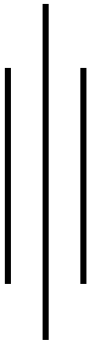
CAMELS RATING OF NEPAL INVESTMENT BANK LTD. AND LAXMI BANK LTD.



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A Thesis Submitted To:

Office of the Dean

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In partial fulfillment of the requirements for the Degree of
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Kathmandu, Nepal
January, 2009

RECOMMENDATION

This is to certify that the thesis:

Submitted by:

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Entitled:

CAMELS RATING OF NEPAL INVESTMENT BANK LTD AND LAXMI BANK LTD.

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

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and found the thesis to be 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

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DECLARATION

I here by declare that the data and work reported in this thesis entitled "**CAMELS RATING OF NEPAL INVESTMENT BANK LTD AND LAXMI BANK LTD"** submitted to office of the dean, faculty of management, Tribhuvan University is my authentic work done for the partial fulfillment of the requirement of the degree of Master of Business Studies (M.B.S.) under the guidance and supervision of **Mrs. Ruchila Pandey (Assistant Campus Chief) and Mr. Dhruba Subedi (Lecturer)** of Shanker Dev Campus, Kathmandu Nepal.

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ACKNOWLEDGEMENT

Commercial Banks are the backbone of any economy; a bank cannot be imagined without the presence of investors. Thus, protection of Investors should be considered seriously. Legal provision and the practice regarding shareholders' interests also are immature in our country. In this way, shareholders are being exploited from the lack of transparent shareholders protection act. In addition, passive role played by the concerned departments have led to violation of shareholders rights.

The present study though particularly related to the performance evaluation of Nepal Investment Bank and Laxmi Bank ltd. from the view of shareholders protection would help the shareholders to understand the different aspect related to the welfare and betterment of the shareholders.

Writing research work needs help of so many persons. I am grateful with all of them who have helped, guided and supervised to complete this work without whose co-operation it would have been simply impossible to complete this research work.

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I am sole responsible for any errors that might have occurred during completion of my research work.

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ABBREVEATIONS

C. V.	:	Coefficient of Variation.
CAPM	:	Capital Assets Pricing Model.
CML	:	Capital Market Line. .
CRR	:	Cash Reserve Ratio.
DY	:	Dividend Yield.
EB	:	Everest Bank Limited.
EMH	:	Efficient Market Hypothesis.
EPS	:	Earning per Share.
ERR	:	Expected Rate of Return.
F/Y	:	Fiscal Year.
FI	:	Financial Institution
HBL	:	Himalayan Bank Limited.
IRR	:	Interest Rate Risk
JV	:	Joint Venture
LBL	:	Laxmi Bank Limited
Ltd.	:	Limited.
MBA	:	Masters of Business Administration.
MBS	:	Masters of Business Studies.
MPS	:	Market Price per Share.
NBBL	:	Nepal Bangladesh Bank Limited.
NBL	:	Nepal Bank Limited.
NEPSE	:	Nepal Stock Exchange Limited.
NIB	:	Nepal Investment Bank Limited.
NIDC	:	Nepal Industrial & Development Bank.
NRB	:	Nepal Rastra Bank.
OTC	:	Over-The-Counter.
RRR	:	Required Rate of Return.
RSA	:	Rate Sensitive Assets
RSL	:	Rate Sensitive Liabilities
S.D.	:	Standard Deviation.
SCBNL	:	Standard Chartered Bank Nepal Limited.
SDC	:	Shanker Dev Campus.
T-Bill	:	Treasury Bills.
TU	:	Tribhuvan University.

CHAPTER I

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

New innovations, deregulation and globalization in banking sector have contributed a lot in making banking business more complex and potentially riskier. This has presented new challenges to bank supervisors with respect to the structuring of their ongoing supervision. In response, supervisors have developed new methods and processes for monitoring and assessing banks on an ongoing basis. Particular attention is being paid in this regard to improving the quality of bank examinations and to the development of systems that can assist supervisors and examiners in identifying changes, particularly deterioration, in banks' financial condition as early as possible. Amongst the various new initiatives that have been taken or are being taken in this respect are the development of more formal, structured and quantified assessments not only of the financial performance of banks but also of the underlying risk profile and risk management capabilities of individual institutions.

The ability to monitor financial sector soundness presupposes the existence of valid indicators of the health and stability of financial systems. In addition, if the indicators are comparable across countries they facilitate monitoring of the financial system, not only at the national but also at the global level. The latter is crucial in view of the magnitude and mobility of international capital, and the risk of contagion of financial crises from one country to another.

CAMELS framework is considered as one commonly used framework for analyzing the health of individual institutions, which looks at six major aspects of a financial institution: ***c***apital adequacy, ***a***sset quality, ***m***anagement soundness, ***e***arnings, ***l***iquidity, and ***s***ensitivity to market risk. has shown that certain macroeconomic trends have often preceded banking crises. Assessments of financial soundness, therefore, need to incorporate the broad pictureparticularly an economy's vulnerability to capital flow reversals and currency crises.

The Federal Register Press release affirms in its introduction text of the revised Uniform Financial Institution Rating System (UFIRS) that it has over the years proven to be an effective internal supervisory tool for evaluating the soundness of FIs on a uniform basis and for identifying those institutions requiring special attention or concern. The press release reasons number of changes, have occurred in the banking industry and in the Federal supervisory agencies' policies and procedures, for the revision of 1979 rating system. The revisions to UFIRS with inclusion of the sixth component addressing sensitivity to market risks will be in effect from January 1, 1997.

The direct public beneficiaries of private supervisory information, such as that contained in CAMELS ratings, would be depositors and holders of banks' securities. Small depositors are protected from possible bank default. Rather than evaluating a bank's solely on its performance to date or focusing on areas of minimal risk, it is imperative to evaluate both bank's performance and management's ability to identify, measure, monitor, and control risk.

Nepal Rastra Bank (NRB), the Financial Institutions' regulatory authority in Nepal, directed this concept vide circular Bai. Bya. Pa.Pa.66/057 dated 26-04-2001 by implementing minimum capital requirement standard in Nepal.

The purpose of this research is to focus on to identify and monitor current and potential areas of risk in one of the major FIs of Nepal.

Laxmi Bank Ltd.:

Laxmi Bank was incorporated in April 2002 as a commercial bank. The current shareholding constitutes of promoters holding 55.42 percent, Citizen Investment Trust holding 9.02 percent and the general public holding 35.56 percent. Promoters represent Nepal's leading business families with diversified business interests. The Bank's shares are listed and actively traded in the Nepalese Stock Exchange.

Laxmi Bank has grown with branches in Birgunj, Banepa, two in Pokhara, Biratnagar, Narayanghat, Pulchowk, Lalitpur, Teku, New Road, Janakpur, New Baneshwor, Damak, Bhatbhateni, Itahari and Maharajgunj. Following the merger with Hisef Finance Ltd., a decade old first generation finance company, its office in Hattisar, Kathmandu was converted to that of Laxmi Bank. This office was converted to a full branch and corporate office in October 2005.

With a view to providing safe, seamless, quick and advance banking services, the bank has been heavily investing in contemporary banking technologies. The Bank uses Flexcube as its main banking platform. Flexcube incidentally has been ranked the number one selling core banking solution globally, and has been embraced by over 500 financial institutions across over 90 countries. The Bank provides its services through a host of delivery channels including cell phone, Internet, ATM, Point of Sales (PoS) etc., in addition to a network of physical branches. The Internet banking facility comes with capabilities of online shopping in addition to regular Internet banking features. The bank is the first in South Asia to have implemented SWIFTNet,

the advanced version of the SWIFT technology, which is used for speedy and secure payment and messaging services.

Under a professional management team, the bank has established itself as an emerging key player. Today the bank is recognized as an innovative and progressive bank geared to providing shareholders and customers with quality earnings and value-added services. Transparency, good governance, and sound business growth are their driving forces.

Nepal Investment Bank Ltd.:

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, has 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 the same percentage.

- The remaining 20% being held by the General Public (which means that NIBL is a Company listed on the Nepal Stock Exchange).

NIBL, which is managed by a team of experienced bankers and professionals having proven rack record, can offer us what we're looking for. The choice of a bank will be guided among other things by its reliability and professionalism.

Mission Statement:

To be the leading Nepali Bank, delivering world class service through the blending of stat-of-the art technology and visionary management in partnership with competent and committed staff, to achieve sound financial health with sustainable value addition to all our stakeholders. The bank committed to do this mission while ensuring the highest levels of ethical standards, professional integrity, corporate governance and regulatory compliance.

CAMELS Rating System

Federal Reserve Bank of New York (1997*)* has defined the component of CAMEL as rating system which produces a composite rating of an institution's overall condition and performance by assessing five components: The CAMEL was later updated with inclusion of sixth component, **S**ensitivity to Market Risk, now is referred to as the **CAMELS** rating system. The Component of CAMELS are as follows:

C – Capital Adequacy

A – Assets Quality

M – Management Administration

E – Earning

L – Liquidity

S – Sensitivity to the Market Risk

1.2 FOCUS OF THE STUDY

In Nepal, NRB uses the CAELS (Capital, Assets, Earnings, Liquidity, Sensitivity) system for assessing the financial soundness of commercial banks and accordingly for the first time ranked the banks based on the statistics of 3rd -quarter of the FY 2061/62.

