong links with trade and industry.

The bank is providing customer-friendly services through its Branch Network. With an aim to help Nepalese citizens working abroad, the bank has entered into arrangements with banks and finance companies in different countries, which enable quick remittance of funds by the Nepalese citizens in countries like UAE, Kuwait, Bahrain, Qatar, Saudi Arabia, Malaysia, and Singapore.

Bank has set up its representative offices at New Delhi (India) to support Nepalese citizen remitting money and advising banking related services. EBL was one of the first banks to introduce Any Branch Banking System (ABBS) in Nepal. EBL has introduced Mobile Vehicle Banking system to serve the segment deprived of proper banking facilities through its Branch, which is the first of its kind.EBL has introduced branchless banking system first time in Nepal to cover unbanked sector of Nepalese society.EBL is first bank that has launched e-ticketing system in Nepal.

1.2 Statement of the Problem

Capital adequacy requirement is a must for effective running of a bank Capital adequacy play a role in the protection of bank from getting into failure. It also helps generate sufficient confidence among depositors and creditors. Thus, purpose of capital adequacy ratio is to protect the interest of depositors and a

creditor by making bank healthy and robust against all the contingencies and enhances the image of the bank in the financial market. Higher the capital adequacy ratio the more sound the bank is.

Regarding the capital adequacy ratio, there is always been conflict between management and regulatory authorities, Regulatory authorities always focus on increasing capital adequacy ratio in order to stabilize the financial system while management wishes to reduce the ratio so as to increase shareholder rate of return on investment. Thus, capital adequacy management has become most important and most controversial issues in the financial institutions. And hence this study will try to find out the answers of following questions.

- Do the banks are maintaining the capital adequacy ratios as required by NRB?
- Do the banks keep the loan loss provision as per NRB directives?
- Are the banks managing credit risk?

1.3 Objectives of the Study

Nepal Rastra Bank has issued directives for sound economic environment. NRB has taken various regulation, supervision and monitoring action for all financial institutions. The objective of the study is to analyze of the capital adequacy and loan loss provision of two banks namely Nepal Investment Bank Ltd and Everest Bank Limited are as per the directives of NRB. The specific objectives of this study are as follows:

- To see and analyze the capital adequacy position of selected banks.
- To analyze the status of Non-Performing Asset and their loan loss provision.

- To explore the status of credit risk level of banks under study.
- To analyze financial soundness of the banks under study.

1.4 Significance of the Study

This study tries to analyze the adoption of NRB's rules and regulation of selected banks. To conduct research on this issue is fruitful for bank that really on fluctuate economies. Similarly, it is essential for policy maker, planner and economist to keep sound knowledge on it. The research has provided rich and sound knowledge to the concern authority who seeks better strategy in the field of economy and commerce. The study is beneficial to the people who are directly or indirectly related with these aforementioned banks. This is important to also NRB to monitor whether the aforementioned banks are following the directives. The study is useful to the existing investors and the potential investors who keep the interest with these banks. Eventually the study serves researcher as a reference in future who are interested on this subject matter.

1.5 Limitation of the Study

The study has the following limitations:

- The study analyses the directives issued by NRB. There are several directives issued by the NRB. Here only capital adequacy and loan loss provision related directives are taken for this study.
- The study is based on two selected banks to find out their compliance of the directives issued by NRB.
- The study has limitation of time i.e. covers only five years data, i.e. from the fiscal year 2005/06 to 2009/10. A.D.

- Basically analyse capital adequacy framework and loan loss provision in relation to Basel II.

- The study concerns with the secondary data depend upon the reliability of annual report and that of primary data depends upon the response of the respondents.

1.6 Organization of the Study

This study is divided into five chapters. The first includes general background of the study, profile of the sampled banks, statement of problem, objectives of the study, significance of the study and limitation of the study. Similarly, second chapter deals with the review of conceptual framework, review of journals and articles and review of thesis which are relevant to the study. The third chapter covers the research design, source of data, population and sample, method of data analysis, various financial and statistical tools. The fourth chapter covers the interpretation of data and analysis of the study to achieve the objectives of the research. In the same manner, the fifth chapter summaries the whole study, provides the conclusions and recommendations to enhance the banking system. Besides these chapters, bibliography and appendices have presented at the end of the study.

CHAPTER- II

REVIEW OF LITERATURE

This chapter is mainly divided into two parts i.e. conceptual review and review of the related studies; for that various relevant books, journal and articles as well as few past dissertations have been reviewed for the purpose of the study.

2.1 Conceptual Review

Under this section, the review of capital adequacy concept and prerequisite for the effective implementation of capital adequacy framework Scope and objective of BASEL II (Framework as prescribed by Nepal Rastra Bank (NRB) on Mid July 2008 (Fiscal Year 2065/066)) are evaluated. NRB issues directives under which the financial institutions of Nepal have to Perform. The directives that are related to the financial performance of the study are reviewed in this part of the study. The following directives are reviewed.

2.1.1 Capital Adequacy Framework 2007

"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.*"(*Joao, 2000:111)

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 judgment 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 capitalized 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. 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 of studied at various phases, this framework is found to be in consistence. 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.

CAF and its 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 it adequate to protect its depositors and creditors?
- Is it commensurate with the risk associated activities and profile of the commercial banks?
- Does it Promotes public confidence in the banking system?

CAF and its 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.

CAF and its 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. Thus, the banks are generally expected to operate above the limits prescribed by this framework.

CAF and its 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 *(NRB,2007).*

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 is deducted and the assets and liabilities, as well as third party capital investments in the subsidiary is to be removed from the bank's balance sheet for capital adequacy purposes" *(NRB, 2007: 3).*

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.

2.1.2 Definition of Capital

Qualifying capital consists of Tier 1 (core) capital and Tier 2 (supplementary) capital elements, net of required deductions from capital. Thus, for the purpose

of calculation of regulatory capital, banks are required to classify their capital into two parts as follows:

a. 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." *(NRB, 2007: 5).*

b. 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." *(NRB, 2007: 5)*

2.1.2.1 Elements of Tier 1 Capital

"The elements of Tier 1 Capital that should be considered while adopting BASEL II approach for capital requirement are:

Paid up Equity Capital

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.

- Share Premium.
- Proposed Bonus Equity Share.
- Statutory General Reserve.
- Retained Earnings available for distribution to shareholders.
- 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.
- Capital Redemption Reserves created in lieu of redeemable instruments.
- Capital Adjustment reserves created in respect of increasing the capital base of the bank.
- Dividend Equalization Reserves.

- Any other type of reserves notified by NRB from time to time for inclusion in Tier 1 capital" *(NRB, 2007: 6)*

2.1.2.2 Elements of Tier 2 Capital

"The elements of Tier 2 Capital that should be considered while adopting BASEL II approach for capital requirement are;

Cumulative and/or redeemable preference shares with maturity of five years and above.

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.

- 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.

- 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.

- Exchange equalization reserves created by banks as a cushion for unexpected losses arising out of adverse movements in foreign currencies.

- Investment adjustment reserves created as a cushion for adverse price movements in bank's investments falling under ‘Available for Sale’ category.

- 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 his reasonableness of the revalued amount is duly certified by the internal auditor of the bank.

- Any other type of reserves notified by NRB from time to time for inclusion in Tier 2 capital" *(NRB; 2007: 6-7)*

2.1.2.3 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." *(NRB, 2007: 7-8)*

2.1.2.4 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" (*Kaminsky et.al., 1999:478).*

2.1.2.5 Capital Adequacy Ratio

"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" *(Nanchane & co, 2006:104).*

2.1.3 Review Process for Capital Adequacy Ratio

"The supervisory review process of the framework is intended not only to ensure that banks have adequate capital to support all the risks in their business, but also to encourage banks to develop and use better risk management techniques in monitoring and managing their risks. It is the responsibility of the bank management in developing an internal capital assessment process and setting capital targets that are commensurate with the bank's risk profile and control environment beyond the core minimum requirements." (*Ferri et.al. 2006:32)*

Nepal Rastra Bank recognizes the significance of the relationship between the amount of capital held by the bank against its risks and the strength and effectiveness of the bank's risk management and internal control processes. However, increased capital should not be viewed as the only option for addressing increased risks confronting the bank. Other means for addressing risk, such as strengthening risk management, applying internal limits, strengthening the level of provisions and reserves, and improving internal controls, must also be considered. Furthermore, capital should not be regarded as a substitute for addressing fundamentally inadequate control or risk management processes.

There are three main areas that are particularly suited to treatment under this process:

- Risks considered under minimum capital requirements which are not fully captured it (e.g. credit concentration risk)
- Those factors not taken into account by the minimum capital requirements (e.g. business and strategic risk)
- Factors external to the bank (e.g. business cycle effects).

In order to achieve the objectives of the supervisory review process, this process has been broadly divided into three parts:

- Internal Capital Adequacy Assessment Process (ICAAP)
- Supervisory Review
- Supervisory Response

2.1.3.1 Internal Capital Adequacy Assessment

"The internal capital adequacy assessment process (ICAAP) is a comprehensive process which requires board and senior management oversight, monitoring, reporting and internal control reviews at regular intervals to ensure the alignment of regulatory capital requirement with the true risk profile of the bank and thus ensure long-term safety and soundness of the bank *(Griggith et.al., 2002:42).* The key components of an effective ICAAP are discussed below."

A) Board and senior management oversight

"Bank management is responsible for understanding the nature and level of risk being taken by the bank and how this risk relates to adequate capital levels. It is also responsible for ensuring that the formality and sophistication of the risk management processes is commensurate with the complexity of its operations. A sound risk management process is the foundation of an effective assessment of the adequacy of a bank's capital position" (Benston, 2005:135).

"The boards of directors of the bank are responsible for setting the bank's tolerance for risks. The board should also ensure that management establishes a mechanism for assessing various risks; develops a system to relate these risks to the bank's capital level and sets up a method for monitoring compliance with internal policies. It is equally important that the board instills strong internal controls and thereby an effective control environment through adoption of

written policies and procedures and ensures that the policies and procedures are effectively communicated throughout the bank." *(Billet, Garfinkel &O Neal; 2002:355)*

"The analysis of a bank's current and future capital requirements in relation to its strategic objectives is a vital element of the strategic planning process. The strategic plan should clearly outline the bank's capital needs, anticipated capital expenditures, desirable capital level, and external capital sources. Senior management and the board should view capital planning as a crucial element in being able to achieve its desired strategic objectives." *(Borio; 2003:45)*

B) Sound capital assessment

"Another crucial component of an effective ICAAP is the assessment of capital. In order to be able to make a sound capital assessment the bank should, at minimum, have the following: - Policies and procedures designed to ensure that the bank identifies, measures, and reports all material risks, A process that relates capital to the level of risk, A process that states capital adequacy goals with respect to risk, taking account of the bank's strategic focus and business plan; and A process of internal control reviews and audits to ensure the integrity of the overall management process."*(Leeladhar; 2006:155)*

C) Comprehensive assessment of risks

All material risks faced by the bank should be addressed in the capital assessment process. Nepal Rastra Bank recognizes that not all risks can be measured precisely. However, bank should develop a process to estimate risks with reasonable certainties. In order to make a comprehensive assessment of risks, the process should, at minimum, address the following forms of risk.

I. Credit Risk: Banks should have methodologies that enable them to assess the credit risk involved in exposures to individual borrowers or counterparties as

well as at the portfolio level. The credit review assessment of capital adequacy, at a minimum, should cover risk rating systems, portfolio analysis/aggregation, large exposures and risk concentrations.

Internal risk ratings are an important tool in monitoring credit risk. Internal risk ratings should be adequate to support the identification and measurement of risk from all credit exposures, and should be integrated into an institution's overall analysis of credit risk and capital adequacy. The ratings system should provide detailed ratings for all assets, not only for problem assets.

II. Credit Concentration Risk: "Risk concentrations are arguably the single most important cause of major problems in banks. A risk concentration is any single exposure or group of exposures with the potential to produce losses large enough (relative to a bank's capital, total assets, or overall risk level) to threaten a bank's health or ability to maintain its core operations.

Lending being the primary activity of most banks, credit risk concentrations are often the most material risk concentrations within a bank. However, risk concentrations can arise in a bank's assets, liabilities, or off-balance sheet items, through the execution or processing of transactions (either product or service), or through a combination of exposures across these broad categories. Credit risk concentrations are based on common or correlated risk factors, which, in times of stress, have an adverse effect on the creditworthiness of each of the individual counterparties making up the concentration." *(Bailey; 2005:16)*

"Such credit concentrations are not addressed in the minimum capital requirements for credit risk. Thus, Banks should have in place effective internal policies, systems and controls to identify, measure, monitor, and control their credit risk concentrations. Banks should explicitly consider the extent of their credit risk concentrations in their assessment of capital adequacy under review process. These policies should cover the different forms of credit risk

concentrations to which a bank may be exposed to. Such concentrations include but are not limited to: - Significant exposures to an individual counterparty or group of related counterparty. Banks might also establish an aggregate limit for the management and control of all of its large exposures as a group, Credit exposures to counterparties in the same economic sector or geographic region, Credit exposures to counterparties whose financial performance is dependent on the same activity or commodity and Indirect credit exposures arising from a bank's CRM activities (e.g. exposure to a similar type of collateral or credit protection provided by single counterparty or same collateral in cases of multiple banking)." *(Ferri, Liu & Majnoni; 2000:95)*

A bank's framework for managing credit risk concentrations should be clearly documented and should include a definition of the credit risk concentrations relevant to the bank and how these concentrations and their corresponding limits are calculated. Limits should be defined in relation to a bank's capital, total assets or, where adequate measures exist, its overall risk level. A bank's management should conduct periodic stress tests of its major credit risk concentrations and review the results of those tests to identify and respond to potential changes in market conditions that could adversely impact the bank's performance.