The research study is focused on assessing the financial condition and performance of Nepal investment Bank Ltd. (NIB) and laxmi Bank Ltd. (LBL) by using descriptive and analytical research design, prescribed by UFIRS and in accordance to BASEL accord. The study encompasses all the six components of CAMELS and carried out with annual Reports of Condition and Income. More specifically, the study focuses on the trend analysis of Capital Adequacy ratio, Non Performing Loan composition, Total Expenses to Revenues ratio, earning per employee, return on equity, return on assets, net interest margin, earning per share, liquidity and Sensitivity to Market Risk with respect to NRB standard during the period of past five years starting from FY 2003/04 to 2007/2008.

1.3. STATEMENT OF PROBLEM

The main objective of a Financial Institution (FI) is to increase its returns for its owners which often comes, however, at the cost of various increased risk: Credit Risk, Liquidity Risk, Interest Rate Risk, Interest, Market Risk, Off-Balance Sheet Risk, Foreign Exchange Risk, Country Risk, Technology Risk, Operational Risk and Insolvency Risk. The government owned banks in Nepal are almost running in loss. It is also very difficult to call the private sector banks sound though they are earning profit since they may be exposed to aforesaid risks. Questions

are being raised over the validity of their balance sheet and profit & loss account. Should the suspicion come true, it will prove very costly to the depositors, creditors and national economy as a whole. In view of this it is important that FIs manage these risks and have appropriate policies, processes, or practices in place that management follows and uses.

The elementary problem of this research is to scrutinize the financial condition of NIB and LBL in the framework of CAMELS and is an attempt to come back with the following research questions:

- How NIB and LBL are managing their Capital Adequacy? Is it in line with the regulated minimum capital requirement?
- What is the level, trend of Asset Compositon and Risk Weighted Assets of NIB and LBL and what is the bank ‘s quality of Loans and Loan provision mix?
- How NIB and LBL are managing their expenses with respect to revenues? What control and monitoring mechanism are maintained in the bank?
- What are the level, trend and stability of NIB and LBL earnings?
- Is the NIB and LBL’s liquidity position adequate in consideration of the current level and prospective sources of liquidity compared to funding needs?
- How changes in interest rates can affect each bank's earnings?

1.4. OBJECTIVES OF THE STUDY

The world economy economy has undergone through drastic changes over a decade and abruptly since last 5 years along with the Nepalese economy. The threats imposed by Nepalese economy, have made it imperative to search for opportunities in order to curb any hindrances to

the economical development. Because of the importance and relevance of banks in shaping the economy, it has become important to review the banking industry and its business strategies.

In line with the statement of problem, the main objective of this study is to analyze the financial condition of NIB and LBL and following are the objectives on specific terms:

- To analyse Capital Adequacy & Liquidity Position of NIB and LBL and campare with regulatory minimum capital requirement.
- To analyse quality of assets and evaluate Risk Weighted Assets of NIB and LBL.
- To evaluate the level, trend and stability of NIB and LBL's earning.

1.5 SIGNIFICANCE OF THE STUDY

The main objective of the study is to focus on the investors awareness , although the role of Every investor will have not well knowledge about the real financial instruments . financial sector in the economic development of nation remained controversial for same time, recent theories in finance suggest that stock markets do promote long term growth (Papaioannou & Duke, 1993:36). Apart from aiming to gain knowledge, research itself adds new to the existing literature. The significance of this study lies mainly in identifying problem or deteriorating FI, as well as for categorizing institution with deficiencies in particular component areas. Further, it assists in following safety and soundness trends and in assessing the aggregate strength and soundness of the financial industry. The research is prepared in order to supplement present examination procedures applicable to FIs of Nepal. As such, the study assists the stakeholders in fulfilling their collective mission of maintaining stability and public confidence. It would helpful for the senior management involved in day-to-day operations. Bankers, and Examiners, alike can use this report to further their understanding of a banks financial condition. As

CAMELS has little been researched in the context of Nepal , the scholars will find it a literature for their future research works.

1.6 LIMITATION OF THE STUDY

This study is subject to some constraints. Some of the unavoidable hindrances that come in this study are as follows:

- The research is conducted to fulfill the academic requirement of Master of Business degreee.
- The evaluation made herein are taken of only two sample units. It is focused on the financial analysis of the study unit in the frame work of the six components of CAMELS system.
- The study remains largely in the realms of Offsite Monitoring System.
- The proxy financial tools are used to measure the qualitative factors like the Management component.
- The bank's audited annual reports of condition for the period 2003/04 to 2007/08 are the primary source of information and treated as authentic.

1.7 ORGANIZATION OF THE STUDY

This research has been organized in five chapters as below:

Chapter I: Introduction:

The first chapter deals with introduction. This includes background, statement of problem, objectives of the study, significance of the study, limitation of the study.

Chapter II: Review of Literature:

Second chapter presents review of available literature. It includes review from book, reports, article journal, previous thesis etc.

Chapter III: Research Methodology:

Third chapter incorporates the research methodology used in the study, which includes research design, sources of data population and samples, methods of data collection and analysis etc.

Chapter IV: Presentation and Analysis of Data:

The fourth chapter deals with data collected from different sources. Based on the data analysis CAMELS rating will be done using statistical and non-statistical tools. This chapter also includes major findings.

Chapter V: Summary, Conclusion and Recommendation:

The fifth chapter includes summary, conclusion and offers suggestions for further improvement.

CHAPTER II

REVIEW OF LITERATURE

This chapter focusses on the concept of commercial bank, CAMELS rating system and review of research papers and dissertataions. The basic concept of the functions of commercial bank and detailed evaluation criteria of the components of CAMELS are reviewed in this chapter. Besides these, current stage of the related research work and dissertations on the research work have been reviewed and summed up.

2.1 CONCEPTUAL FRAMEWORK

This section presents the theoretical aspect of the study, which include the concept of commercial banks, functions of commercial banks, concept of CAMELS rating system.

2.1.1 Concept of Commercial Bank

Banks are the most important source of institutional credit in the money market. A commercial bank is a profit-seeking business firm, dealing in money or rather dealing in claims to money. It is a FI that creates deposits liabilities which circulate as money unlike the deposits of other FIs. In fact, the greater part of money supply is the direct consequence of the profit-seeking or money-creating activities of commercial banks.

A commercial bank is an institution that operates for profits. Like other industrial or commercial enterprise, a bank too, seeks to earn maximum income through the suitable employment of its resources. It is a financial intermediary - a sort of a middleman between people with surplus funds and people in need of funds. It accepts deposits for the purpose of

lending or investment and thereby hopes to make a profit — profits which are adequate enough to enable the bank to pay interest at the prescribed rates to its depositors, meet establishment expenses, build reserves, pay dividend to the shareholders, etc. In general, commercial banks are those FIs, which play the role of financial intermediary in collection and disbursement of funds from surplus unit to deficit unit. A commercial bank is established with a view to provide short term debt necessary for trade and commerce of the country along with other ordinary banking business such as collecting the surplus in the form of deposit, lending debts by discounting bills of exchange, accepting valuable goods in security, acting as an agent of the client etc. A commercial bank accepts deposits and provides loans primarily to business firm. On the other hand, the broad concept of commercial bank holds that the commercial bank is a banking institution other than central bank. The commercial bank is the only institution other than central bank permitted to accept demand and time deposits.

2.1.2 Functions of Commercial Bank

The basic business of banking is a combination of two functions - payments and financial intermediation and has however, changed and continues to change along three dimensions: entry of new institutions into banking, as new forms of lending and borrowing are developing the intermediation function is evolving; and other related functions to the basic ones are being added. The commercial banks in Nepal provide the following main banking functions:

Deposits collection: This is the oldest function of a bank in which the banker charges commission for keeping the money in its custody. Now-a-days a bank accepts three kinds of deposits from its customers. The first is the ‘savings’ deposits on which the bank pays interest relatively at low rate to the depositors. Depositors are allowed to withdraw their money by cheque up to a limited amount during a week or a year. Businessmen keep their deposits in

current accounts known as demand deposits. They can withdraw any amount available in their current account by cheque without notice. The bank does not pay interest on such accounts. A bank accepts fixed or time deposits from savers who do not need money for a stipulated period from 6 months to longer periods ranging up to 10 years or more.

Advance and Loans: One of the primary functions of a commercial bank is to advance loans to its customers. A bank lends a certain percentage of the cash lying in deposits at a higher interest rate than it pays on such deposits. This is how it earns profits. The bank advances loans in the ways of: Cash Credit, Term Loans, Hire purchase loan, Call Loans, Overdraft and discounting Bills of Exchanges.

Credit Creation: Credit creation is one of the most important functions of the commercial banks. When a bank advances a loan, it opens an account in the name of the customer and does not pay him in cash but allows him to draw the money by cheque according to his needs. By granting a loan, the bank creates deposit.

Trade Credit: A commercial bank finances foreign trade of its customers by accepting foreign bills of exchange and collecting them from foreign banks. It also transacts other foreign exchange business-buying and selling of foreign currency.

Agency Services: A bank acts as an agent of its customers while collecting and paying cheque, bills of exchange, drafts, dividends etc. It also buys and sells shares, securities, , debentures etc. for its customers. Further, it pays subscriptions, insurance premium, utilities bills and other similar charges on behalf of its clients. It also acts as a trustee and executor of the property and will of its customers. Moreover, the bank acts as consultants to its clients. For these services, the bank charges a normal fee while it renders others free of charge.

Other Services: Banks also act as custodian of valuables of the customers by providing locker facility where they can keep their jewelry and valuable documents. It issues various forms of credit instruments, such as cheque, drafts and travelers' cheque etc., which facilitate transactions. It renders underwriting services to companies and helps in the collection of funds from the public. Lastly, it provides statistics on money market and business trends of the economy.

2.1.3 Concept of "CAMELS" Bank Rating System

Federal Reserve Bank of New York (1997*)* has defined the component of CAMEL as rating system which produces a composite rating of an institution's overall condition and performance by assessing five components: **C**apital adequacy, **A**sset quality, **M**anagement administration, **E**arnings, and **L**iquidity The CAMEL was later updated with inclusion of sixth component, **S**ensitivity to Market Risk, now is referred to as the **CAMELS** rating system.

CAMEL was originally developed by the FDIC for the purpose of determining when to schedule an on-site examination of a bank (Thomson, 1991; Whalen and Thomson, 1988). The FFIEC is revised in January 1997, the UFIRS, which is commonly referred to as the CAMEL rating system. This system was designed by regulatory authorities to quantify the performance and the financial condition of the banks which it regulates.

The CAMELS rating system is subjective. Benchmarks for each component are provided, but they are guidelines only, and present essential foundations upon which the composite rating is based. They do not eliminate consideration of other pertinent factors by the examiner. The uniform rating system provides the groundwork for necessary supervisory response and helps institutions supervised by all three US supervisors to be reasonably compared and evaluated.

Ratings are assigned for each component in addition to the overall rating of a bank's financial condition. The ratings are assigned on a scale from 1 to 5. The CAMELS ratings are commonly viewed as summary measures of the private supervisory information gathered by examiners regarding banks' overall financial conditions, although they also reflect available public information.

The most important criteria for determining the appropriateness of FIs to act as a financial intermediary are its solvency, profitability, and liquidity. In this respect, the BCBS of the Bank of International Settlements (BIS), since 1988, has recommended using capital adequacy, assets quality, management quality, earnings and liquidity (CAMEL) as criteria for assessing FI.

During an on-site bank exam, supervisors gather private information, such as details on problem loans, with which to evaluate a bank's financial condition and to monitor its compliance with laws and regulatory policies. A key product of such an exam is a supervisory rating of the bank's overall condition, commonly referred to as a CAMELS rating. CAMELS rating system is used by the three federal banking supervisors [the Federal Reserve, the FDIC, and the Office of the Comptroller of the Currency (OCC)] and other financial supervisory agencies to provide a convenient summary of bank conditions at the time of an exam. In Nepal, the NRB plays the supervisory role for evaluating bank’s financial condition though rating the bank’s in accordance to CAMELS is still in its initial phase.

Composite Ratings

The FFIEC press release, USA (1996) describes the composite rating and defines the six compnents ratings. According to the press release, Composite ratings are based on a careful evaluation of an institution's managerial, operational, financial, and compliance performance.

The six key components used to assess an institution's financial condition and operations are: capital adequacy, asset quality, management capability, earnings quantity and quality, the adequacy of liquidity, and sensitivity to market risk. The rating scale ranges from 1 to 5, with a rating of 1 indicating: the strongest performance and risk management practices relative to the institution's size, complexity, and risk profile; and the level of least supervisory concern. A 5 rating indicates: the most critically deficient level of performance; inadequate risk management practices relative to the institution's size, complexity, and risk profile; and the greatest supervisory concern. The composite ratings are defined in the FFIEC press release (1996) are as follows:

Composite 1: FIs in this group are sound in every respect and generally have components rated 1 or 2. Any weaknesses are minor and can be handled in a routine manner by the board of directors and management. These FIs are the most capable of withstanding the vagaries of business conditions and are resistant to outside influences such as economic instability in their trade area. These FIs are in substantial compliance with laws and regulations. As a result, these FIs exhibit the strongest performance and risk management practices relative to the institution's size, complexity, and risk profile, and give no cause for supervisory concern.

Composite 2: FIs in this group are fundamentally sound. For a FI to receive this rating, generally no component rating should be more severe than 3. Only moderate weaknesses are present and are well within the board of directors' and management's capabilities and willingness to correct. These FIs are in substantial compliance with laws and regulations. Overall risk management practices are satisfactory relative to the institution's size, complexity, and risk profile.

Composite 3: FIs in this group exhibit some degree of supervisory concern in one or more of the component areas. These FIs exhibit a combination of weaknesses that may range from moderate to severe; however, the magnitude of the deficiencies generally will not cause a component to be rated more severely than 4. FIs in this group generally are more vulnerable to outside influences than those institutions rated a composite 1 or 2. Additionally, these FIs may be in significant noncompliance with laws and regulations.

Composite 4: FIs in this group generally exhibit unsafe and unsound practices or conditions. There are serious financial or managerial deficiencies that result in unsatisfactory performance. The problems range from severe to critically deficient. The weaknesses and problems are not being satisfactorily addressed or resolved by the board of directors and management. FIs in this group generally are not capable of withstanding business fluctuations. There may be significant noncompliance with laws and regulations. Risk management practices are generally unacceptable relative to the institution's size, complexity, and risk profile. Close supervisory attention is required, which means, in most cases, formal enforcement action is necessary to address the problems. Institutions in this group pose a risk to the deposit insurance fund. Failure is a distinct possibility if the problems and weaknesses are not satisfactorily addressed and resolved.

Composite 5: FIs in this group exhibit extremely unsafe and unsound practices or conditions; exhibit a critically deficient performance; often contain inadequate risk management practices relative to the institution's size, complexity, and risk profile; and are of the greatest supervisory concern. The volume and severity of problems are beyond management's ability or willingness to control or correct. Immediate outside financial or other assistance is needed in order for the

FI to be viable. Ongoing supervisory attention is necessary. Institutions in this group pose a significant risk to the deposit insurance fund and failure is highly probable.

2.1.4 CAMELS Components

Each of the component rating descriptions in the FFIEC Press release (1996) is divided into three sections: an introductory paragraph; a list of the principal evaluation factors that relate to that component; and a brief description of each numerical rating for that component. Some of the evaluation factors are reiterated under one or more of the other components to reinforce the interrelationship between components. The listing of evaluation factors for each component rating is in no particular order of importance. The description of the CAMELS components are made as under based on the FFIEC Press release (1996).

2.1.4.1 Captial Adequacy

Bank capital performs several important functions. Most importantly they are:

Absorbs Losses: Capital allows institutions to continue operating as going concerns during periods when operating losses or other adverse financial results are experienced.

Promotes Public Confidence: Capital provides a measure of assurance to the public that an institution will continue to provide financial services even when losses have been incurred, thereby helping to maintain confidence in the banking system and minimize liquidity concerns.

Restricts Excessive Asset Growth: Capital, along with minimum capital ratio standards, restrains unjustified asset expansion by requiring that asset growth be funded by a commensurate amount of additional capital.

Provides Protection to Depositors: Placing owners at significant risk of loss, should the institution fail, helps to minimize the potential "moral hazard" and promotes safe and sound banking practices.

Capital is necessary for the bank to operate. While many areas of a bank are important and subject to scrutiny, capital adequacy is the area that triggers the most regulatory action. This action is largely based on the three major ratios used in the assessment of capital adequacy, which are:

- The Tier 1 Risk-Based Capital Ratio.
- The Total Risk-Based Capital Ratio.
- The Tier 1 Leverage Ratio.

The capital adequacy of an institution is rated based upon, but not limited to, an assessment of the following evaluation factors:

- Size of the bank
- Volume of inferior quality assets
- Bank's growth experience, plans and prospects
- Quality of capital Retained earnings
- Access to capital markets
- Non-ledger assets and sound values not shown on books (real property at nominal values, charge-offs with firm recovery values, tax adjustments).

The FDIC Improvement Act of 1991, which created a link between enforcement actions and the level of capital held by a bank. This supervisory link is commonly known as Prompt Corrective Action (PCA) and aims to resolve banking problems early and at the least cost to the bank insurance fund. PCA has classified the banks as:

Well-Capitalized: To be considered well-capitalized, a bank will meet the following conditions:

- Total risk-based capital ratio is 10 percent or more,
- Tier 1 risk-based capital ratio is 6 percent or more, and
- Tier 1 leverage ratio is 5 percent or more.

In addition to these ratio guidelines, to be well capitalized a bank cannot be subject to an order, a written agreement, a capital directive or a PCA directive.

Adequately Capitalized: To be adequately capitalized, a bank will meet the following conditions:

- Total risk-based capital ratio is at least NRB minimum capital adequacy ratio requirement.
- Tier 1 risk-based capital ratio is at least NRB minimum Tier I capital ratio requirement.
- Tier 1 leverage ratio is at least 4 percent.

Undercapitalized: To be considered undercapitalized, a bank will meet the following conditions:

- Total risk-based capital ratio is less than 8 percent,
- Tier 1 risk-based capital ratio is less than 4 percent, or Tier 1 leverage ratio is less than 4 percent.

Significantly Undercapitalized: To be considered significantly undercapitalized, a bank will meet the following conditions:

- Total risk-based capital ratio is less than 6 percent,

- Tier 1 risk-based capital ratio is less than 3 percent, or
- Tier 1 leverage ratio is less than 3 percent.