III. Operational Risk: "The failure to properly manage operational risk can result in a misstatement of an institution's risk/return profile and expose the institution to significant losses. Gross income, used in the Basic Indicator Approach is only a proxy for the scale of operational risk exposure of a bank and can in some cases underestimate the need for capital. Thus, Banks should develop a framework for managing operational risk and evaluate the adequacy of capital as prescribed by this framework. The framework should cover the bank's appetite and tolerance for operational risk, as specified through the policies for managing this risk, including the extent and manner in which

operational risk is transferred outside the bank. It should also include policies outlining the bank's approach to identifying, assessing, monitoring and controlling/mitigating the risk." *(Hill; 2004:60)*

IV. Market Risk: "The prescribed approach for the computation of capital charge for market risk is very simple and thus may not be directly aligned with the magnitude of risk. Likewise, the approach only incorporates risks arising out of adverse movements in exchange rates while ignoring other forms of risks like interest rate risk and equity risks. Thus, banks should develop a frame work that addresses these various forms of risk and at the same time perform stress tests to evaluate the adequacy of capital.

The use of internal models by the bank for the measurement of market risk is highly encouraged. Wherever bank's make use of internal models for computation of capital charge for market risks, the bank management should ensure the adequacy and completeness of the system regardless of the type and level of complexity of the measurement system as the quality and reliability of the measurement system is largely dependent on the quality of the data and various assumptions used in the model." *(Nitsure; 2005:1144)*

V. Liquidity Risk: "Liquidity is crucial to the ongoing viability of any financial institution. The capital positions can have a telling effect on institution's ability to obtain liquidity, especially in a crisis. Each bank must have adequate systems for measuring, monitoring and controlling liquidity risk. Banks should evaluate the adequacy of capital given their own liquidity profile and the liquidity of the markets in which they operate. Banks are also encouraged to make use of stress testing to determine their liquidity needs and the adequacy of capital." *(Reddy; 2006:45)*

VI. Other Risks: Although the 'other' risks, such as reputational and strategic risk, are not easily measurable, banks are expected to take these into consideration as well while deciding on the level of capital.

D) Monitoring and Reporting

"The bank should establish an adequate system for monitoring and reporting risk exposures and assessing how the bank's changing risk profile affects the need for capital. The bank's senior management or board of directors should, on a regular basis, receive reports on the bank's risk profile and capital needs. These reports should allow senior management to:- Evaluate the level and trend of material risks and their effect on capital levels, Evaluate the sensitivity and reasonableness of key assumptions used in the capital assessment measurement system, Determine that the bank holds sufficient capital against the various risks and is in compliance with established capital adequacy goals and Assess its future capital requirements based on the bank's reported risk profile and make necessary adjustments to the bank's strategic plan accordingly." *(Koehn & Santomero; 2000:1246)*

E) Internal Control Review

"The bank's internal control structure is essential to a sound capital assessment process. Effective control of the capital assessment process includes an independent review and, where appropriate, the involvement of internal or external audits. The bank's board of directors has a responsibility to ensure that management establishes a system for assessing the various risks, develops a system to relate risk to the bank's capital level, and establishes a method for monitoring compliance with internal policies. The board should regularly verify whether its system of internal controls is adequate to ensure well-ordered and prudent conduct of business." *(Kahane; 2007:210)*

“The bank should conduct periodic reviews of its risk management process to ensure its integrity, accuracy, and reasonableness. Key areas that should be reviewed include:- Appropriateness of the bank’s capital assessment process given the nature, scope and complexity of its activities, Identification of large exposures and risk concentrations, Accuracy and completeness of data inputs into the bank’s assessment process, Reasonableness and validity of scenarios used in the assessment process and Stress testing and analysis of assumptions and inputs.” *(Gjerde & Semmen; 2000:170)*

2.1.3.2 Supervisory Review

“Nepal Rastra Bank shall regularly review the process by which a bank assesses its capital adequacy, risk positions, resulting capital levels, and quality of capital held by a bank. Supervisors shall also evaluate the degree to which a bank has in place a sound internal process to assess capital adequacy. The emphasis of the review should be on the quality of the bank’s risk management and controls and should not result in supervisors functioning as bank management. Some of the key areas which will be reviewed during the supervisory review process are discussed hereunder

A. Review of Adequacy of Risk Assessment

NRB shall assess the degree to which internal targets and processes incorporate the full range of material risks faced by the bank. Supervisors shall also review the adequacy of risk measures used in assessing internal capital adequacy and the extent to which these risk measures are also used operationally in setting limits, evaluating business line performance, and evaluating and controlling risks more generally. Supervisors shall consider the results of sensitivity analyses and stress tests conducted by the institution and how these results relate to capital plans.

B. Assessment of Capital Adequacy

NRB shall review the bank's processes to determine that:

- Target levels of capital chosen are comprehensive and relevant to the current operating environment;
- These levels are properly monitored and reviewed by senior management; and
- The composition of capital is appropriate for the nature and scale of the bank's business.

NRB shall also consider the extent to which the bank has provided for unexpected events in setting its capital levels. This analysis should cover a wide range of external conditions and scenarios, and the sophistication of techniques and stress tests used should be commensurate with the bank's activities.

C. Assessment of the Control Environment

NRB shall consider the quality of the bank's management information reporting and systems, the manner in which business risks and activities are aggregated, and management's record in responding to emerging or changing risks. In all instances, the capital level at an individual bank should be determined according to the bank's risk profile and adequacy of its risk management process and internal controls. External factors such as business cycle effects and the macroeconomic environment should also be considered.

D. Supervisory Review of Compliance with Minimum Standards

In order to obtain relief as per this framework banks are required to observe number of requirements, including risk management standards and disclosures. In particular, banks will be required to disclose features of their internal

methodologies used in calculating minimum capital requirements. As part of the supervisory review process, supervisors must ensure that these conditions are being met on an ongoing basis. Likewise, the supervisors must ensure that qualifying criteria as specified in the framework are continuously being met as these criteria are developed as benchmarks that are aligned with bank management expectations for effective risk management and capital allocation.

E. Significance of Risk Transfer

Securitization or credit sale agreements with recourse may be carried out for purposes other than credit risk transfer (e.g. funding). Where this is the case, there might still be a limited transfer of credit risk. However, for an originating bank to achieve reductions in capital requirements, the risk transfer arising from a securitization or credit sale has to be deemed significant by the NRB. If the risk transfer is considered to be insufficient or nonexistent, NRB can require the application of a higher capital requirement or, alternatively, may deny a bank from obtaining any capital relief from the securitization or transfer agreements. Therefore, the capital relief that can be achieved will correspond to the amount of credit risk that is effectively transferred.

F. Credit Risk Mitigates

In case when the eligibility requirements are not fulfilled, NRB will not consider Credit Risk Mitigates in allocating capital. Similarly, CRM may give rise to residual risks, which may render the overall risk reduction less effective. Where, these risks are not adequately controlled by the bank, NRB may impose additional capital charges or take other appropriate supervisory actions.

G. Operational Risk and Market Risk

The framework prescribes simple approaches for allocating capital for operational and market risk which may not be directly aligned with the volume

and complexity of risk. Thus, the supervisor shall consider whether the capital requirements generated by the prescribed approaches gives a consistent picture of the individual bank's risk exposure in comparison with the peer group and the banking industry at large. Where NRB is convinced such is not the case, appropriate supervisory response is warranted.

H. Market Discipline

The framework requires banks to disclose various key information about their business on a periodic basis. It is imperative that the banks discharge their obligations under the disclosure requirements in order to be eligible to claim benefits of CRM. In line with the utmost significance of this requirement, the supervisor shall review the adequacy of the disclosures. As a part of this process itself, the supervisor shall regularly review the website of the banks and review the contents of the site. Wherever the review process identifies any shortcomings or non-compliances, appropriate supervisory response shall be initiated." *(NRB; 2007:43-46)*

2.1.3.2 Supervisory Response

Nepal Rastra Bank expects banks to operate above the minimum regulatory capital ratios. Wherever, NRB is not convinced about the risk management practices and the control environment, it has the authority to require banks to hold capital in excess of the minimum.

A. Supervisory Adjustments in Risk Weighted Assets and Capital

Having carried out the review process as described above, supervisors should take appropriate action if they are not satisfied with the results of the bank's own risk assessment and capital allocation. In such a scenario, NRB shall be empowered to undertake any or combination of the banks risk weighted assets and regulatory capital computations.

B. Corrective Actions for Non-Compliances

The failure on part of the banks to meet the provisions of this framework shall be considered as a violation of the NRB directives and shall attract stipulated actions. The nature of the enforcement action largely depends on degree of the capital adequacy of the bank. The trigger points and the prescribed action in case of non-compliance shall be as per the provisions of Prompt Corrective Action Byelaw 2064 propounded by Nepal Rastra Bank. *(NRB; 2007)*

2.2 Review of NRB Directives

NRB is the central bank of Nepal. It issues directives under which the financial institutions of Nepal have to perform. The directives that are related to the financial performance of the study are reviewed in this part of the study.

2.2.1 NRB Directives Relating to Capital Adequacy

Capital Adequacy Ratio: The sum of core capital and supplementary capital is called total capital fund. Capital adequacy ratio is calculated on the basis of core capital, supplementary capital and risk weighted assets. The provision of minimum capital fund to be maintained by the commercial banks as per directed by NRB since fiscal year 2061/062 to 2066/067 are as follows:

Table 2.1

Capital Fund to be Maintained

Fiscal Year	Capital fund in % on the basis of Total risk weighed assets	
	Core capital	Total capital fund
2061/062	6.00	12.00
2066/067	6.00	10.00

(Source: Unified directives 2061/62 & 2066/067)

2.2.2 NRB Directives relating to Loan Classification and Loan Loss Provision

A) Classifications of Loan and Advances: Effective from FY 2058/59 (2011/02) has been classifying outstanding principal amount of loan and advance on the basis of aging. As per the directives issued by NRB, all loan and advance shall be classified into the following four categories:

I. Pass Loan:- Loan and advance whose principal amount are not pass due and due for a period up to 3 months shall be included in this category. These are classified and defined as performing loans.

II. Sub-Standard Loan:- All loan and advance that are past due for a period of 3 months to 6 months shall be included in this category.

III. Doubtful Loan: - All loan and advances which are past due for a period of 6 months to 1 year shall be included in this category.

IV. Bad Loan:- All loan and advances which are past due for a period of more than 1 year as well as advances which have least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery in future shall be included in this category.

B) Loan loss provisioning: The loan loss provisioning, on the basis of the outstanding loans and advance and bills purchases classified as per this directives, shall be provided as follows:

Table 2.2

Classifications of Loan Loss Provisioning

Classification of loan	Loan loss provision
Pass loan	1%
Sub- Standard loan	25%
Doubtful loan	50%
Loss	100%

(Source: Unified directives 2061/62 &2066/067)

2.3 Review of Journals and Articles

Pausch and Welzel (2009), in their article, "*Credit Risk and the Role of Capital Adequacy Regulation"* have started that a capital adequacy regulation included both in the existing Basel Capital Accord and in the proposed New Capital Accord induces a risk neutral bank behave as if it were risk averse. This is cause by an income effect from linking the bank's exposure to risk to the equity capital required for performance banking activities.

The only necessary condition for this mechanism to work is that holding and extending equity is more costly than the risk free interest rate in the interbank capital market. Because of this effect of capital adequacy regulation there exists an incentive for banks to engage in active risk management, i.e. hedging, if regulatory rules accept such hedging operations as risk reducing which part of the proposal of the New Basel Capital Accord. In this case the banks fully hedge their exposure to risk and can separate decisions on interest rates from hedging decisions. Otherwise hedging is not beneficial for banks and thus there is no need for performing such activities.

Sarma and Nikaido (2007), in their articles, "Capital Adequacy Regime in India an Overview" have started that with respect to the current regime of capital standards. The Basel I, India's banking industry is performing reasonably well, with an average CRAR of about 12 percent. Which is not only higher than the internationally acceptable level of 8 percent, but also higher than India's own regulatory requirement of 9 percent? Further, the increased requirement of tier I capital, the high cast of implementation of Basel II regime. If these issues are not tackled up front, then the end result would be no different from the current Basel I norms, albeit at higher cost. Despite these challenges, in a globalizing financial system. India will not be able to do away with the recent international developments such as Basel II. In the long run, adherence to Basel II by India banks will result in improved accounting. Risk management and supervisory principles that are in line with internationally accepted best practices. While the Basel II regime provides the credit rating industry with an opportunity in terms of business expansion, it needs to be seen if the industry is able to perform in terms of the key principles of objectivity, independence, transparency, disclosure, resources and credibility.

Harringtone (2003). in his article, *Capital Adequacy in insurance and Reinsurance* has stated that if economically efficient regulation is the goal capital standards and regulatory supervision should be less stringent for sectors characterized by greater market discipline and less systemic risk. Market discipline is greater and systemic risk is lower for insurance that for banking capital requirement should be less stringent for insurers. Because market discipline is greater for reinsurance than for direct insurance, capital requirements and related regulation need not be as stringent for reinsurers as for direct insurers. The relative stringency of capital requirement for insurers and reinsurers in the U.S. and the E.U. is by and large consistent with significant market discipline.

Any federal regulation of insurers in the U.S., harmonization of reinsurance regulation in the E.U. and internationally and charges in the centralization and scope of regulatory authority over different financial activities should evolve under full appreciation of limited systemic and risk and significant market discipline in insurance and avoid undermining that discipline. Even if appropriate in banking, extension of the Basel framework to insurance and reinsurance would be ill advised. Relatively simple capital requirement for insurers and reinsurers are a virtue; stringency is a vice. Complexity with little stringency is costly but relatively benign. Wise prudential policy would maintain and further promote insurance and reinsurance market discipline, thus obviating the need for intrusive, stringent and complex capital rules and associated regulatory intervention in private decision-making.