Ratings Capital Component

- A rating of 1 indicates a strong capital level relative to the institution's risk profile.
- A rating of 2 indicates a satisfactory capital level relative to the FI's risk profile.
- A rating of 3 indicates a less than satisfactory level of capital that does not fully support the institution's risk profile. The rating indicates a need for improvement, even if the institution's capital level exceeds minimum regulatory and statutory requirements.
- A rating of 4 indicates a deficient level of capital. In light of the institution's risk profile, viability of the institution may be threatened. Assistance from shareholders or other external sources of financial support may be required.
- A rating of 5 indicates a critically deficient level of capital such that the institution's viability is threatened. Immediate assistance from shareholders or other external sources of financial support is required.

A FI is expected to maintain capital commensurate with the nature and extent of risks to the institution and the ability of management to identify, measure, monitor, and control these risks. The effect of credit, market, and other risks on the institution's financial condition should be considered when evaluating the adequacy of capital. The types and quantity of risk inherent in an institution's activities will determine the extent to which it may be necessary to maintain capital at levels above required regulatory minimums to properly reflect the potentially adverse consequences that these risks may have on the institution's capital.

BASEL Capital Accord

The Basel Committee on Banking Supervision (BCBS) is a committee of banking supervisory authorities that was established by the central bank governors of the Group of Ten countries in 1975. It consists of senior representatives of bank supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom, and the United States. It usually meets at the Bank for International Settlements (BIS) in Basel, where its permanent Secretariat is located. (BIS, November 2005)

Starting with its publication of "International Convergence of Capital Measurement and Capital Standards" in July 1988, popularly known as Basel I Capital Accord, BCBS set out a minimum capital requirement of 8% for banks. Prior to that, the committee introduced 25 core principles on effective banking supervision. In 1996, the committee incorporated market risk in the 1988 capital accord. With a major revision of the 1988 accord, there followed by the revised publication of the Committee's first round of proposals for revising the capital adequacy framework in June 1999 popularly known as Basel II Capital Accord. Since then, it is revised in January 2001, April 2003 and released its final revised framework updated in November 2005. In this accord, the concept and rationale of the three pillars (minimum capital requirements, supervisory review, and market discipline) approach was introduced, on which the revised framework is based. In the revised framework BCBS retains key elements of the 1988 capital adequacy framework, including the general requirement for banks to hold total capital equivalent to at least 8% of their risk-weighted assets; the basic structure of the 1996

Market Risk Amendment regarding the treatment of market risk; and the definition of eligible capital. (BIS, 2005)

The new Basel capital accord (Basel II), shall be applicable to internally active banks all over the world with effect from end of 2006. Implementing the new accord in Nepal has been a challenging task for the supervisors as well as FIs. Hence, certain preparatory homework is needed to Nepalese financial system to implement BASEL II. NRB and FIs need to have coordinated effort efficiently in Nepalese banks and FIs to establish certain baseline for the effective implementation of BASEL II. In this regard, second interaction program was held in Nepal with the banks executives to make them aware of the new development. The commercial banks so far has shown positive attitude towards the implementation of Basel II. "New Capital Accord Implementation Preparatory Core Committee" was drafted "NRB's Concept Paper on New Capital Accord". According to the program of New Capital Accord implementation, concept paper was forwarded to all the commercial banks for comments and recommendations. A form was also developed so that commercial banks classify their exposures as per the new approach, which was reviewed by the "Basel-II Implementation Working Group". NRB has adopted Basel Core Principles for Effective Supervision as guideline for supervision of commercial banks. Core principle methodology adopted by BCBS provides a uniform template for both self-assessment and independent assessment. It involves four part qualitative assessment system: Compliant, Largely Compliant, Materially Non-Compliant, and Non-Compliant. For each principle essential and additional criteria are defined. To achieve a "compliant' assessment with a principle, all essential and additional criteria must be met without any significant deficiencies. A "largely compliant" assessment is given if only minor shortcoming is observed, and these are not seen as sufficient to raise serious doubts about the

authority's ability to achieve the objective of that principle. A "materially non-compliant assessment is given when the shortcomings are sufficient to raise doubts about the authority's ability to achieve compliance, but substantial progress has been made. A "non-compliant" assessment is given when no substantial progress towards compliance has been achieved.

There is no doubt that the new accord though complex carries a lot of virtues and will be a milestone in improving banks internal mechanism and supervisory process and beneficial to the commercial banks.

Capital Adequacy Norms by NRB

NRB has from time to time stipulated minimum capital fund to be maintained by the banks on the basis of risk weighted assets. The total capital fund is the sum of core capital and supplementary capital. According to the NRB unified directives for Banks and Non-Bank FIs issue number E. Pra.Ni.No 01/061/62 (Ashar 2062 BS), the capital funds of a bank comprise the following:

Core Capital: Core Capital of a bank includes paid up equity, share premium, non-redeemable preference shares, general reserve and accumulated profit and loss. However, where the amount of goodwill exists, the same shall be deducted for the purpose of calculation of the core capital.

Supplementary Capital: Supplementary capital includes general loan loss provision, exchange fluctuation reserve, assets revaluation reserve, hybrid capital instruments, unsecured subordinated term debt and other free reserves not allocated for a specific purpose.

Banking and Financial Institution Ordinance (BAFIO) (2061) also assimilates the same things, which were included and explained in NRB Act 2058, in regard of bank capital. NRB Act is

effective from 1st Shrawan 2058 (July 16th 2001). According to the NRB directive, minimum paid- up capital requirement for establishment of commercial banks is as under:

i. Rs. 250 million to operate all over Nepal except Kathmandu Valley.
ii. Rs. 1000 million to operate all over Nepal.
iii. All existing commercial banks are required to raise capital base to Rs. 1000 million by mid July, 2009 through minimum 10 percent paid- up capital increment every year.

Generally, the capital measurement tool is basically represented by a ratio of primary capital to assets (Estrella, et al., 2000; Tam and Kiang, 1992; Elliott, 1991; Looney et al., 1989; Lane et al., 1986; Martin, 1977). Estrella et al. (2000) utilized three measures, including a more complex weighted measure, but found the simple measures of capital were relatively good explanatory power over short time horizons, while risk-weighted ratios provided relatively better explanatory power over longer horizons. Eccher et al. (1996), Thomson (1991), Whalen (1991) and Sinkey (1978) employed an analogous ratio definition, but with a refinement to adjust for loan losses, which theoretically would account for some portion of related risk in the asset portfolio (Cantor, 2001).

2.1.4.2 Assets Quality

Asset quality is one of the most critical areas in determining the overall condition of a bank. The primary factor effecting overall asset quality is the quality of the loan portfolio and the credit administration program. Loans are usually the largest of the asset items and can also carry the greatest amount of potential risk to the bank's capital account. Securities can often be a large portion of the assets and also have identifiable risks. Other items which impact a comprehensive review of asset quality are other real estate, other assets, off-balance sheet items and, to a lesser extent, cash and due from accounts, and premises and fixed assets.

Management often expends significant time, energy, and resources on their asset portfolio, particularly the loan portfolio. Problems within this portfolio can detract from their ability to successfully and profitably manage other areas of the institution. Examiners need to be diligent and focused in their review of the various asset quality areas, as they have an important impact on all other facets of bank operations.

Evaluation of Asset Quality

The evaluation of asset quality should consider the adequacy of the Allowance for Loan and Lease Losses (ALLL) and weigh the exposure to counter-party, issuer, or borrower default under actual or implied contractual agreements. All other risks that may affect the value or marketability of an institution's assets, including, but not limited to, operating, market, reputation, strategic, or compliance risks, should also be considered. Prior to assigning an asset quality rating, several factors should be considered. The factors should be reviewed within the context of any local and regional conditions that might impact bank performance. In addition, any systemic weaknesses, as opposed to isolated problems, should be given appropriate consideration. The following is not a complete list of all possible factors that may influence an examiner's assessment; however, all assessments should consider the following:

- The adequacy of underwriting standards, soundness of credit administration practices, and appropriateness of risk identification practices,
- The level, distribution, severity, and trend of problem, classified, on accrual, restructured, delinquent, and non-performing assets for both on- and off-balance sheet transactions,
- The adequacy of the allowance for loan and lease losses and other asset valuation reserves,
- The credit risk arising from or reduced by off-balance sheet transactions, such as un-funded commitments, credit derivatives, commercial and standby letters of credit, and lines of credit,
- The diversification and quality of the loan and investment portfolios,

- The extent of securities underwriting activities and exposure to counter-parties in trading activities,
- The existence of asset concentrations,
- The adequacy of loan and investment policies, procedures, and practices,
- The ability of management to properly administer its assets, including the timely identification and collection of problem assets,
- The adequacy of internal controls and management information systems,
- The volume and nature of credit documentation exceptions.

As with the evaluation of other component ratings, the above factors, among others, should be evaluated not only according to the current level but also considering any ongoing trends. The same level might be looked on more or less favourably depending on any improving or deteriorating trends in one or more factors.

Rating the Asset Quality Factor

The Asset Quality Rating definitions are applied following a thorough evaluation of existing and potential risks and the mitigation of those risks. The definitions of each rating is as follows:

- A rating of 1 indicates strong asset quality and credit administration practices. Identified weaknesses are minor in nature and risk exposure is modest in relation to capital protection and management's abilities. Asset quality in such institutions is of minimal supervisory concern.