Dowd (2008), in his article, *Does Asymmetric Information Justify Bank Capital Adequacy Regulation?,* has stated that bank regulators are deluding themselves if they think that is any compelling economic justification for it on market failure grounds, and the standard prudential and paternalistic arguments usually cited to defend such regulation do not meet even basic standards of economic analysis. No one has yet shown that there is anything wrong with laissez-faire banking that capital adequacy regulation would put right. Perhaps the best argument for capital adequacy regulation and even that is highly problematic is that it might help to counter the moral hazard created by the regulatory authorities themselves. But this is an argument based on government failure rather than market failure, and it is surely better for regulators to stop moral hazard problems in the first place. Regulators should get their own house in order. Government failure does not constitute a good argument for government intervention.

Tai (2004), has written article on *Can bank be a source of contagion during the 1997 Asian crisis?,* This paper test whether bank can be a source of contagion

during the 1997 Asian crisis using asset return data from a crisis country – Thailand. In particular, the writer has examined whether Thai banking sector can produce contagion effects in both conditional means and volatilities of its foreign exchange and stock markets during the crisis after controlling economic fundamentals. The test result show that contagion-in-mean effect appear to be multidirectional since return shocks emanating from any of the three markets sweep across all markets, but contagion-in-volatility effect are mainly driven by the negative return shocks originating in the banking sector. overall the empirical evidence indicates that the past return shocks originating from banking sector have significant impact not only on the volatilities of foreign exchange and aggregate stock markets, but also on their prices, suggesting that bank can be a major source of contagion during the crisis.

Bauer and Ryser (2004), *has written article on Risk management strategies for bank.* They analyze optimal risk management strategies of a bank financed with deposits and equity in a one period model. The bank motivation for risk management comes from the deposits which can lead to bank runs. In the events of such a run, liquidation costs arise. The hedging strategy that maximizes the value of equity is derived. They identify conditions under which well known result such as complete hedging, maximal speculation or irrelevance of the hedging decision are obtained. The initial debt ratio, the size of the liquidation costs, regulatory restrictions, the volatility of the risky asset and the spread between the risk less interest rate and the deposit rate are shown to be the important parameters that drive the bank's hedging decision.

Review of Related studies

Subedi (2009), has conducted a study on "*NRB Unified Directives on Capital Adequacy Norms and Its Impact"*- A Case study of Nepal Industrial and Commercial Bank Limited, with main objectives to analyze the significance and

impact of NRB Capital Adequacy Norms, Capital Adequacy, and to examine the relation of Capital Fund to the other stakes of NIC bank.

The major findings of the study were the Capital fund of NIC Bank has grown consistently over the study period comprising of FY 2059/60 to FY 2063/64. It is found that the bank is quite successful in maintain capital adequacy as prescribed by NRB. The capital to deposit ratio of NIC Bank is found to be satisfactory.

Luitel (2009), has conducted a study on *"Analysis of non-performing Assets and Loan Loss Provision of Commercial Banks; with special reference to SCBNL, BOK & EBL"* with the main objectives of examining and studying the level of nonperforming assets and loan loss provision of selected commercial banks, the loan loss provision maintained, and to measure the relationship between NPA with total deposit.The major findings of the study were the non-performing assets covered 0.79% of the total assets of SCBNL. 2.40% of the total assets of BOK and .80% of the total assets of EBL, likewise, the non-performing assets to total deposit of SCBNL are .89% and that of BOK is 2.80%, and EBL is 0.93%.In average, SCBNL has kept 2.98% of total loans as loan loss provision and BOK has kept 3.71% of the total loans as loan loss provision and EBL has kept 3.19% as loan loss provision.

Lamsal (2006), in his study, *"Capital Adequacy and Its Significance to Commercial Banks"* has the main objectives of the study are to review directives of NRB regarding capital adequacy related to commercial banks, to analyze the implementation status of the directives given by NRB, to evaluate capital adequacy of the selected banks are SCBNL, NABIL, NIBL, EBL, HBL, NICBL, LBL and KBL. And to examine the efficiency and weakness of capital adequacy ratio. The major findings are among these eight banks have shortfall of supplementary capital in accordance with the NRB requirement, likewise

capital adequacy ratio it is seen that NIBL,HBL,LBL and KBL has not meet the standard of 12% as per NRB directives, and all of these banks make its internal Audit and Inspection Department stronger so that the directives are properly implemented keeping into mind that the violation of rules of directives have chances to pay penalties which may lead to unfavorable consequences.

Bhandari (2005) has done study on, *"Financial performance Analysis of Himalayan Bank Ltd., In the Framework of CAMEL."* The objective of the study was to comprehend the financial performance of HBL through CAMEL framework. The study has covered the time span of FYs 1998/99 to 2003/4. The researcher used financial tools like capital adequacy ratio, core capital adequacy ratio, supplementary capital adequacy ratio, non performing loan ratio, loan loss ratio, total expenses to total incomes ratio, earning per employee, return on equity, net interest margin, earning per share, NRB balance to total deposits ratio etc. The statistical tools used are average, standard deviation, coefficient of variations and least square trend analysis. The researcher concluded that the bank is running with the adequate capital, non performing loan to loan ratio is in declining trend where as loan loss provision is in increasing trend. The indicators of management and the earning quality showed the decreasing trend where as the overall liquidity position of bank is good.

Mall (2008), has conducted a study on, *"Financial performance Analysis of Annapurna Finance Company Limited in the framework of CAMEL"* The main objectives of the study was to analyze the financial performance of Annapurna Finance Company Limited in the framework of CAMEL from the FY 2002/03 to the FY 2006/07. The study was based on the secondary data covering the period of five years. The researcher used various financial and statistical tools to get the meaningful result and to meet the research objectives. The major finding of the study were, the capital fund of AFCL is sound as per NRB rules, the non-performing loan ratio are below the international standard but it is at fluctuating

trend, the loan loss ratio are also fluctuating trend during the study period. The earning quality ratios are generally in fluctuating and decreasing trend except the net interest margin which is in increasing trend. The overall liquidity position of AFCL is in good condition.

Shrestha (2009) has conducted a study on "*Capital Adequacy in Commercial Banks.*" The main objectives of the study were to evaluate capital adequacy of the selected commercial banks, to examine the efficiency and weakness of capital adequacy and to measure the core capital adequacy ratio maintained by the bank. The major finding of the study were it is seen that NIBL, SBI, LIBL and MBL have not meet the standard of 12% capital adequacy ratio directed by NRB, The banks are SCBNL, SBI, NBBL, LUBL and MBL have remained unsuccessful to meet the maximum supplementary capital as directed by NRB and the capital adequacy ratio of the selected banks are as per NRB directives

2.2.3 Research Gap

The above reviewed articles, journals, researches are concerned with the capital adequacy ratio and loan loss provision maintained by the banks using other financial ratio. The reviewed study does not measure the credit risk, which is the main reason for maintaining such capital adequacy ratio and these study does not shows the impact of non-performing loan on the financial health. These studies are limited in secondary data analysis. Thus, to fulfill such research gaps the present research is conducted by making specification to capital adequacy, loan loss provision and Credit risk only. To do the effective research the research focuses on capital adequacy and loan loss provision is selected banks.

CHAPTER-III

RESEARCH METHODOLOGY

A research is systematic study or search of facts by formulating hypothesis, collecting information, analyzing and interpreting them through the valid result. It is also called a creative inquiry and investigation to search new insight into the phenomena. However, research methodology is a technique used for conducting research. It provides various methods for the collection, presentation, interpretation and analysis of data. For this various methods and statistical tools are used to analyze the data and conclude the findings.

3.1 Research Design

Research Design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Thus, a research design is a plan for the collection and analysis of data. A research design is a plan or blue print of investigation for the collection and analysis of data. It helps the researcher in the right direction in order to achieve the goal. To achieve the objective of the study, descriptive and analytical research design has been used. Some financial and statistical tools are applied to examine facts regarding the capital adequacy framework and the loan loss provision of selected banks.

3.2 Nature and Source of Data

This study is based on both secondary and primary data. For primary data, the responses obtained through the questionnaires to the employee of the banks are the main sources. Whereas the annual reports of the banks under studied are the major source for secondary data. Beside these, the unified directives of NRB and the annual report of NRB also are used as the major source for secondary

data. Further, other relevant information are collected through BASEL and NRB publications and work papers.

3.3 Population and Sample

The researcher has selected only two commercial banks. Out of many banking institutions only two banks are taken under study through purposive sampling method to meet the objectives of the study.

3.4 Data Collection Procedures

Data are collected from the primary sources and secondary sources. Researcher collects the necessary data from the field of inquiry. In the primary stage, the primary data are raw in nature, after collecting the data they are presented, edited, tabulated and analyzed at the central office of the investigator. For this research, interview and Questionnaire method are used for data collection. Secondary data is the information which has already been collected by some individual or agency and statistically treated to draw certain conclusions and also to extract some other information. Some other data and information have been collected from the authoritative sources like library of collage, Nepal Rastra Bank, different articles, reports, magazines, websites etc. the articles published by the banks are also the source of information.

3.5 Data Analysis Tools

The collected data has not any meaning unless these data are analyzed finally. Some financial and statistical tools have used to analyze the data to obtain the desired objectives.

A) Financial Tools

Here, we included the following ratios.

a) Total Capital Adequacy Ratio

It takes into account the most important financial risks, e.g. Foreign exchange risk credit and interest risks by assigning weighting & risk to assets and risk weighted asset (RWA). Tier 1 capital, Tier 2 capital, is be calculate the total capital adequacy ratios,

$$CAR = \frac{Tier1 + Tier2\ capital}{RWA}$$

b) Tier I Capital Adequacy Ratio

Tier 1 ratio, core capital adequacy ratio, shows the relationship between the total core capital (internal source) and risk adjusted assets. It is calculated by using the following model,

$$Core\ Capital\ Adequacy\ Ratio = \frac{Tier\ 1\ Capital}{RWA}$$

c) Tier II Capital Adequacy Ratio

This shows the absolute contribution of supplementary capital in capital adequacy. It is used to analyze the supplementary capital adequacy of the banks and determined by using the following model,

$$Supplementary\ Capital\ Adequency\ Ratio = \frac{Tier\ II\ Capital}{RWA}$$

B) Credit Risk Tools

a) Non-Performing Loan to total Loan Ratio

The non-performing loan to total loan ratio indicates the relationship between non-performing loan and total loan. It measures the proportion of non-performing loan in total loan and advances. The ratio is used to analyze the assets quality of the bank and is determined by using the given model,

$$NPL\ to\ Total\ Loan = \frac{Non\ Performing\ Loan}{Total\ Loan\ and\ Advance}$$

b) Loan Loss Provision to Total Loans and Advances Ratio

Each bank has kept the loan loss provision for loan and advance as per the direction of Nepal Rastra Bank. The loan loss provision to total loans and advances measure the aggregate percentage of loan loss provision kept by bank on loans and advances and thus eventually measures the security position. It is calculated as follows,

$$LLP\ to\ Total\ Loans\ and\ Advances = \frac{Loans\ Loss\ Provision}{Total\ Loans\ and\ Advances}$$

C) Statistical Tools

a) Arithmetic mean

Arithmetic Mean of given set of observations is the sum of the observation divided by the number of observation. Simple Arithmetic Mean is used in this study and where necessary for analysis,

We have Mean $(\bar{X}) = \frac{\Sigma X}{n}$

Where $\sum X =$ sum of all values of the observations

n= number of observations

b) Standard Deviation

The standard deviation usually denoted by letter Karl Pearson suggested it as a widely used measure of dispersion and defined as the given observations from their arithmetic mean of a set of value. Standard deviation, in this study has been used to measure the degree of fluctuation of interest rate and other variable required as per the necessity of the analysis,

We have, S. D. $\sigma = \sqrt{\frac{(X\ Z\overline{X})^2}{n}}$

c) Coefficient of Variation (C.V.)

The relative measure of dispersion based on standard deviation is called coefficient of standard deviation. It is denoted by C.V. thus,

We have, C. V. = $\frac{\sigma}{\overline{X}} \times 100\%$

Where σ = Standard Deviation

$\overline{X}$ = mean value of variable

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

In this chapter secondary and primary data are analyze to draw meaningful findings and conclusion.

4.1 Secondary Data Analysis

This part incorporates the analysis of the secondary data that are related in measuring the capital adequacy ratio and in measuring the credit risk of the banks. Further, statistical analysis of the data is also presented under this section.

4.1.1 Core Capital Adequacy Ratio (CCAR)

As per the Unified directive of NRB, the bank has to keep minimum 6% of the risk weighted assets as core capital (Tier 1). The core capital adequacy ratio maintained by NIBL and EBL within the five year period are presented in the below table. **Table 4.1**

Core Capital Adequacy Ratio

Fiscal Year	NRB Min. Req.%	NIBL		EBL	
		CCAR %	Variation%	CCAR%	Variation%
2005/06	6%	7.97	1.97	8.21	2.21
2006/07	6%	7.90	1.90	7.82	1.82
2007/08	6%	7.71	1.71	9.04	3.04
2008/09	6%	8.56	2.56	8.52	2.52
2009/10	6%	8.50	2.50	8.39	2.39
Mean		8.13		8.40	
S.D.		0.34		0.40	
C.V.		4.18		4.75	

Source: - Annual Report of NIBL and EBL

Table 4.1 indicates that in all the fiscal years taken for study, the core capital adequacy ratio as maintained by NIBL has met the benchmark set by NRB for core capital adequacy. This is because the ratio of NIBL is higher than the minimum requirement. During the First three fiscal years the CCAR maintained by NIBL shows a decreasing trend NIBL has kept 7.97%, 7.90%, 7.71%, 8.56% and 8.50% CCAR against the 6% set by the NRB in the fiscal year 2005/06, 2006/07,2007/08, 2008/09 and 2009/10 respectively. In average, NIBL has maintained 8.13 CCAR in the five fiscal years period and the coefficient of variation in such ratio is 4.18% indicating a good degree of uniformity.