- A rating of 2 indicates satisfactory asset quality and credit administration practices. The level and severity of classifications and other weaknesses warrant a limited level of supervisory attention. Risk exposure is commensurate with capital protection and management's abilities.
- A rating of 3 is assigned when asset quality or credit administration practices are less than satisfactory. Trends may be stable or indicate deterioration in asset quality. The level and severity of classified assets, other weaknesses, and risks require an elevated level of supervisory concern.
- A rating of 4 is assigned to FIs with deficient asset quality or credit administration practices. The levels of risk and problem assets are significant, inadequately controlled, and subject the FI to potential losses that, if left unchecked, may threaten its viability.
- A rating of 5 represents critically deficient asset quality or credit administration practices that present an imminent threat to the institution's viability.

Non-Performing Assets (NPAs)

Loans and advances of FIs need to be serviced by either the principal or the interest of the amount borrowed in stipulated time as agreed by the parties at the time of loan settlement. NRB unified directives E. Pra.Ni.No 02/061/62 (Ashar 2062 BS) for Banks and Non-Bank FIs, defines Non Performing Loans as loans classified as Substandard, Doubtful and Loss or Loans which are past due by principal for more than 3 months. Dhungana (2006) in his column states that the details and classification of standards of Non Performing Loans may vary from country to country depending upon the their own banking system requirement norms. He further states that unlike Nepal, countries like Korea, Indonesia, Philippines, India have classified the loan

into five categories on which normal and special categories are classified as Performing loans whereas sub standard, doubtful and estimated loss categories are considered as Non Performing Loans. The study conducted by World Bank highlights that all commercial banks of South Asian countries except Nepal and Sri Lanka classify loans as non-performing only after it has been in arrear for at least six months (Pernia, 2004). NRB unified directives for Banks and Non-Bank FIs through directive number E. Pra.Ni.No 02/061/62 (Ashar 2062 BS) classifies NPL, according to international practice, into three categories depending on the temporal position of loan default. Substandard, Doubtful and Loss Assets are the categories on the basis of the time barred to repay either interest or the principal. The degree of NPA assets depend solely on the length of time the asset has been in the form of non-obliged by the loanee. The more time it has elapsed the worse condition of assets is being perceived and such assets are treated accordingly. However, the treatment of NPAs depends according to countries. No uniform rule seems to apply.

Factors causing NPAs

Subedi (2006) in his column broadly categorized into internal and external factors for high level of NPA in Nepalese banking system. The following factors can also be the reason for causing NPA:

- NPAs may arise due to failure of business for which loan was used. Whatever may be the reasons for failure of business, it obstructs the carrying out of timely payments of financial obligations.
- On the other part of appraising institutions, the defect in appraising projects breed mismatch not only in investment planning but also in receivables due to defective

projection of returns. Large portion of NPAs in developing countries arise due to defective and standard credit appraisal system.

- Monitoring of projects in time provide insurance against failure of enterprises through rectification of minor flaws that ape ear during the course of operation. Inability of sound monitoring system can also lead to failure of the project.
- The resources of FIs collected through deposits from people may be misutilized. Recklessness or negligence on the part of the officials while approving the loan will turn into default.
- Attitude of the officials that does not amount to sincere corporate culture also leads to breed drawbacks in the payment of dues to FIs.
- The credit programs sponsored by the government are regarded as the source of NPAs. For political benefits government, without assessing the financial feasibility of the credit program, announces and compels the credits agencies to go along with the declared policies.
- Moreover, dishonest politicians often want free ride of on the amounts of loan delivered by credit agencies under government designed programs. Such loans are hardly recoverable. The fact is evidenced from the experience in Nepal and India by the manifestation of higher percentage of NPAs found in priority sector loans.

Effects of NPAs

Financial crisis emerged from Thailand in South East Asian countries largely is considered to be due to higher level of NPAs existed with the FIs. The situation was grave when the assets

stopped to repay loans to credit agencies which were borrowed from overseas capital market. Investment in domestic market did not provide returns, hence the amount involved turned into non-performing while repayment schedule to lending agency overseas was matured. Failure to honor the repayment on due time was the principal reason to result in financial crisis that terminated into economic crisis in South East Asian countries. Financial crisis occurred in Asia had the higher proportion of NPAs emanate from loans which constituted highest share in the total assets of FIs. Countries with higher proportion of loan in the total assets of banks and finance companies became vulnerable while institutions with lower share of loans in the total assets were affected less. Of the total assets of commercial banks in Nepal, total credit accounted 47.2% in the fiscal year 1997/98 (NRB, 1999). Similarly India had the proportion of loan in the total assets as 42.0% while those figures for Thailand, Indonesia and Malaysia were 78%, 70%, and 69 percent respectively (Mukherjee, 1999).

Empirically, it has been seen that Nepal and India having lower proportion of loan in respect of total assets provided cushion to make ample provision and therefore were least affected by the financial crisis. On the other hand the South East Asian with relatively higher proportion of loans in the total assets of the FIs fell victim of the shock of regional crisis.

The credit institutions are repelled from further investment after the interest accrual or due principal repayment has stopped. Interest incomes from such assets are reduced to the extent of declared amount as NPAs. As the assets declared NPA emanate from the deposits, it puts the depositors fund at risk. The credit agencies are put to an extra amount of liability by regulatory authorities in the form of provision. The amount required for provision depends on the level of NPAs and their quality. Rising level of NPAs create a psyche of worse environment especially

in the financial sector. Depositors are not interested to save. Rather the hard earned savings are diverted to consumptions. Consequently the savings pattern hence investment is affected thereby creating an unhealthy atmosphere in the financial sector.

NRB Directives related to Assets quality

NRB unified directive for Banks & Non-Bank FIs (Ashar 2062 BS) through directive number E. Pra.Ni.No 02/061/62, requires the banks to classify outstanding loans and advances on the basis of aging of Principal amount. As per the directive the Loans and Advances should be classified into the following four categories:

Pass: Loans and Advances whose principle amount are not past due over for 3 months included in this category. These are classified and defined as performing loans.

Substandard: All loan and advances that are past due for a period of 3 months to 6 months included in this category.

Doubtful: All loans and advances, which are past due for a period of 6 months to 1 year, included in this category.

Loss: All loans and advances which are past due for more than 1 year and have least or thin possibility of recovery or considered unrecoverable shall included in this category. Besides this, any loan whether past due or not, in situations of inadequate security, borrower declared insolvent, no whereabouts of the borrower or misuse of borrowed fund, are to be classified as Loss category.

The directive further requires banks to provision for loan loss, on the basis of the outstanding loans and advances and bills purchased classified as above. Loan loss provision set aside for

performing loans is defined as General Loan Loss Provision and that set aside for non-performing loan as Specific Loan Loss Provision.

With the objectives of lowering the concentration risk of bank loans to a few big borrowers and to increase the access of small and middle size borrowers to the bank loans, NRB through directive number E. Pra.Ni.No 03/061/62 limits commercial banks to extend credit to a single borrower or group of related borrowers up to 25% of its core capital for fund based credit facilities and not more than 50% of its core capital for Non fund based credit facilities like letters of credit, guarantees, acceptances, commitments.

The facilities extended against bank's own fixed time deposit, HMG securities, NRB Bonds, counter guarantees of World Bank/Agricultural Development Bank/International A+ rated banks (as per list of top 1000 world international banks published by the London based magazine, "The Banker"), are excluded from the restriction.

2.1.4.3 Management Quality

The capability of the board of directors and management, in their respective roles, to identify, measure, monitor, and control the risks of an institution's activities and to ensure a FI's safe, sound, and efficient operation in compliance with applicable laws and regulations is reflected in this rating. Depending on the nature and scope of an institution's activities, management practices may need to address some or all of the following risks: credit, market, operating or transaction, reputation, strategic, compliance, legal, liquidity, and other risks. Sound management practices are demonstrated by: active oversight by the board of directors and management; competent personnel; adequate policies, processes, and controls taking into

consideration the size and sophistication of the institution; maintenance of an appropriate audit program and internal control environment; and effective risk monitoring and management information systems. This rating should reflect the board's and management's ability as it applies to all aspects of banking operations as well as other financial service activities in which the institution is involved. The capability and performance of management and the board of directors is rated based upon, but not limited to, an assessment of the following evaluation factors:

- The level and quality of oversight and support of all institution activities by the board of directors and management.
- The ability of the board of directors and management, in their respective roles, to plan for, and respond to, risks that may arise from changing business conditions or the initiation of new activities or products.
- The adequacy of, and conformance with, appropriate internal policies and controls addressing the operations and risks of significant activities.
- The accuracy, timeliness, and effectiveness of management information and risk monitoring systems appropriate for the institution's size, complexity, and risk profile.
- The adequacy of audits and internal controls to: promote effective operations and reliable financial and regulatory reporting; safeguard assets; and ensure compliance with laws, regulations, and internal policies.
- Compliance with laws and regulations.
- Responsiveness to recommendations from auditors and supervisory authorities.

- Management depth and succession.

Rating the Management factor

- A rating of 1 indicates strong performance by management and the board of directors and strong risk management practices relative to the institution's size, complexity, and risk profile. All significant risks are consistently and effectively identified, measured, monitored, and controlled. Management and the board have demonstrated the ability to promptly and successfully address existing and potential problems and risks.

- A rating of 2 indicates satisfactory management and board performance and risk management practices relative to the institution's size, complexity, and risk profile. Minor weaknesses may exist, but are not material to the safety and soundness of the institution and are being addressed. In general, significant risks and problems are effectively identified, measured, monitored, and controlled.