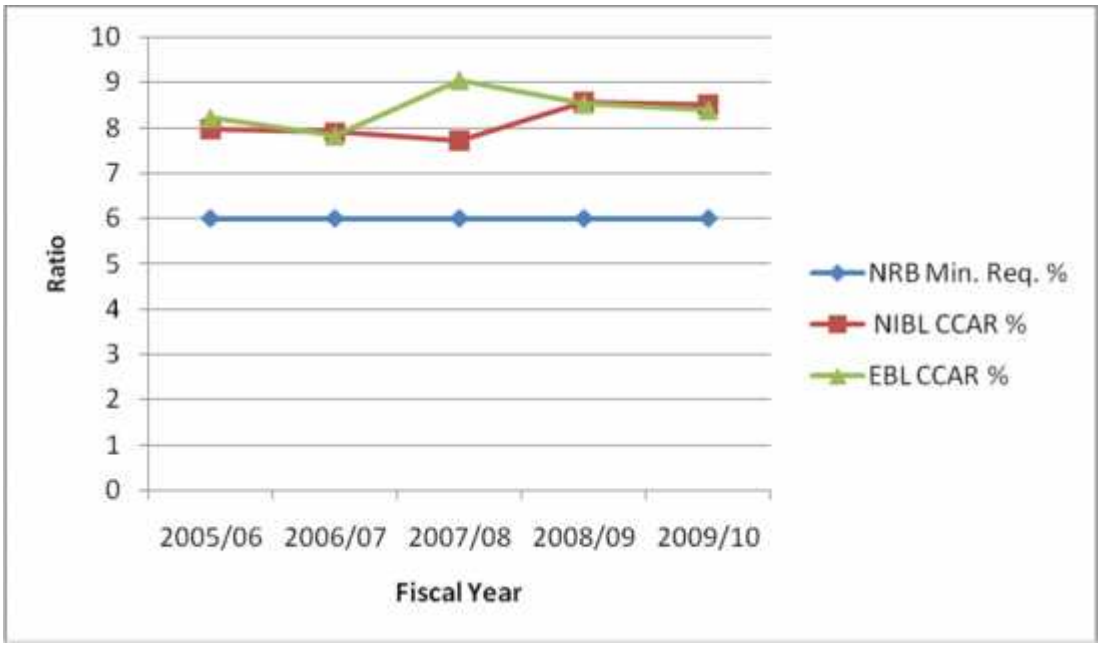
Similarly, the CCAR maintained by EBL has also exceeded the NRB's minimum standard. The ratio kept by EBL in the fiscal year 2005/06 8.21% and from then the ratio is 7.82%, 9.04%,8.52% and 8.39% in the fiscal year 2006/07, 2007/08,2008/09, and 2009/10 respectively against the NRB standard of 6%. The variance of the ratio of EBL is the lowest in fiscal year 2006/07 and the highest in fiscal year 2007/08. However on average the CCAR maintained by EBL is 8.40% and the coefficient of variance in such ratio is 4.75%.

Comparing the two Banks on the basis of average CCAR, It can be concluded that the capital foundation of EBL is little bit adequate than that of NIBL in protecting its depositors and creditors and commensurate of risk associating activities. Since the average CCAR of EBL (8.40%) is higher than that of NIBL (8.13%), In addition looking each individual year, the core capital of EBL is stronger than of NIBL. In general both banks have maintained Tier1 capital

adequacy above the NRB standard, which indicates the adequate application of internal source, i.e. shareholder's equity.

Figure 4.1

Core Capital Adequacy Ratio



the figure shows both banks have been maintaing CAR above NRB standard. EBL has better position than the NIBL.

4.1.1 Supplementary Capital Adequacy Ratio (SCAR)

The ratio reflects proportion of supplementary capital components in total risk adjusted assets and relative contribution in the CAR. NRB regulates supplementary capital ratio by following supplementary capital not exceeding 100% of the core capital for CAR calculation.

Table 4.2 has presented the supplementary capital ratio of the banks. The table has shows that supplementary capital adequacy ratio maintained by NIBL has increased the first three year, i.e. 4.01% in the fiscal year 2005/06 to 4.26% in the fiscal year 2006/07 indicating increase in risk weighted assets and has decreased to 3.57% in the fiscal year 2007/08 to 2.05% in the F.Y. 2009/10. In

average, the supplementary capital adequacy ratio is 3.30% and the coefficient of variance in the ratio is 25%. NIBL is success to maintain the supplementary capital adequacy ratio well below the NRB's norms and thus the variance has ranged from 3.64% in the F.Y. 2006/07 to 6.45% in the F.Y. 2009/10.

Table 4.2

Supplementary Capital Adequacy Ratio (SCAR)

Fiscal Year	NIBL			EBL		
	Max. Req.	SCAR %	Variation%	Max. Req.	SCAR%	Variation%
2005/06	7.97	4.01	3.96	8.21	4.11	4.1
2006/07	7.90	4.26	3.64	7.82	3.38	4.44
2007/08	7.71	3.57	4.14	9.04	2.40	6.64
2008/09	8.56	2.68	5.68	8.52	2.82	5.7
2009/10	8.50	2.05	6.45	8.39	2.38	6.01
Mean		3.3			3	
S.D.		0.83			0.66	
C.V.		25			21.73	

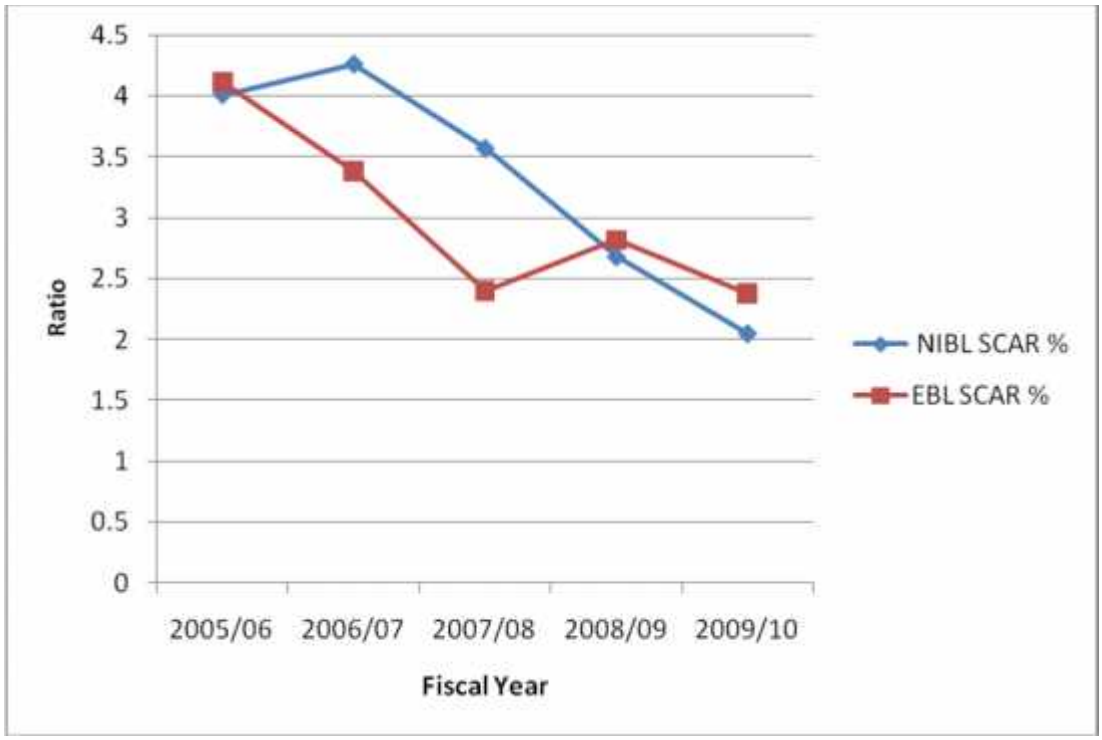
Source: - Annual Report of NIBL and EBL

Likewise, the supplementary capital adequacy ratio of EBL shows a decreasing trend for the first three year. The table has shows that supplementary capital adequacy ratio maintained by EBL is maximum, 4.11% in the F.Y. 2005/06 and minimum, 2.38% in the F.Y.209/10. This supplementary capital ratio shows the risk weighted asset has increased during the period. On average, the supplementary capital adequacy ratio of EBL is 3% in all the F.Y. taken for study. The supplementary capital ratio of EBL is well below the maximum level directed by NRB and thus the variance has ranged from 4.10% in the F.Y. 2005/06 to 6.64% in the F.Y. 2007/08.

Comparing two banks, it can be concluded that the capital base of NIBL is slightly stronger than that of EBL in meeting the risk.

Figure 4.2

Supplementary Capital Adequacy Ratio (SCAR)



The figure shows that the supplementary capital adequacy ratio of NIBL is lower than that of EBL in some study period.

4.1.3 Capital Adequacy Ratio (CAR)

Capital Adequacy ratio above NRB standard, i.e. minimum 12% till F.Y. 2007/08 but after F.Y. 2008/09 the capital adequacy ratio is minimum 10%. *(NRB; 2007: 8)* Indicating adequacy of capital and signifies higher securities to depositors, higher internal source and higher ability to cushion operational and unanticipated losses. The CAR maintained by NIBL and EBL are presented in the table below.

Table 4.3

Capital Adequacy Ratio (CAR)

Fiscal Year	NRB min. Req.%	NIBL		EBL	
		CAR %	Variance%	CAR%	Variance%
2005/06	12%	11.97	-0.03	12.32	0.32
2006/07	12%	12.17	0.17	11.20	-0.80
2007/08	12%	11.28	-0.72	11.44	-0.56
2008/09	10%	11.24	1.24	11.34	1.34
2009/10	10%	10.55	0.55	10.77	0.77
Mean		11.44		11.41	
S.D.		0.58		0.51	
C.V.		5.05		4.44	

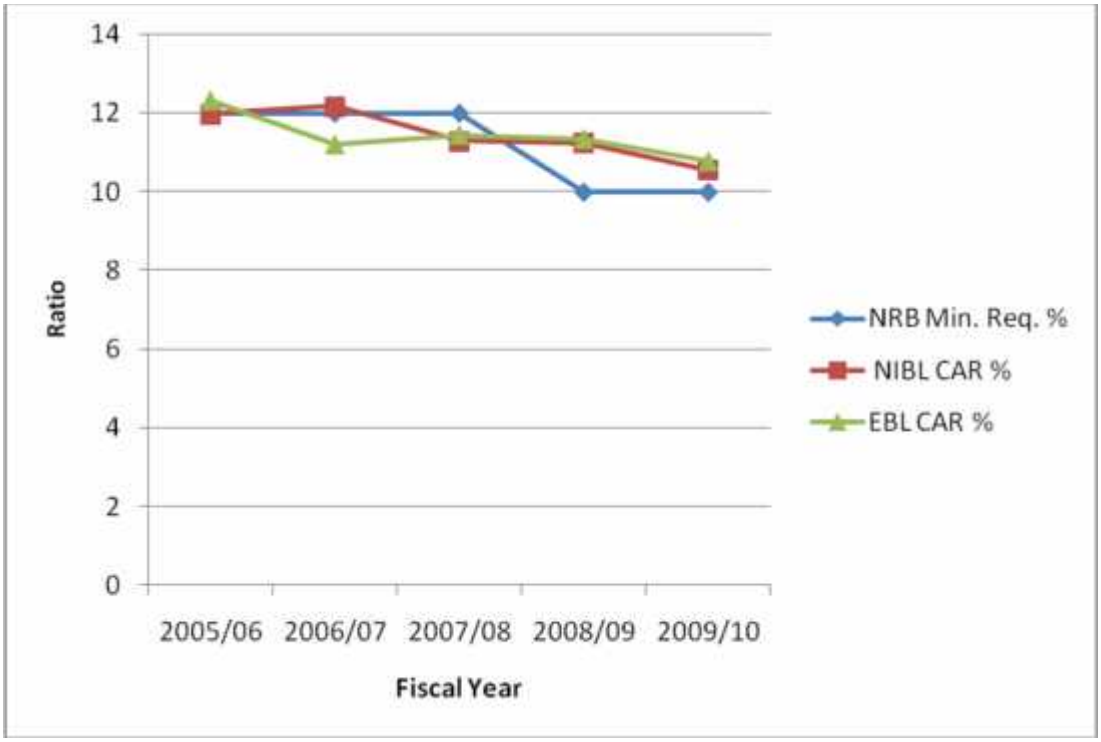
Table 4.3 measures the capital adequacy ratio of the selected banks. As per the Basel II, the minimum capital adequacy ratio is 8%, however NRB has fixed 12% from the F.Y. 2004/05 and 10% from the F.Y. 2008/09. The table shows that the CAR of NIBL has exceeded the minimum requirement of NRB for the three F.Y. i.e. by 0.17% in the F.Y. 2006/07 by 1.24% in the F.Y.2008/09 and 0.55% in the F.Y. 2009/10 and deficits in the two F.Y. 2005/06 by -0.03% and -0.72% in the F.Y. 2007/08. This shows that the CAR maintained by NIBL during five year period has fluctuated. On average, NIBL has maintained 11.44% CAR ratio lower than the NRB's standard within the five year period and the coefficient of variance in the ratio is 5.05% indicating a fair degree of consistency in the ratio.

However, the CAR maintained by EBL shows a fluctuating trend. The Car ratio of EBL is 12.32% in the F.Y.2005/06 and has decreased to 11.20% in the F.Y.2006/07, increased to 11.44% in the F.Y. 2007/08 then, decreased to

11.34% in the F.Y.2008/09 and finally decreased to 10.77%in the F.Y. 2009/10. On comparison with the NRB standard, the CAR ratio indicates that EBL has failed to meet the NRB's minimum standard in the F.Y.2006/07 and 2007/08. In average, EBL has kept 11.41% as CAR and the coefficient of variance in the ratio is 4.44%, indicating consistency in the ratio.

Figure 4.3

Capital Adequacy Ratio (CAR)



The figure shows that the both banks have failed to comply with the NRB's norms in some of the year NIBL's capital base is slightly stronger than that of EBL in meeting the risk and securing the depositors and creditors.

4.1.4 Non Performing Loan (NPL) to Total Loan and Advance (LA)

The Non- performing loan to total loan and advance measures the risk on the total loan and thus represents the quality of the asset the bank is carrying on.

Higher the ratio higher the risk on the assets and vice-versa. The ratio of NIBL and EBL for the five year periods are presented in the table below.

Table 4.4

Non Performing Loan (NPL) to Total Loan and Advance (LA)

Fiscal Year	NIBL			EBL		
	NPL	LA	RATIO	NPL	LA	RATIO
2005/06	272.49	13178.15	2.07	129.23	10136.25	1.27
2006/07	421.97	17769.10	2.37	113.17	14082.69	0.80
2007/08	309.47	27529.30	1.12	127.31	18836.43	0.67
2008/09	213.91	36827.16	0.58	117.98	24469.55	0.48
2009/10	254.03	40948.44	0.62	43.70	28156.39	0.15
Mean			1.35			0.674
S.D.			0.74			0.37
C.V.			54.73			54.84

Source: - Annual Report of NIBL and EBL

Table 4.4 shows the efficiency of bank in controlling non-performing loans/ assets. The non-performing loan of NIBL is found to be in fluctuating and thus has ranged from Rs. 213.91 millions in the F.Y.2008/09 to Rs. 421.97 millions in the F.Y. 2006/07. Although the total loan and advance is found to be in increasing trend, ranging from Rs. 13178.15 millions in the F.Y. 2005/06 to Rs. 40948.44 millions in the F.Y.2009/10. Also except in the F.Y.2006/07 and 2009/10, the ratio of non-performing loan to total loan is in decreasing trend. Thus it can be inferred that NIBL has given special attention in loan recovery and simultaneously minimizing the loan default. The ratio is 2.07%, 2.37%,

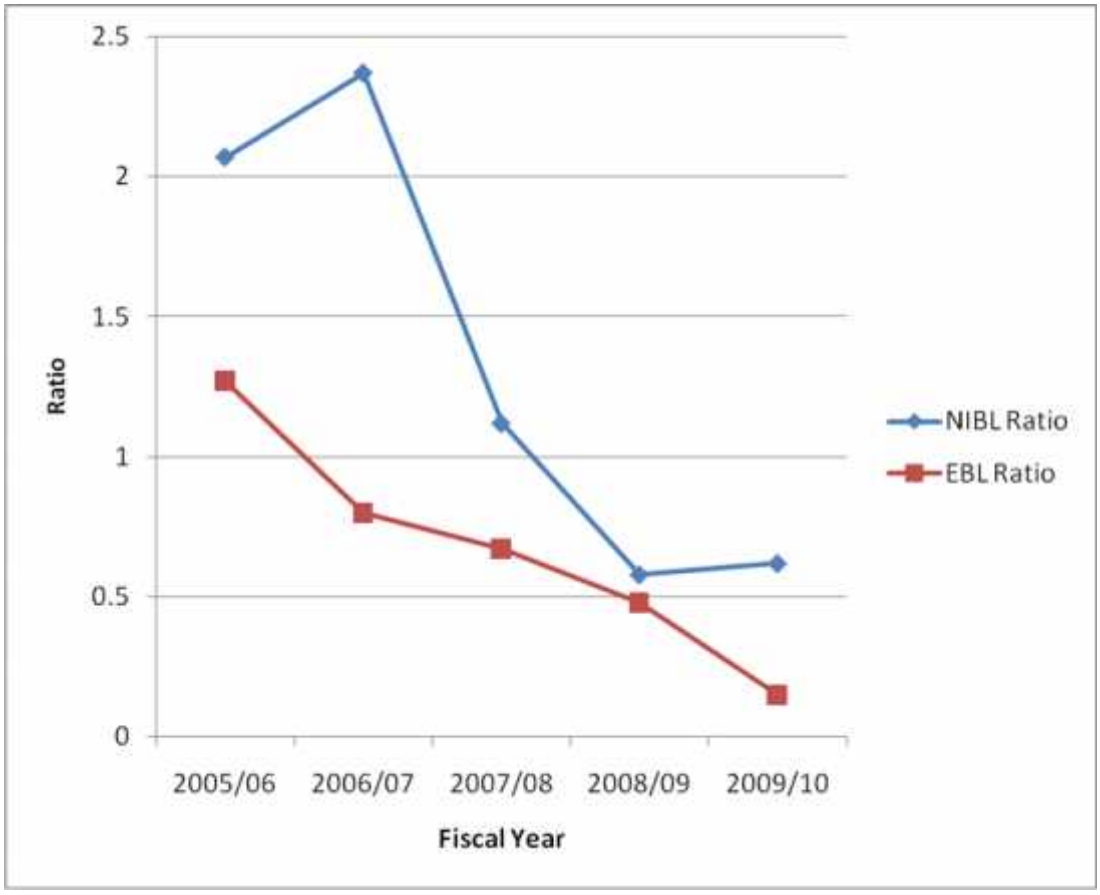
1.12%, 0.58% and 0.62% in the F.Y.2005/06,2006/07,2007/08,2008/09 and 2009/10 respectively. On average the credit risk ratio of NIBL for five year period is 1.35% and the coefficient of variation on such ratio is 54.73% indicating higher inconsistency.

However, the table reveals that the non-performing loan of the EBL is in decreasing trend and these ranges from Rs. 129.23 millions to Rs 43.90 millions in the F.Y. 2005/06 and 2009/10 respectively. The loan and advance is in increasing trend ranging from Rs. 10136.25 millions in the F.Y. 2005/06 to Rs. 28156.39 millions in the F.Y.2009/10. However the ratio of non-performing loan to total loan and advance of the bank is in decreasing trend. The ratio is 1.27% in the F.Y.2005/06 which decreasing the ratio 0.15%inthe F.Y.2009/10. It indicates that the growth rate of loan and advances is far higher than the decreasing rate of non-performing loan in period of five years. On average the credit risk on total loan and advance is 0.674% and the coefficient of variation on such risk is 54.84% it also indicating higher inconsistency.

Consequently, it can be concluded that the two banks have satisfactorily decreased the non-performing assets ratio and thus indicates of having sound loan management policy.

Figure 4.4

Non Performing Loan (NPL) to Total Loan and Advance (LA)



The figure shows that the NIBL having fluctuate trend, is superior to EBL in controlling the non-performing assets.

4.1.5 Loan Loss Provision (LLP) to Total Loan and Advance (LA)

The non-performing asset is considered much risky than the performing loan and finally affects the financial performance of the company. Thus to remain on a safe side, each bank has to keep more portions of non-performing assets. Such as 25% of sub-standard loan, 50% of doubtful loan and 1005 of loss loan as provision. The loan loss provisions to non-performing assets measure the aggregate representation of loan provision on non-performing assets.

Table 4.5

Loan Loss Provision (LLP) to Total Loan and Advance (LA)

Fiscal Year	NIBL			EBL		
	LLP	LA	RATIO	LLP	LA	RATIO
2005/06	401.94	13178.15	3.05	334.94	10136.25	3.30
2006/07	482.67	17769.10	2.72	418.60	14082.69	2.97
2007/08	532.65	27529.30	1.83	497.34	18836.43	2.64
2008/09	585.95	36827.16	1.59	584.88	24469.55	2.39
2009/10	630.13	40948.44	1.53	600.04	28156.39	2.13
Mean			2.16			2.68
S.D.			0.61			0.41
C.V.			28.33			15.40

Source: - Annual Report of NIBL and EBL

Table 4.5 shows the loss provision made by the banks against the loan and advance disbursed. The table shows that the loan loss provision kept by NIBL is in increasing trend and thus ranged from Rs.401.94 millions in the F.Y. 2005/06 to Rs. 630.13 millions in the F.Y2009/10. Further the loan loss provision to total loan and advance has followed decreasing trend and the highest ratio is 3.05% in the F.Y2005/06 and lowest ratio is 1.53% in the F.Y2009/10. The decreasing trend of loan loss provision ratio indicates that the loan and advance includes high portion of performing loan rather than non-performing loans as result, lower ratio has been maintained. On average 2.16% of the total loan and advances has been kept as provision for loan default.

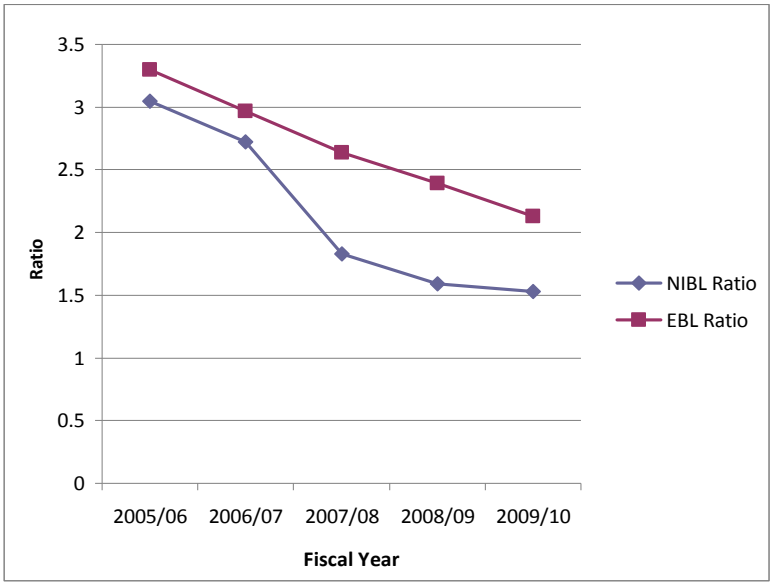
Similarly, the loss provision amount of EBL shows an in increasing trend and thus ranges from Rs. 334.94 millions in the F.Y. 2005/06 to Rs. 600.04 millions in the F.Y.2009/10. The ratio of loan loss provision to total loan of EBL is

3.30%, 2.97%, 2.64%, 2.39% and 2.13% in the F.Y. 2005/06, 2006/07, 2007/08, 2008/09 and 2009/10 respectively. In average, EBL has kept 2.68% of total loan and advance as loan loss provision.

Comparing two banks, it can be concluded that the NIBL requires making more provisions for low loan loss against total loan than EBL.

Figure 4.5

Loan Loss Provision (LLP) to Total Loan and Advance (LA)



The figure shows that the credit risk of NIBL is lower than that of EBL and the average loan loss provision to total loan of NIBL is lower than that of EBL.

4.2 Primary Data Analysis

With the objective of finding out the views of banking personnel on the capital adequacy ratio and the risk confronting to the bank, the primary data analysis have been done. For primary data collection, a questionnaire containing 9 questions have been distributed to the 10 employees of concerned banks and requested them to express their opinions.

4.2.1 Appropriate Ratio for CCAR

As per the NRB's directives, the core capital adequacy ratio of each bank should be minimum 6%. To examine whether such rate is favorable, the respondents are asked to express their views.

Table 4.6

Appropriate Ratio for CCAR

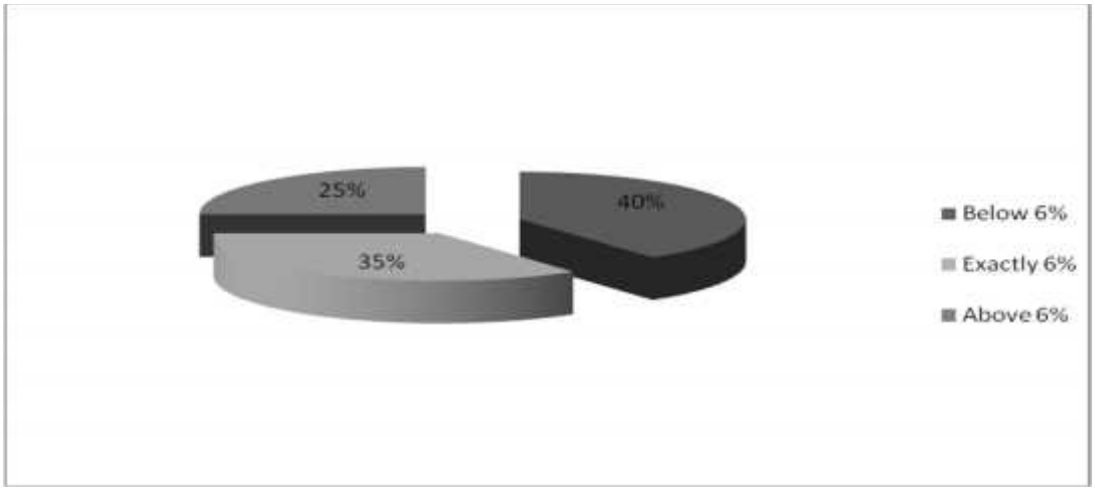
Responses	NIBL		EBL		Total	
	No.	%	No.	%	No.	%
Below 6%	3	30	5	50	8	40
Exactly 6%	3	30	4	40	7	35
Above 6%	4	40	1	10	5	25
Total	10	100	10	100	20	100

Source: - Field Survey, 2011

Table 4.6 presents that 30% of the respondents from NIBL (3 out of 10), and 50% of the respondents from EBL (5out of 10), and 40% of the total respondents (8 out of 20) have stated the core capital adequacy ratio should be below 6%. Similarly, 30% of the respondents from NIBL (3 out of 10), 40% of the respondents from EBL (4 out of 10) and 35% of the total respondents (7out of 20) have affirmed that the ratio should be exactly 6%, which is now on the practice. Finally, 40% of the respondents from NIBL (4 out of 10), 20% of the respondents from EBL, (1 out of 10), and 25% of the total respondents have said that the rate should be above 6%. Rather mixed responses have been obtained on this question. However, accepting the views of major respondents, it can be concluded that the core capital adequacy ratio should be below 6% to have optimal capital base.