- A rating of 3 indicates management and board performance that need improvement or risk management practices that are less than satisfactory given the nature of the institution's activities. The capabilities of management or the board of directors may be insufficient for the type, size, or condition of the institution. Problems and significant risks may be inadequately identified, measured, monitored, or controlled.

- A rating of 4 indicates deficient management and board performance or risk management practices that are inadequate considering the nature of an institution's activities. The level of problems and risk exposure is excessive. Problems and significant risks are inadequately identified, measured, monitored, or controlled and

require immediate action by the board and management to preserve the soundness of the institution. Replacing or strengthening management or the board may be necessary.

- A rating of 5 indicates critically deficient management and board performance or risk management practices. Management and the board of directors have not demonstrated the ability to correct problems and implement appropriate risk management practices. Problems and significant risks are inadequately identified, measured, monitored, or controlled and now threaten the continued viability of the institution. Replacing or strengthening management or the board of directors is necessary.

Researchers construct various financial ratios to capture management quality. Meyer and Pifer (1970) state that "Managerial ability is like Lord Acton's elephant — difficult to define but easy to identify. Over a period of time differences between good and poor management will be systematically reflected by the balance sheet and income data, and analysis of such data should enable prediction of failures." Graham and Homer (1988) evaluate the factors that contributed to the failure of 162 national banks in USA and conclude that more than 60 percent of failed banks experienced poor management, measured by such variables as poorly followed loan policies, inadequate problem loan identification systems, and non-existent or poorly followed asset/liability management.

Sinkey (1975) purported that a specific ratio representative of management is difficult to identify, but his view was that many ratios are proxies. Often, researchers (Tam and Kiang, 1992; Espahbodi, 1991; West, 1985) have not attempted to include a variable to represent management quality. Thomson (1991) and Whalen (1991) employed the ratio of overhead

expense to total assets as representative of management operating efficiency. As none of the ratios from previous research exhibited significance.

2.1.4.4 Earning Quality

Under the UFIRS, in evaluating the adequacy of a FI's earnings performance, consideration should be given to:

- The level of earnings, including trends and stability,
- The ability to provide for adequate capital through retained earnings,
- The quality and sources of earnings,
- The level of expenses in relation to operations,
- The adequacy of the budgeting systems, forecasting processes, and management information systems in general,

From a bank regulator's standpoint, the essential purpose of bank earnings, both current and accumulated, is to absorb losses and augment capital. Earnings are the initial safeguard against the risks of engaging in the banking business, and represent the first line of defence against capital depletion resulting from shrinkage in asset value. Earnings performance should also allow the bank to remain competitive by providing the resources required to implement management's strategic initiatives.

Analysis of Earnings Performance

An analysis of earnings comprise of examiner reviewing each component of the Earnings Analysis Trail and Ratio Analysis. Generally, the analysis of earnings begins with the examiner reviewing each component of the earnings analysis trail. The earnings analysis trail provides a means of isolating each major component of the income statement for individual analysis. The earnings analysis trail consists of the following income statement components: net interest

income, non-interest income, non-interest expense, provision for loan and lease losses, and income taxes. Each component of the earnings analysis trail is initially reviewed in isolation. Typically, ratios are examined to determine a broad level view of the component's performance. The level of progression along the analysis trail will depend on a variety of factors including the level and trend of the ratio(s), changes since the previous examination, and the institution's risk profile.

Earning Ratio Analysis: Several key ratios used in the earnings analysis are used as shown below:

- Net Income to Average Assets Ratio [Return on Assets (ROA) ratio]
- Net Interest Income to Average Assets Ratio
- Net Interest Income to Average Earnings Assets Ratio
- Non-interest Income to Average Assets Ratio
- Non-interest Expense to Average Assets Ratio
- Provision for Loan and Lease Losses (PLLL) to Average Assets Ratio
- Realized Gains/Losses on Securities to Average Assets Ratio(s)

Earnings quality is the ability of a bank to continue to realize strong earnings performance. It is quite possible for a bank to register impressive profitability ratios and high volumes of income by assuming an unacceptable degree of risk. An inordinately high ROA is often an indicator that the bank is engaged in higher risk activities. For example, bank management may have taken on loans or other investments that provide the highest return possible, but are not of a quality to assure either continued debt servicing or principal repayment. Seeking higher rates

for earning assets with higher credit risk will boost short-term earnings. Eventually, however, earnings may suffer if losses in these higher-risk assets are recognized.

In addition, certain of the bank's adversely classified and non-performing assets, especially those upon which future interest payments are not anticipated, may need to be reflected on a non-accrual basis for income statement purposes. If such assets are not placed on a non-accrual status, earnings will be overstated. Similarly, material amounts of troubled debt restructured assets may have an adverse impact on earnings.

An institution's asset quality has a close relationship to the analysis of earnings quality. Poor asset quality may necessitate increasing the PLLL to bring the ALLL to an appropriate level and must be reviewed for impact on earnings quality.

Rating the Earnings Factor

- Earnings rated 1 are strong. Earnings are more than sufficient to support operations and maintain adequate capital and allowance levels after are given to asset quality, growth, and other factors affecting the quality, quantity and trend of earnings.
- Earnings rated 2 would be satisfactory and sufficient to support operations and maintain adequate capital and allowance levels after consideration is given to asset quality, growth, and other factors affecting the quality, quantity and trend of earnings. Earnings that are relatively static, or even experiencing a slight decline, may receive a 2 rating provided the institution's level of earnings is adequate in view of the assessment factors listed above.
- Earnings rated 3 may need to improve. Earnings may not fully support operations and provide for the accretion of capital and allowance levels in relation to the institution's overall condition, growth, and other factors affecting the quality, quantity, and trend of earnings.
- A rating of 4 indicates earnings that are deficient. Earnings are insufficient to support operations and maintain appropriate capital and allowance levels. Erratic fluctuations in net income or net interest margin, the development of significant negative trends, nominal or unsustainable earnings, intermittent losses, or a substantive drop in earnings from the previous years may characterize institutions so rated.
- A rating of 5 indicates earnings that are critically deficient. A FI with earnings rated 5 is experiencing losses that represent a distinct threat to its viability through the erosion of capital.

2.1.4.5 Liquidity

In evaluating the adequacy of a FI's liquidity position, consideration should be given to the current level and prospective sources of liquidity compared to funding needs, as well as to the adequacy of funds management practices relative to the institution's size, complexity, and risk profile. In general, funds management practices should ensure that an institution is able to maintain a level of liquidity sufficient to meet its financial obligations in a timely manner and to fulfill the legitimate banking needs of its community. Practices should reflect the ability of the institution to manage unplanned changes in funding sources, as well as react to changes in market conditions that affect the ability to quickly liquidate assets with minimal loss. In addition, funds management practices should ensure that liquidity is not maintained at a high cost, or through undue reliance on funding sources that may not be available in times of financial stress or adverse changes in market conditions. Liquidity is rated based upon, but not limited to, an assessment of the following evaluation factors:

- The adequacy of liquidity sources compared to present and future needs and the ability of the institution to meet liquidity needs without adversely affecting its operations or condition.
- The availability of assets readily convertible to cash without undue loss.
- Access to money markets and other sources of funding.
- The level of diversification of funding sources, both on- and off-balance sheet.
- The degree of reliance on short-term, volatile sources of funds, including borrowings and brokered deposits, to fund longer-term assets.
- The trend and stability of deposits.

- The ability to securitize and sell certain pools of assets.
- The capability of management to properly identify, measure, monitor, and control the institution's liquidity position, management information systems, and contingency funding plans.

Rating the Liquidity factor

- A rating of 1 indicates strong liquidity levels and well-developed funds management practices. The institution has reliable access to sufficient sources of funds on favorable terms to meet present and anticipated liquidity needs.
- A rating of 2 indicates satisfactory liquidity levels and funds management practices. The institution has access to sufficient sources of funds on acceptable terms to meet present and anticipated liquidity needs. Modest weaknesses may be evident in funds management practices.
- A rating of 3 indicates liquidity levels or funds management practices in need of improvement. Institutions rated 3 may lack ready access to funds on reasonable terms or may evidence significant weaknesses in funds management practices.
- A rating of 4 indicates deficient liquidity levels or inadequate funds management practices. Institutions rated 4 may not have or be able to obtain a sufficient volume of funds on reasonable terms to meet liquidity needs.
- A rating of 5 indicates liquidity levels or funds management practices so critically deficient that the continued viability of the institution is threatened. Institutions rated 5

require immediate external financial assistance to meet maturing obligations or other liquidity needs.

Liquidity Management Concepts

There are several principles which the economists have propounded to resolve the conflicts between objectives of liquidity, safety and profitability. These concepts are discussed as under:

The Real Bills Doctrine: The Real Bills doctrine states that a commercial bank should extend only short-term self-liquidating productive loans to business firms. Self liquidating loans are those meant to finance the production, storage, transportation, and distribution. When such goods are ultimately sold, the loans are considered to liquidate themselves automatically. The short-term self liquidating productive loan has three advantages. Firstly, they possess liquidity due to which, they liquidate themselves automatically. Secondly, there is no risk of running into bad debts since they mature in the short run and are for productive purpose. Lastly, such loans earn income for the banks as they are productive.