Figure 4.6

Appropriate Ratio for CCAR



4.2.2 Appropriate Ratio for CAR

As per the Basel II, the minimum capital requirement should be 8%, whereas NRB have adopted 12% till 2007/08 and 10% for the fiscal year 2008/09. Thus, to determine which CAR would be appropriate in the Nepal's context, the respondents are asked on this matter.

Table 4.7

Appropriate Ratio for CAR

Responses	NIBL		EBL		Total	
	No.	%	No.	%	No.	%
Exactly 8%	1	10	2	20	3	15
Exactly 10%	6	60	6	60	12	60
Exactly 12%	3	30	2	20	5	25
Total	10	100	10	100	20	100

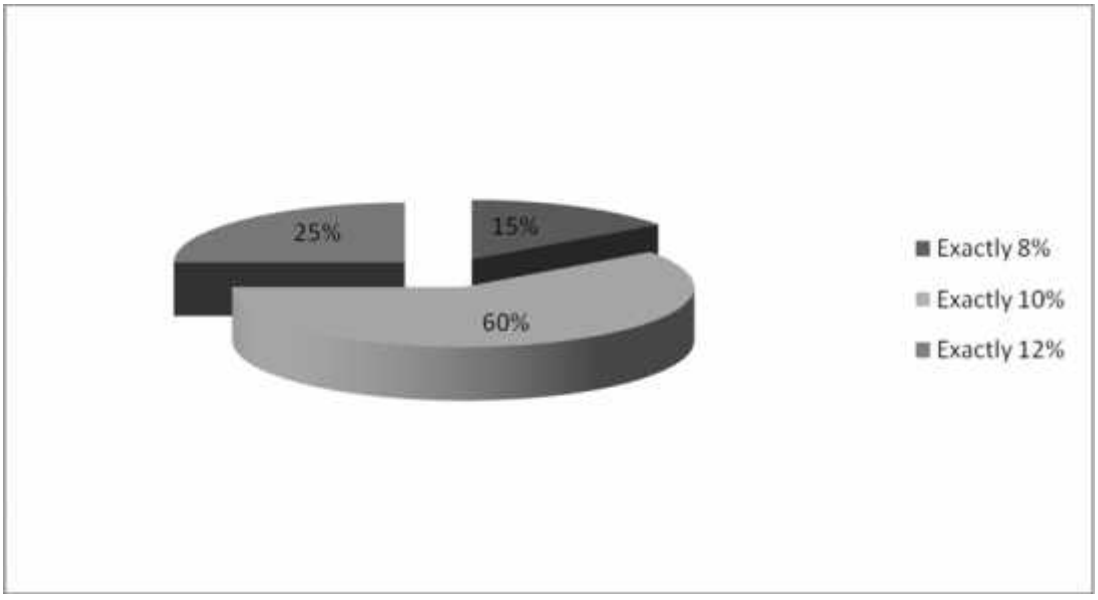
Source: - Field Survey, 2011

As seen in table 4.7, the 60% for the NIBL's respondents (6 out of 10) have said that the CAR should be 10% as adopted by NRB for the fiscal year 2008/09, while 305 (3 out of 10) of them have sated the previous practice of 12% as appropriate rate and 10% (1out of 10) of the respondent of NIBL affirmed 8% as directed by BASEL II. Similarly, 60% of the respondents of EBL (6out of 10) have said that the CAR should be 10%, 20% of them have said that the ratio should be 12% and only 20% have said that the ratio should be 8%. Hence, in each bank, the majority of the respondents have favored the existing, not the previous, CAR of NRB to be the appropriate, and the least have favored the ratio of BASEL II.

On overall, 60% of the total respondents have favored the existing CAR ratio of NRB effective from the fiscal year 2008/09, 25% of them have supported the previous CAR ratio adopted by NRB, and only 15% have said to adopt the BASEL II minimum requirement.

Figure 4.7

Appropriate Ratio for CAR



4.2.3 Main Factor to be ensured by Capital Adequacy Framework

The capital adequacy framework should be adopted to have sound capital management and to strengthen the financial system of the bank. Hence, to investigate what should be the main factor that should be most ensured by capital adequacy framework, the respondents are asked on this issue.

Table 4.8

Main Factor to be ensured by Capital Adequacy Framework

Responses	NIBL		EBL		Total	
	No.	%	No.	%	No.	%
Protect depositor & creditor	6	60	5	50	11	55
Commensurate risk	4	40	4	40	8	40
Promote public confidence	0	0	1	10	1	5
Total	10	100	10	100	20	100

Source: - Field Survey, 2011

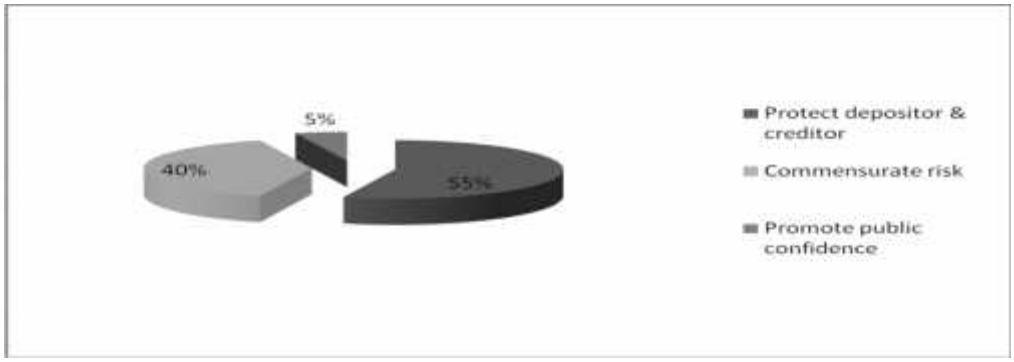
Table 4.8 indicates that the majority of the respondents from NIBL, 60% (6out of 10) have stated that the capital adequacy framework should ensure the protection of depositor and creditor most, while 50% of the respondents from EBL, (5 out of 10), and 55% of the total respondents, (11 out of 20), have supported this view. Similarly, 40% of the respondents from NIBL, (4 out of 10), 40% of the respondents from EBL, (4 out of 10), and 40% out of the total respondents, (8 out of 20), have affirmed that the capital adequacy framework should ensure commensuration with the risk confronting with the financial management of the bank.

Finally, none of the respondents from NIBL, (0 out of 10), 10% of the respondents from EBL, (1 out of 10), 5% of the total respondents, (1 out of 20), have suggested that the capital adequacy framework should ensure promotion of public confidence in the banking system most. Hence, on the basis of the

majority, it can be concluded that the capital adequacy framework should be designed in protecting the depositor and creditors interest most.

Figure 4.8

Main Factor to be Ensured by Capital Adequacy Framework



4.2.4 Coverage of Capital Adequacy Ratio

Addressing the risk that debilities the financial status of the bank is the other reason for having sound capital adequacy ratio. To examine the kind of risk and then effects should the capital adequacy ratio address most, respondents were asked to express their opinions. The responses obtained from them are presented in the table below.

Table 4.9

Coverage of Capital Adequacy Ratio

Responses	NIBL		EBL		Total	
	No.	%	No.	%	No.	%
Credit concentration risk	6	60	4	40	10	50
Business & strategic risk	3	30	3	30	6	30
Business cycle effects	1	10	3	30	4	20
Total	10	100	10	100	20	100

Source: - Field Survey, 2011

The table depicts that 60% of the respondents from NIBL, (6 out of 10), have stated that the capital adequacy ratio should cover the risk that is related to the credit management. Similarly, 30% of the respondents from NIBL have opinioned that the business and strategic risk should be addressed by the CAR at first. Likewise, (1out of 10), 10% of the respondents from NIBL have stated that the risk that affects the business cycle of the banks should be covered by CAR.

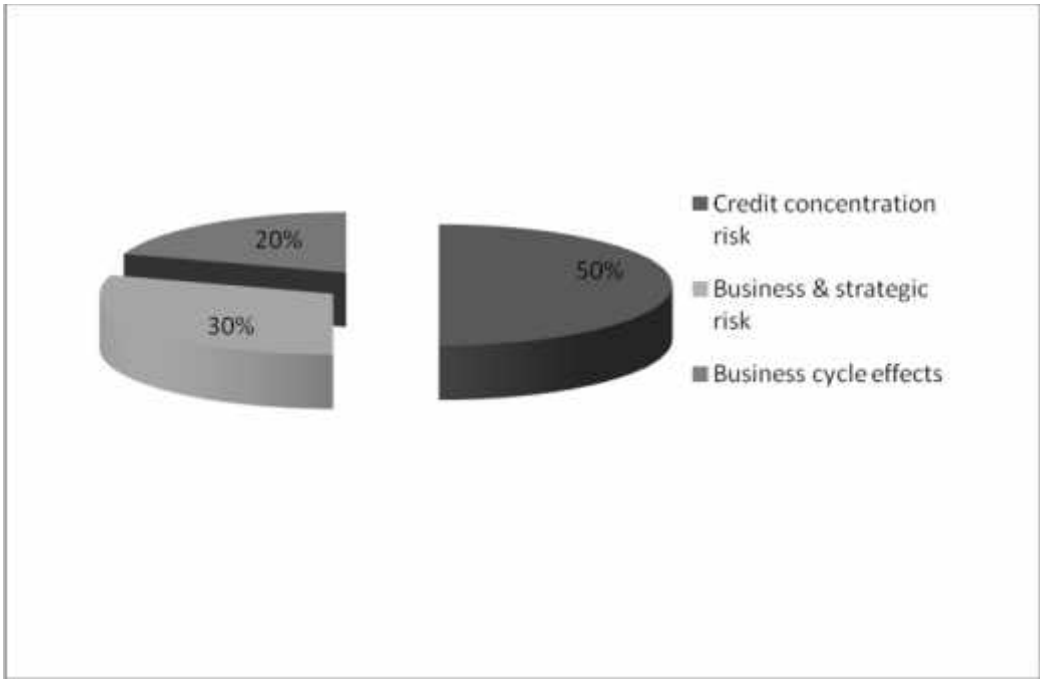
Likewise, in EBL, 4 out of 10, i.e. 40 % of the respondents have said that the credit concentration risk should be covered at first by the CAR. Also, 3 out of 10, i.e. 30% of the respondents have said that the business and strategic risk should be covered, whereas 30% of the respondents have said that the business cycle effects should be covered.

However, on average, 50%of the total respondents, (10 out of 20), have affirmed that the addressing of credit concentration risk should be given most priority by capital adequacy ratio. Similarly, 30% of the total respondents have said that the business and strategic risk should be addressed at first, and 30% of the total respondents have opinioned that the business cycle effects should be

covered most. Considering the overall majority, and the majority of each bank individually, it can be concluded that the capital adequacy ratio should cover mostly the risk associated with credit management.

Figure 4.9

Coverage of Capital Adequacy Ratio



4.2.5 Crucial Component Internal Capital Adequacy Assessment Process

To ensure long term safety and financial soundness in the bank, the internal capital adequacy assessment process is consists of five major components. For further examination on which of the components is crucial, the employees are asked on this matter. The responses that are obtained from them are presented in the table below.

Table 4.10

Crucial Component Internal Capital Adequacy Assessment Process

Responses	NIBL		EBL		Total	
	No.	%	No.	%	No.	%
Board & Senior Management Oversight	0	0	1	10	1	5
Sound Capital Assessment	2	20	3	30	5	25
Comprehensive Assessment	4	40	3	30	7	35
Monitoring & Reporting	2	20	1	10	3	15
Internal Control Review	2	20	2	20	4	20
Total	10	100	10	100	20	100

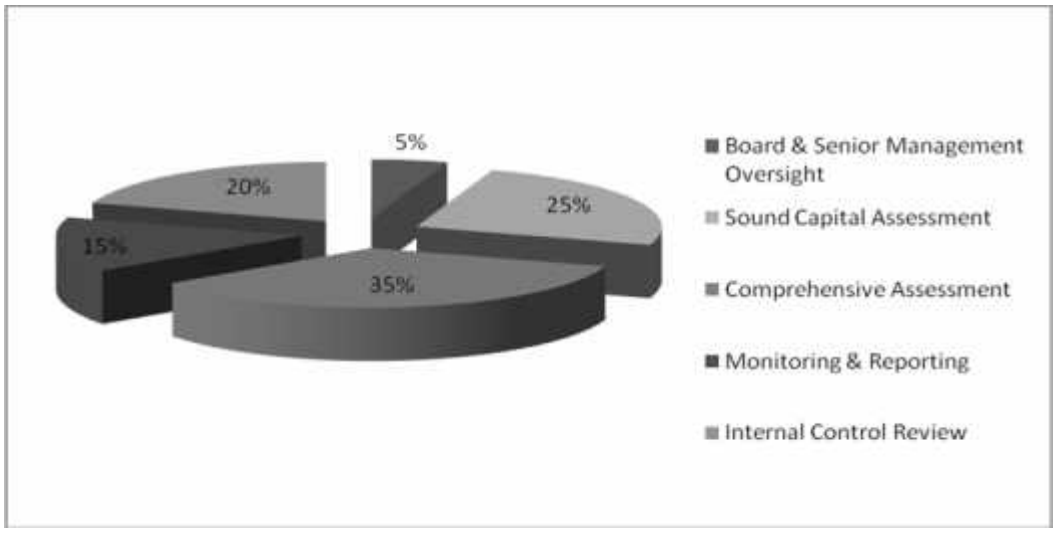
Source: - Field Survey, 2011

Table 4.10 shows that none of the employees of NIBL, 10% of the employees of EBL, and 5% of the total employees of both banks have stated that board and senior management oversight is the most key component of the internal capital of adequacy assessment process. However, 20% of the employees from NIBL, 30% of the employees from EBL, and 25% of the total employees have said that sound capital assessment in the main component of internal capital adequacy assessment process. Likewise, 40% of the employees from NIBL, 30% of the employees from EBL, and 35% of the total employees have stated that comprehensive assessment of risk, which incorporates credit risk, operational risk, market risk, liquidity risk and other risks is the most crucial component of internal capital adequacy assessment process.

Similarly, 20% of the employees from NIBL, 10% of the employees from EBL, and 15% of the total employees have pointed out monitoring and reporting as the main component of internal capital Assessment Adequacy process (ICAAP). Finally, 20% of the employees from NIBL, 20 of the employees from EBL and 20% of the total employees have pointed out internal control review as the main component of ICAAP. Considering the overall majority, it can be concluded that the comprehensive assessment of risk weights most high in the internal capital adequacy assessment process.

Figure 4.10

Crucial Component Internal Capital Adequacy Assessment Process



4.2.6 Impact of Non Performing Loan

Increase in non-performing loan jeopardizes the sustainability of the bank. Thus, it is essential to know the impact of non-performing loan on the financial health. Hence, the respondents are asked whether the NPA really inversely affects the financial soundness. The responses obtained from them are presented in the table below.

Table 4.11

Impact of Non Performing Loan

Responses	NIBL		EBL		Total	
	No.	%	No.	%	No.	%
Yes	7	70	8	80	15	75
No	0	0	1	10	1	5
Don't know	3	30	1	10	4	20
Total	10	100	10	100	20	100

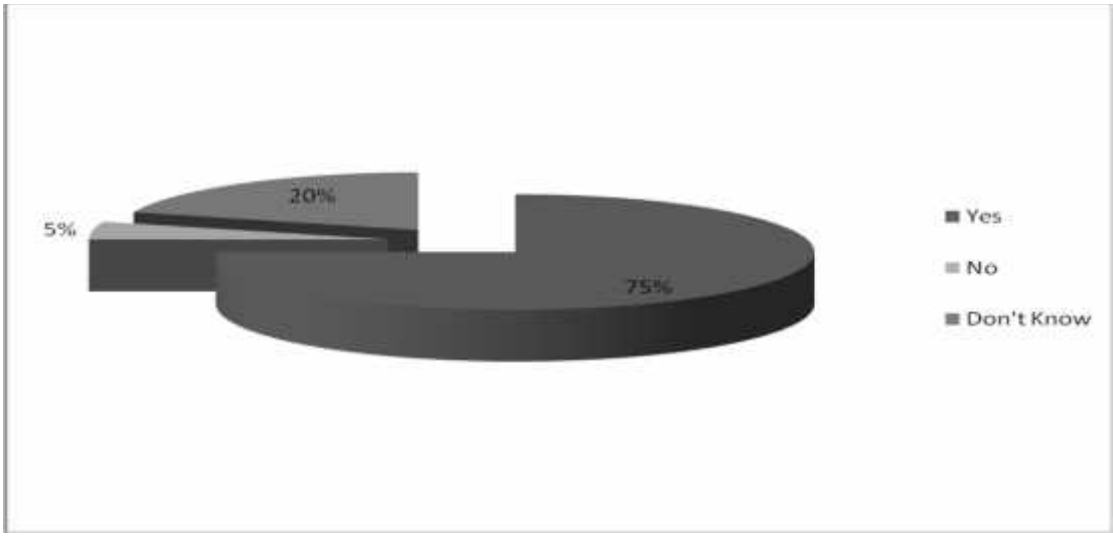
Source: - Field Survey, 2011

The above table shows that the majority (70%) of the respondents of NIBL have said that the NPA affects the financial health of the bank, while 30% have said that they have no idea. Similarly, 80% of the respondents of EBL have said that NPA do affects the financial soundness, and 10% of the respondents have denied, remaining 10% remained have said that they have no idea. Thus, on overall 75% of the total respondents(15 out of 20) have said that NPA inversely affects the financial health, 5% (1 out of 20) have stated that NPA does not have significant role to inversely affect on financial soundness and 20% of the respondents (4 out of 20) have no ideas on this.

On the basis of above responses, it can be considered that the inverse effect of NPA in the financial growth is widespread in Nepalese commercial banks. Thus, both NRB and commercial banks should make appropriate policy to reduce the portion of NPA in order to ensure a good assets quality.

Figure 4.11

Impact of Non Performing Loan



4.2.7 Best Method to Resolve NPA

Since NPA affects the financial growth of a bank, it is essential to know the resolving method of NPA. Thus, the respondents are asked the best method they think to reduce the problem of NPA and increase the assets quality of the bank. The responses obtained from them are presented in the below table.

Table 4.12

Best Method to Resolve NPA

Responses	NIBL		EBL		Total	
	No.	%	No.	%	No.	%
Strict Recovery Policy	3	30	4	40	7	35
Monitoring	4	40	5	50	9	45
New Rules & Regulations	1	10	0	0	1	5
Rebate for timely payment	2	20	1	10	3	15
Total	10	100	10	100	20	100

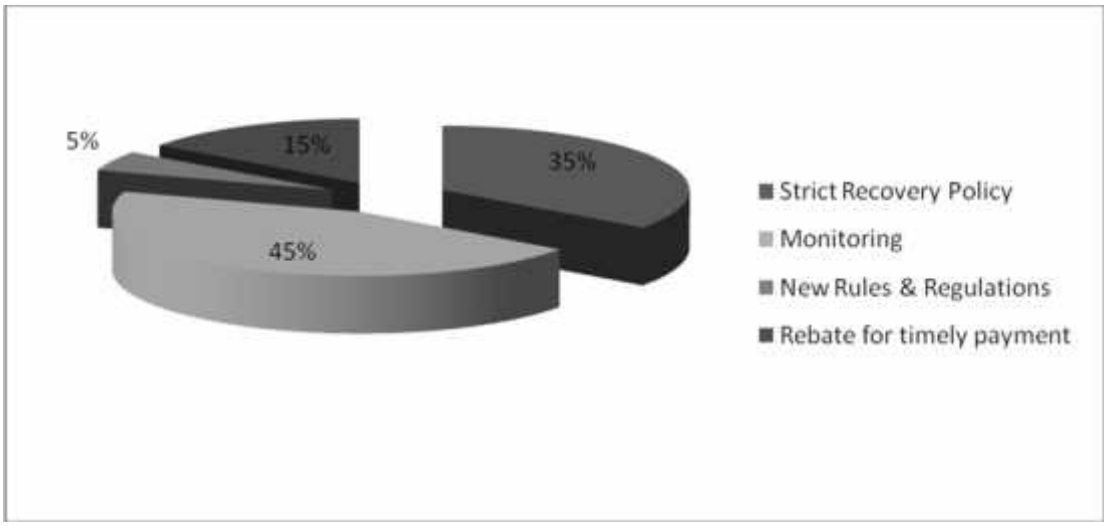
Source: - Field Survey, 2011

The above table shows that 40% of the respondents from NIBL have said monitoring the activities of the borrower is the best method for resolving the problem of NPA. Similarly, 30% have stated strict recovery policy, 20% have said provision of rebate for timely payment and 10% have affirmed formulation of new rule and regulation regarding NPA is the best method for resolving the NPA's problem.

Likewise, 50%of the respondents of EBL have said monitoring, 40% have said strict recovery policy and 10% have said rebate for timely payment as the best method for resolving NPA problem. Further, the majority of the respondents, 45% have also pointed out monitoring as the best method. Thus, looking the responses of each bank, it can be concluded that monitoring the activities of the borrower is the appropriate method for controlling the adverse effect of NPA. Besides this method, the adoption of strict recovery policy can also be important.

Figure 4.12

Best Method to Resolve NPA



4.2.8 Sufficiency of Loan Loss Provision

As per the NRB directives, each bank has to maintain 1% of the performing loan, 25%of the sub standard loan, 50% of the doubtful loan and 100% of the loss loan as loan loss provision. To examine whether such loan loss provision is sufficient to meet the credit risk, the respondents are asked to suggest their views. The responses that are obtained through questionnaire are presented in the table.

Table 4.13

Sufficiency of Loan Loss Provision

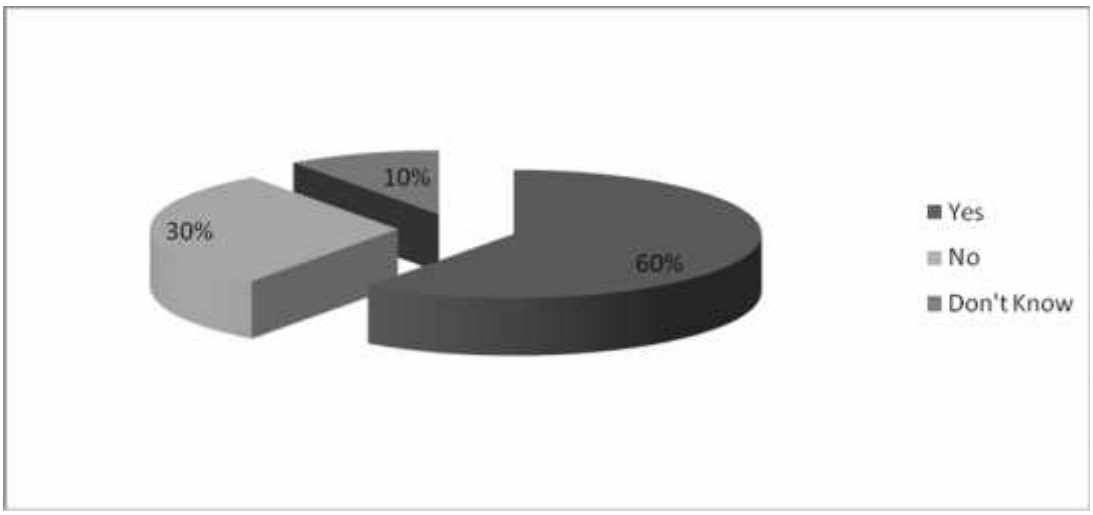
Responses	NIBL		EBL		Total	
	No.	%	No.	%	No.	%
Yes	7	70	5	50	12	60
No	2	20	4	40	6	30
Don't know	1	10	1	10	2	10
Total	10	100	10	100	20	100

Source: - Field Survey, 2011

The table shows that 70% of the respondents from NIBL, (7 out of 10), 50% of the respondents from NIBL, (5 out of 10), and 60% of the total respondents, (12 out of 20), have pointed that the existing loan loss provision is sufficient to meet the credit risk. Similarly, 20%of the respondents from NIBL, 40% of the respondents from EBL, and 30% of the total respondents, have stated that the existing loan loss provision is not sufficient to meet the credit risk. However, 10% of the respondents from NIBL, (1 out of 10), and 10% of the total respondents, (2 out of 20), have said that they have no idea on this issue and thus have remained indifferent. Eventually, considering the overall majority, it can be concluded that the existing loan loss provision as directed by NRB is sufficient to address the credit risk.

Figure 4.13

Sufficiency of Loan Loss Provision



4.2.9 Follow up Process

To examine the best time within which the bank should follow up for recovery after due date, the respondents have been asked on this regard. The responses obtained from them have been presented in the table.

Table 4.14

Follow up Process

Responses	NIBL		EBL		Total	
	No.	%	No.	%	No.	%
Within a week	0	0	3	30	3	15
Within two weeks	8	80	5	50	13	65
Within a month	2	20	1	10	3	15
After one month	0	0	1	10	1	5
Total	10	100	10	100	20	100

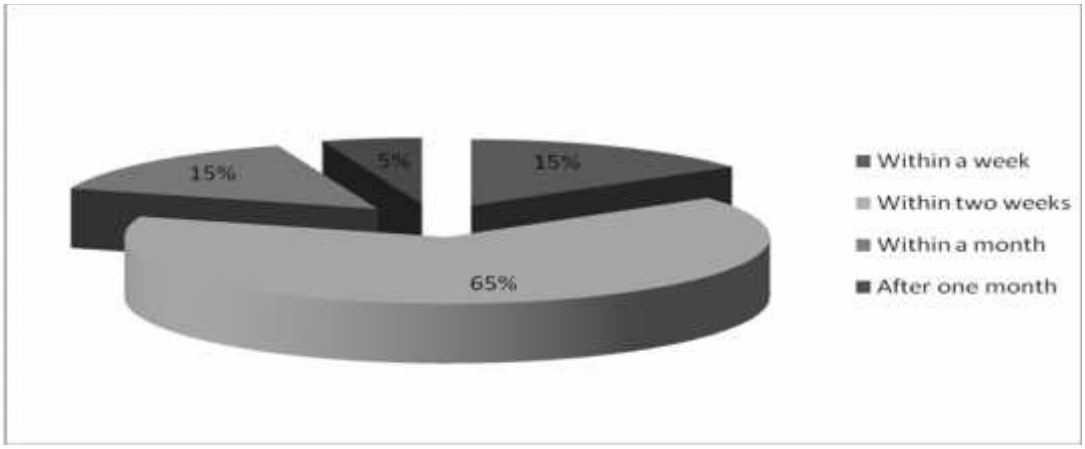
Source: - Field Survey, 2011

The table shows that 65% of the respondents, (13 out of 20), are in the view that banks should follow up for the recovery within two weeks after due date. Similarly, 15% of the respondents, (3 out of 20), have opinioned that within a month after due date will be the best time that the bank should start for recovery. Also, 15% of the respondents, (3 out of 20) and 5% of the respondents, (1 out of 20), have opinioned that within a week and after one month onward respectively will be that best time for follow up.

Looking each category, the majority of NIBL's respondents, (8 out of 10), and the majority of EBL respondents, (5 out of 10),want it to be within two weeks. Eventually, considering the overall majority and the majority of each bank, it can be concluded that within two weeks after the matured date of loan will be the best time for bank to follow up for recovery process.

Figure 4.14

Follow up Process



4.3 Major findings of the study

On the basis of the data analysis, both primary and secondary data, the following major findings have been drawn.