The Shiftability Theory: H.G. Moulton propounded the shiftability theory of bank liquidity. According to this view, an asset to be perfectly shiftabilty must be immediately transferable without capital loss when the need for liquidity arises. But in a general crisis requires that all banks should possess such assets which can be shifted on to the central bank which is the lender of the last resort. This theory has certain elements of truth.

The Anticipated Income Theory: The Anticipated Income Theory was developed by H.V. Proch in 1944 based on term loan practices by USA commercial banks. According to this theory, the bank plans for liquidation of long term loans from the anticipated income of the

borrower regardless of the nature and character of a borrower's business. The bank puts restrictions on the financial activities of the borrower while granting this loan. Consequently, the bank takes into consideration not only the security but with major consideration, the anticipated earnings of the borrower. This theory is superior to the bills doctrine and the shift ability theory because it fulfills the three objectives of liquidity, safety, and profitability.

The Liabilities Management Theory: This theory was developed in the 1960s. According to this theory, there is no need for banks to grant self-liquidating loans and keep liquid assets because they can borrow reserve money in the money market in case of need. A bank can acquire reserves by creating additional liabilities against it, from different sources. These sources includes the issuing of time certificates of deposit, borrowing from the other commercial banks, borrowing from the central bank, raising of capital funds by issuing shares, and by plowing back of profits.

Liquidity Management Techniques

Techniques for liquidity assessment have evolved over the years with the significant changes in the monetary policy operating procedures. Despite the uncertainty in predicting liquidity conditions, econometric models could be used to provide first indicative forecasts, given the estimated structure of inter-relationships based on past information. The treasury or fund manager of any banks and FIs should adopt following techniques for effective liquidity management.

Liquidity Planning: The liquidity planning entails the accurate estimation of liquidity needs and the structuring of the portfolio to meet the expected liquidity needs. To ensure that funds are available to meet the liquidity needs at the lower cost, the treasury manager of the banks

and FIs must manage its money position to comply with the reserve requirements as well as managing its liquid sources.

Managing the Cash Position: A cash position refers to the amount in the process of collection and currency and demand balances due from other banks and the central bank. Numerous transactions that cause an inflow or outflow of cash during a day continually change the cash position of the banks and FIs. Because cash yields no income, cash holdings must be limited to a minimum. The treasury/ fund manager may invest any excess cash or may acquire additional cash sources from interbank loans or from discount window at the central bank.

Managing the Liquidity Position: Once the liquidity needs of the banks and FIs have been estimated, the treasury manager must decide how these needs are to be funded. The banks and FIs must choose between two general liquidity management strategies, namely, asset management and liquidity management. In the asset management, assets are sold to meet liquidity needs. In the liability management, money is borrowed to meet liquidity needs. A combination of these strategies is normally employed. The following guidelines must be kept in mind by the treasury manager when managing the liquidity position of the banks and FIs:

- The treasury manager must coordinate and keeps track of the activities and strategies of the funds-raising and funds-using departments within the banks and FIs.
- The treasury managers should know the timing of large withdrawals from big credit clients or depositors in order to plan.
- The priorities and objectives of liquidity management should be clear and properly communicated.

- The needs and decisions must be evaluated on a continuous basis to invest access liquidity and avoid liquidity shortages.

Controlling Liquidity Risk: To asses how well the banks and FIs are managing its liquidity position, the management should be cautious on the following signals from the marketplace that indicate a pending liquidity problem:

- Public confidence in terms of withdrawal of deposits from the banks and FIs.
- Share price behavior, falling share prices indicate perceived liquidity problems.
- Risk premiums on money market borrowings.
- Losses because of the hasty sale of assets for liquidity purposes.
- Inability to meet the demands of new credits customers.
- More frequent and larger borrowings from the central bank.

Considering the aforementioned technique, the treasury manager must also consider the purposes of the liquidity need, the length of time for which funds are needed, the access to liability markets, the costs and characteristics of various liquidity sources and interest rate forecast. It is revealed that the large banks have better access to liability liquidity sources due to the better quality assets and a broader capital base. The small banks have to rely more on assets for liquidity. Thus, an effective liquidity management is essential to reduce costs.

A liquidity ratio measures an entity's ability to pay its short-term obligations out of liquid assets. Liquidity (L) was generally represented in previous studies with a ratio of cash (with

some adjustment for short-term liquid securities) to total assets (Tam and Kiang, 1992; Espahbodi, 1991; Lane et al., 1986; Martin, 1977; Sinkey, 1975).

NRB regulations regarding Liquidity

NRB had given the instruction to the commercials banks since 2023 B.S. to deposit the amount the amount ratio of 8 percent from their deposit liability. In the beginning of 2047 B.S. the increase in the quantity of internal credit was very high and began to show negative effect on economy. The deflation grew up to 21 percent. So, high liquidity appeared in economy, hence, control of the negative effect that may fall on economy to improve the growth of price rate and improvement of the position of loss of running account and control the capacity of flowing the loan of the commercial banks, was necessary and the NRB second time prescribed liquidity ratio. It made compulsory to invest 24 percent the amount of the total deposit of the commercial bank in H.M.G. Bond, treasury bills, or NRB Bonds. With some signs of improvement of economy, the investment ratio was revised accordingly, since Poush 2049 B.S. Since the beginning of 2050 B.S., the economy showed improvement and the rate of deflation fell down to 8.8%. With this, the provision of investing in the government securities was removed.

With effective from, 2054, Chaitra 31st, commercial banks were required to maintain liquidity of 8% of the total Current & Saving deposits and 6% of the fixed deposits, in addition to 3% of total deposit in cash at vault. Since then the NRB reserve requirement has been changed to ensure adequate liquidity of 5% of the total deposit and following arrangements have been put into force by NRB effective from F/Y 2061/062.

The compliance of liquidity maintenance, the NRB applies following procedures:

a. NRB balance (CRR) will be calculated as a weekly basis. (Every Sunday to Saturday)

b. NRB balance will be calculated weekly average deposit of 15 days ago. In case of fully off week, balance will be calculated weekly average deposit of previous week.

c. For the purpose of NRB balance calculation, the total deposit liability and balance of NRB will be calculated as total daily balance divided by 7 on weekly average basis by counting from Sunday to Saturday. Previous balance will be taken in the case of off day.

d. Weekly statement of deposit balance to be submitted to NRB Inspection and Supervision Department within 7 days from the end of the week end by filling the specific direction firm no. 131.

In the case of shortfall of the NRB balance the applicable rate of penalties are as follows:

First time shortfall = Equivalent to bank rate on shortfall amount

Second time shortfall = Equivalent to 2 times of bank rate on shortfall amount

Third time shortfall and all subsequent shortfalls = Equivalent to 3 times of bank rate on the shortfall amount.

2.1.4.6 Sensitivity to Market Risk

Sensitivity to market risk refers to the risk that causes due to the changes in market conditions which would adversely affect the earnings and/or capital. One of the market risks is the interest rate risk also called price risk. It is the risk that is caused by changes in market interest rate. A bank may have different types of assets and liabilities. Some assets and liabilities are sensitive to changes in interest rate. Such assets and liabilities are called rate sensitive assets (RSA) and rate sensitive liabilities (RSL).

The assets and liabilities having maturity less than a year need to be re-priced periodically. Therefore, when a bank has more liabilities re-pricing in a rising rate environment than assets re-pricing, the net interest margin decreases. Conversely, if the bank is asset sensitive in a

rising interest rate environment, net interest margin will increase because the bank has more assets re-pricing at higher rates.

There are various methods of measuring interest rate risk. Such as gap analysis, simulation, duration analysis etc. This study focuses on the gap analysis which simply measures the net quantity of assets or liabilities re-pricing within a given period to estimate the likely impact that changes in interest rates will have on earnings. With a view to minimize the IRR NRB requires the banks to use gap analysis for minimization of liquidity risk.

Rating the Sensitivity to Market Risk factor

- A rating of 1 indicates that market risk sensitivity is well controlled and that there is minimal potential that the earnings performance or capital position will be adversely affected. Risk management practices are strong for the size, sophistication, and market risk accepted by the institution. The level of earnings and capital provide substantial support for the degree of market risk taken by the institution.
- A rating of 2 indicates that market risk sensitivity is adequately controlled and that there is only moderate potential that the earnings performance or capital position will be adversely affected. Risk management practices are satisfactory for the size, sophistication, and market risk accepted by the institution. The level of earnings and capital provide adequate support for the degree of market risk taken by the institution.
- A rating of 3 indicates that control of market risk sensitivity needs improvement or that there is significant potential that the earnings performance or capital position will be adversely affected. Risk management practices need to be improved given the size, sophistication, and level of market risk accepted by the institution. The level of earnings and capital may not adequately support the degree of market risk taken by the institution.

- A rating of 4 indicates that control of market risk sensitivity is unacceptable or that there is high potential that the earnings performance or capital position will be adversely affected. Risk management practices are deficient for the size, sophistication, and level of market risk accepted by the institution. The level of earnings and capital provide inadequate support for the degree of market risk taken by the institution.
- A rating of 5 indicates that control of market risk sensitivity is unacceptable or that the level of market risk taken by the institution is an imminent threat to its viability. Risk management practices are wholly inadequate for the size, sophistication, and level of market risk accepted by the institution.