Findings from primary data analysis

- Majority of the respondents, 40% i.e. 8 out of 20 respondents has shown that the existing rate on core capital adequacy ratio i.e. 6% as directed by NRB should be reduced for its appropriateness.
- The majority of the respondents, 60% have strongly supported the existing capital adequacy rate, which has effective from the F.Y. 2008/09 by NRB.
- More than half, 55% of the respondents have affirmed that the capital adequacy framework should more focus on ensuring the protection of depositors and creditors.
- 50%of the total respondents, (10 out of 20), have affirmed that the addressing of credit concentration risk should be given most priority by capital adequacy ratio.
- 35% of the total respondents have stated that comprehensive assessment of risk, which incorporates credit risk, operational risk, market risk, liquidity risk and other risks is the most crucial component of internal capital adequacy assessment process.
- Likewise, 75% of the total respondents (15 out of 20) have asserted that NPA inversely affects the financial health of the bank.
- Majority of the respondents, 45% have asserted that effective monitoring of the borrower activities is the best method for resolving the problem of NPA.
- 60% of the total respondents, (12 out of 20), have pointed that the existing loan loss provision is sufficient to meet the credit risk.

- 65% of the respondent suggested that within two weeks after due date is most appropriate follow up for the recovery process.

Findings from the secondary data Analysis

- The average core capital adequacy ratio maintained by NIBL is 8.135 and that of EBL is 8.40% within the five years against the NRB's standard 6%.

- Similarly, the average supplementary capital adequacy ratio of NIBL is 3.3% and that of EBL is 3%

- Likewise, the average capital adequacy ratio of NIBL within the five year is 11.44% and that of EBL is 11.41% against the NRB's standard is 12% till F.Y. 2007/08 and then after 10%.

- The average non-performing loan to total loan and advance on NIBL is 1.35% and that of EBL is 0.674%.

- The loan loss provision to total loan and advance of NIBL is 2.16% while that of EBL is 2.68%. Indicating higher credit risk in EBL than in NIBL.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

In the course of financial liberalization, banks may encounter stiff competition and incur greater exposure to various risks. Many countries have experienced significant problems following financial liberalization, particularly where prudential supervision failed to adequately deal with increased risks. Thus, the timely implementation of prudential supervision is essential to maintain the systemic health of the financial industry as well as the sound management of individual financial institutions. Prudential policies can limit the risk exposure of the financial industry, to make sure individual institutions are managed properly.

Controlling credit risk through implementation of a minimum capital adequacy standard has been a key prudential supervisory measure. The direction, size and composition of banks portfolios or capital in response to binding capital requirements are crucial in formulating prudential supervision policies and promoting macroeconomic stability.

The rules on capital adequacy –the regulatory capital – express legislators' opinion of how much capital (capital base) a credit institution, such as a bank, must have in relation to the size of its risk taking expressed in the form of risk weighted assets. The legal minimum requirement stipulates that the capital base must correspond to at least 8% of the risk weighted assets. However, NRB has directed 12% capital adequacy rate till 2007/08, and effective from 2008/09 the rate has been reduced to 10%.

To examine whether the banks are implementing the direction of NRB related to the capital adequacy framework, this study has been conducted. Further, the

study tries to examine whether the ratio is sufficient for covering the credit risk and to analyze the position of non –performing loan. For the study, only two banks, namely Nepal Investment Bank Limited and Everest Bank Limited have been selected. The study incorporates both the primary data and secondary data analysis to drive the true picture of capital adequacy framework.

5.2 Conclusion

1. On the basis of secondary data analysis, it can be concluded that the NIBL has sound capital management than EBL does, since the core capital adequacy ratio of NIBL is greater than that of EBL. However, the core capital adequacy ratios of both of the banks are above the minimum requirement of NRB's standard. And the supplementary capital adequacy ratio of NIBL is greater than that of EBL. Though, both the banks are won't able to comply with the capital adequacy ratios directed by NRB in most of the year, NIBL is superior to EBL in meeting the NRB's standard to a large extent. NIBL's capital base is slightly stronger than that of EBL in meeting the risk and securing the depositor and creditors.

2. In addition, the assets of NIBL is most confronting to the credit risk than that of EBL, since the non-performing loan to total loan and advance of NIBL is higher than that of EBL, it can be concluded that the two banks have satisfactorily decreased the non-performing assets ratio indicating the fact that they have sound loan management policy.

3.However, the role of both the banks increasing the industry's credit risk is significantly low. Further, the loan loss provision to total loan and advances indicates that EBL has higher risk than NIBL. it can be concluded that the NIBL require to provision low loan loss against total loan more than EBL. Since the credit risk of NIBL is lower than that of EBL and the average loan loss provision to total loan of NIBL is lower than that of EBL.

From the primary data analysis, it can be inferred that the banks' respondents having the opinions that NRB should deducted ratio for core capital adequacy ratio. The majority respondents have strongly supported that the existing capital adequacy ratio as well as. Also it can be concluded that the CAR should mainly focus on ensuring the protection of depositors and creditors.

4.The capital adequacy ratio should cover the credit concentration risk mainly. It also concluded that comprehensive assessment of risk is the most crucial component of internal capital adequacy assessment process. The impact of non-performing loan in financial health of bank is more than evil. However, it can be inferred that by the monitoring the activities of the borrower, the loan loss can be made at par with the loan loss provision as directed by NRB. And, follow up within every two weeks after due date can somewhat lower the devastating effect of non-performing loan.

5.3 Recommendations

On the basis of the major findings drawn and the conclusion arrived, the following recommendations can be provided to the banks for having sound capital adequacy framework;

- It has been observed that the capital adequacy ratio of NIBL and EBL has not met the standard rate as directed by NRB in some of the year. So it is very essential for these banks to meet the minimum requirement of the NRB.

- Although the capital adequacy ratio as directed by NRB is 12% in past years and 10% from the F.Y. 2008/09. Each bank should have its effective internal capital adequacy assessment department and should maintain the ratio in such a way that it addresses the risks confronting the bank.

- Both of the banks need to have sound credit management policies to minimize the credit risk.

- For effective implementation of capital adequacy framework, both banks need to have mainly the comprehensive risk management policy along with implementation of BASEL core principal and management of corporate risk as prerequisites.

- Both NIBL and EBL should try to reduce the impact of non-performing loan on the financial health by having quick recovery policy, and monitoring the activities of the borrower.

- NRB needs to be practical while issuing the directives. NRB should not make the rules taking into account only the International standard. To combat these problems the directives should be issued after having proper researches and consultations with different banking experts. They become irrelevant if they are not implemented.

BIBLIOGRAPHY

Bailey, R (2005). Basel II and Department Countries: Understanding the Implication, *Journal of Accounting and Finance*. Vol. XIV (11): 05- 71.

Basel Committee on Banking Supervision (2000). The New Capital Accord Consultative Document, *Bank for International settlements. Basel Committee*. XIV (3):22

Bauer,Wolfagang & Marc Ryser (2002). Risk Management Strategies for Banks. *Journal of Banking & Finance*: 331-352.

Beston, George J. (2005). Regulating Financial Markets; A Critique and some proposals. *Journal of Economics and Financial*. VOL. XI (10): 36-44.

Bhandari, Krishna(2006). *The Financial Performance of Himalayan Bank Limited, in the Framework of CAMEL*. An Unpublished Master Degree Thesis Submitted to Faculty of Management, Tribhuvan University.

Billet, Mathew, Garfinkel, Jon A. and O'Neal, Edward (2000).The cost of the market vs. Regulatory Discipline in banking. *Journal of financial economics*. VOL. XXVI (15):333-358.

Bario, Claude (2003). Towards a Macro prudential Framework for Financial supervision and regulation. *Journal of International Banking. Vol.* II (5):128-181.

Dowd, Kevin (2008). Does Asymmetric Information Justify Bank Capital Adequacy Regulation? *Cayo Journal*. Vol. XIX (17):21.

EBL (F.Y. 2005/06-2009/10). *Annual Reports*, Kathmandu; Everest Bank Limited.

Ferri, G., Liu, L and Majnoni, G. (2000). How the proposed Basel Guidelines on Rating-Agency Assessments Would Affect Developing Countries. *Policy Research Working Paper*. Vol. XIV (5):55-81.

Gjerde, Oystein & Semmen , Kristian (2000). Risk-Based Capital Requirements and Bank Portfolio Risk. *Journal of Banking and Finance.* Vol. XIX (19):159-173.

Griffith-Jones, s., Sefoviano, M. & Spratt, S. (2002). Basel II and Developing countries: Diversification and Portfolio Effects. *Journal of Global Finance*. Vol. VII (6):31-86.

Harrington, Scott E. (2003). Capital Adequacy in Insurance and Reinsurance. *Journal of Banking and Securities.* Vol. X(2):15

Hill, C. (2004). Regulating the Rating Agencies. *Washington Quarterly Finance.* Vol. XXV (43):43-95

Joao, Santos (2000). Bank Capital Regulation in Contemporary Banking Theory.*Jornal of Inretnational Banking*. Vol. VII (10):90-115.

Kahane, Yehuda (2007). Capital Adequacy and he Regulation of Fianncila Intermediaries. *Journal of Banking and Finance*. Vol. XXX (1):207-217.

Kaminsky, G. L. & Reinhart, C.M. (1999). The Twin Crises: The Causes of. Banking and Balance-Of-Payments problems. *The American Economics Review* .Vol. XXI (3):473-500.

Koehn, Michael, & Santomero, Anthony M. (2000). Regulation of Bank Capital and Portfolio Risk. *Journal of Finance.* Vol. XXIX (16):1235-1250.

Lamsal, Binod(2006). *Capital Adequacy and its Significance to Commercial Banks*. An Unpublished Master Degree Thesis Submitted to Faculty of Management, Tribhuvan University.

Leeladhar, V. (2006). Demystifying Basel II. *Reserve Bank of India Bulleetin*. Vol. VI (3):153-157.

Luitel, Renu (2009). *Analysis of Non-performing Assets and Loan Loss provision of Commercial Banks; with the special reference to SCBNL BOK & EBL.* An Unpublished Master Degree Thesis Submitted to Faculty of Management, Tribhuvan University.

Mall, Suraj Bahadur (2008). *Financial Performance Analysis of Annapurna Finance Company Limited in the Framework of CAMEL.* An Unpublished Master Degree Thesis Submitted to Faculty of Management, Tribhuvan University.

Nachane, D.M., Ghosh, S & Ray. P. (2006) Basel II and Bank Lending Behaviour: Some Likely Implications for Monitory Policy. *Economic and Political Weekly*. Vol. XXXI (11):103-110.

NIBL(F.Y. 2005/06-2009/10). *Annual Reports*, Kathmandu: Nepal Investment Bank Limited.

Nitsure, R.R.(2005). Basel II Norms: Emerging Market Perspective with Indian Focus. *Economic and Political Weekly*. Vol. XXX (12):1162-1166.

NRB (2007), Capital Adequacy Framework, Kathmandu: Nepal Rastra Bank.

Pausch, Thilo & Welzel, peter (2009). Credit Risk and the Role of Capital Adequacy Regulation. *Journal of Financial Research*. VOL. XI (15).66.

Reddy, Y.V.(2006). Challenges and Implications of Basel II for Asia. *BIS Review*. Vol. XXVI (4):22-45.

Sarma, Mandira and Nikaido, Yuko (2007) Capital Adequacy Regime in India: An Overview. Journal of International Economic Relations. Vol. VI (19):45.

Sharma, P. R. (2064) *Research Methodology with SPSS*, Pokhara.

Shrestha, Rashmi (2009). *Capital Adequacy in Commercial Banks*. An Unpublished Master Degree Thesis Submitted to Faculty of Management, Tribhuvan University.

Singh, Jogroop. *Bank Management*. New Delhi: Kalyani Publication, 2005.

Subedi, Amir Bikram (2009). *NRB Unified Directives on Capital Adequacy Norms and its Impact- A case study of Nepal Industrial and Commercial Bank Limited* . An unpublished Master Degree Thesis submitted to Faculty of Management, Tribhuvan University.

Tai, Chu-Cheng(2004) Can Bank be a Source of Cantogion during the 1997 Asian Crisis? *Journal of Banking and Finance*: 399-421.

Wolf, Howard K. & Pant, Prem R. (2005).*Social Science Research and Thesis Writing*, Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

Websites

www.nrb.org.np

www.google.com/basel II

www.investopedia.com

www.nibl.com.np

www.eblbank.com.np.

APPENDIX I

Questionnaire

1. The minimum core capital adequacy ratio (CCAR) directed by NRB is 6% in your view. What should be such rate?

   a) Below 6% b) Exactly 6% c) Above 6%

2. The minimum capital adequacy ratio (CAR) as per BASEL II is 8% however NRB has directed it to be 12% till 2007/08 and 10% from 2008/09. In your opinion what should be the ratio?

   a) Exactly 8% b) Exactly 10% c) Exactly 12%

3. The capital adequacy framework should ensure mainly which of the following;

   a) Adequacy to protect Depositors and Creditors

   b) Commensurate with the risk associated activities

   c) Promote public Confidence in the banking system

4. The Capital Adequacy Ratio Framework should cover mainly which of the following risk?

   a) Credit Concentration risk

   b) Business and Strategic risk

   c) Business cycle Effects

5. Which of the following components of Internal Capital Adequacy Assessment Process is most important to have sound capital management?

   a)Board and Senior Management Oversight

   b) Sound Capital Assessment

   c) Comprehensive Assessment of Risk

   d) Monitoring and Reporting

e) Internal Control Review

6. Does non performing loan affect the financial health of the commercial bank?

   a) Yes b) No c) Don't Know

7. Which measure is the best option to resolve the problem of NPA?

   a) Strict Recovery policy

   b) Monitoring

   c) New rule and regulations

   d) Rebate for timely payment

8. Is the loan loss provision directed by NRB for different category of loan sufficient to meet the credit risk?

   a) Yes b) No c) Don't Know

9. If the borrower is having with overdue outstanding the bank should start follow up:

   a) Within a Week

   b) Within two week

   c) Within one month

   d) After one month onwards