Gap Analysis

Gap analysis is the most well known ALM (Asset-Liabilities Management) technique, normally used to manage interest rate risk, though it can also be used in liquidity risk management. The ‘‘gap’’ is the difference between interest sensitive assets and liabilities for a given time interval, e.g., six months. In gap analysis, each of the bank’s asset and liability categories is classified according to the date the asset or liability is repriced, and ‘‘time buckets’’, groupings of assets or liabilities, are placed in the buckets, normally overnight–3 months, >3–6 months, >6–12 months, and so on.

Analysts compute incremental and cumulative gap results. An incremental gap is defined as earning assets less funding sources in each time bucket; cumulative gaps are the cumulative subtotals of the incremental gaps. If total earning assets must equal total funding sources, then by definition, the incremental gaps must always total zero and therefore, the last cumulative gap must be zero. Analysts focus on the cumulative gaps for the different time frames

Types of gap

Gap, difference between risk sensitive assets and risk sensitive liability, can be classified as:

a. Liabilities-sensitive gap

b. Asset-sensitive gap

Liabilities-Sensitive Gap

A liabilities-sensitive gap is called negative gap. It occurs when interest-bearing liabilities exceed interest-earning assets for a specific or cumulative maturity period, that is, more liabilities re-price than assets. In this situation, a decrease in interest rates should improve the net interest rate spread in the short term, as deposits are rolled over at lower rates before the corresponding assets. On the other hand, an increase in interest rates lowers earnings by narrowing or eliminating the interest spread.

Asset-Sensitive Gap

A positive or asset-sensitive gap occurs when interest-earning assets exceed interest-bearing liabilities for a specific or cumulative maturity period, that is, more assets re-price than liabilities. In this situation, a decline in interest rates should lower or eliminate the net interest rate spread in the short term, as assets are rolled over at lower rates before the corresponding liabilities. An increase in interest rates should increase the net interest spread.

Most banks have a positive gap because most banks borrow long and lend short, so their assets will mature later than their liabilities. For example, a bank will have rate sensitive deposits, which can be withdrawn any time, but the majority of its rate sensitive loans are not due to be paid back anywhere from a year up to 25 years in the case of a mortgage. When a bank has a positive gap (RSA > RSL), a rise in interest rates will cause a bank to have asset returns rising faster than the cost of liabilities. But if interest rates fall, liability costs will rise faster than asset returns.

Limitation of Gap Analysis

Gap analysis is subject to limitations. Gap analysis does not capture basis risk or investment risk, is generally based on parallel shifts in the yield curve, does not incorporate future growth or changes in the mix of business, and does not account for the time value of money. Moreover, simple gap analysis (based on contractual term to maturity) assumes that the timing and amount of assets and liabilities maturing within a specific gap period are fixed and determined, therefore ignoring the effects of principal and interest cash flows arising from honoring customer drawdown on credit commitments, deposit redemptions, and prepayments, either on mortgages or term loans, as well as the timing of maturities within the gap period. Depending

on the interest rate environment, the mix of assets and liabilities (both on- and off-balance sheet), and the exercise of credit and deposit options by customers, these deficiencies may represent a significant interest rate risk to an institution. Accordingly, the use of gap reports should be complemented with present-value sensitivity systems, such as duration analysis or simulation models.

2.2 REVIEW OF RELATED STUDIES AND PAPERS

The research studies and work papers carried out by different scholars within various geographical region including dissertations conducted by Nepalese scholars are reviewed in this section, which are related with financial performance analysis of commercial bank and/or the area of the study.

2.2.1 Review of Research and Work Papers

Several academic studies have examined whether and to what extent private supervisory information is useful in the supervisory monitoring of banks and developing bank failure-prediction models. It is very crucial for such analysis to identify variables that reliably predict future bank failure. The studies use variables that reflect asset quality, liquidity, capital adequacy, and management quality. Most studies find that capital adequacy, earning ability, and asset quality, measured by the concentration of certain loan types, help to predict bank failure (Sinkey 1975, Pantalone and Plan 1987, Barr and Siems 1993, and Barker and Holdsworth 1993). Barker and Holdsworth (1993) reported that, on average, capital and income slowly deteriorate while past-due loans and charge offs increase as failure approaches. On the other hand, Heyliger and Holdren (1991) discover that asset quality, measured by the ratios of loan loss provisions and net charge offs to total loans, do not provide reliable indicators of bank failure. These studies adopted a number of methods, including multiple discriminant analysis, factor analysis, proportional hazard models, and logit analysis.

Berming (1975) conducted a study on commercial bank regulation structure and performance. The study was carried out to identify the determinants of commercial banks allocation efficiency. Both theoretical and empirical microeconomics analysis has applied to examine the

competitive effects of banking influences. In this paper, the nature of banking was examined; showing that banks are essentially financial intermediaries that are engaged in greater completion than is commonly believed. Many theories of the firm as a bank are presented emphasizing efficiency-distorting forces such as liquidity provisions. Almarin Phillip's model of complex interaction between banking firms and other influences on observed performance was used to summarize banking theories. For the empirical purpose, data covering 1644 banks over the period 1969-1971 were collected. Regression analysis was used to measure the relationship among variables. As a conclusion, the study showed that, the relatively *desirable* banking performance is associated with several traits including Bank asset size, non-bank competition, low cash holdings, low labour cost, state non member basic status, multi bank company legislation, national bank status, low time deposits and low equity capitalization. Demand levels and temporal variations also significantly affect the banking performance. Further more, the study showed that the commercial banks regulation, structure and performance are interrelated with each other.

Sinkey (1975) notes that bank examiners identify a "substandard" loan component of the net capital ratio as critical to identification of problem banks. In later research, Sinkey (1978) recognized the usefulness of loan default information in utilization of a ratio of provision for loan losses to operating expense, although he did not find the "substandard" loan component to be significant.

West (1985) developed a model to predict bank failure, which differed from the majority of research by utilizing FDIC generated information, rather than data from the financial statements. Some evidence resulted to support the contention that a loan quality factor (i.e.,

non-performing loans) had predictive value in this context for monitoring problem banks through its choice in a stepwise logit analysis.

Hirschhom (1987) used a multi-factor market model to predict quarterly stock returns for the 15 largest U.S. banks between 1979 and 1987. He included both contemporaneous CAMEL ratings and lagged quarter-to-quarter changes in CAMEL ratines as explanatory variables. Although the lagged CAMEL values were not useful for predicting stock returns, Hirschhom found that contemporaneous CAMEL ratines were significantly related to stock returns. These results suggest that exam ratings contain useful information, but that most of this information is not private - market participants have either independently inferred this information at the time of the exam, or this information has been leaked shortly after the exam was completed.

Tam and Kiang (1992) utilized stepwise logit analysis. The researchers examined a small sample of Texas banks, where results indicated two measures of loan default risk were significant in their prediction of bank failure. Provision for loan losses to average loans and net charge-offs to average loans exhibited no predictive value.

Barker and Holdsworth (1993), in respect to predicting bank failure, find evidence that CAMEL ratings are useful, even after controlling for a wide range of publicly available information about the condition and performance of banks.

Cole and Gunther (1998) examine a similar question and find that although CAMEL ratings contain useful information, it decays quickly. For the period between 1988 and 1992, they find that a statistical model using publicly available financial data is a better indicator of bank failure than CAMEL ratings that are more than two quarters old.

The direct public beneficiaries of private supervisory information, such as that contained in CAMELS ratings, would be depositors and holders of banks' securities. Small depositors are protected from possible bank default by FDIC insurance. This probably explains the finding by Gilbert and Vaughn (1998) that the public announcement of supervisory enforcement actions, such as prohibitions on paying dividends, did not cause deposit runoffs or dramatic increases in the rates paid on deposits at the affected banks. However, uninsured depositors could be expected to respond more strongly to such information. Jordan, et al., (1999) find that uninsured deposits at banks that are subjects of publicly-announced enforcement actions, such as cease-and-desist orders, decline during the quarter after the announcement.

As of year-end 1998, bank holding companies (BHCs) had roughly $120 billion in outstanding subordinated debt. DeYoung, et al., (1998) examine whether private supervisory information would be useful in pricing the subordinated debt of large BHCs. The authors use an econometric technique that estimates the private information component of the CAMEL ratings for the BHCs' lead banks and regresses it onto subordinated bond prices. They conclude that this aspect of CAMEL ratings adds significant explanatory power to the regression after controlling for publicly available financial information and that it appears to be incorporated into bond prices about six months after an exam. Furthermore, they find that supervisors are more likely to uncover unfavorable private information, which is consistent with managers' incentives to publicize positive information while de-emphasizing negative information. These results indicate that supervisors can generate useful information about banks, even if those banks already are monitored by private investors and rating agencies.

Focusing specifically on CAMEL ratings, Berger and Davies (1998) use event study methodology to examine the behavior of BHC stock prices in the eight-week period following an exam of its lead bank. They conclude that CAMEL downgrades reveal unfavorable private information about bank conditions to the stock market. This information may reach the public in several ways, such as through bank financial statements made after a downgrade. These results suggest that bank management may reveal favorable private information in advance, while supervisors in effect force the release of unfavorable information.

Berger, Davies, and Flannery (1998) extend this analysis by examining whether the information about BHC conditions gathered by supervisors is different from that used by the financial markets. They find that assessments by supervisors and rating agencies are complementary but different from those by the stock market. The authors attribute this difference to the fact that supervisors and rating agencies, as representatives of debt holders, are more interested in default probabilities than the stock market, which focuses on future revenues and profitability. This rationale also could explain the authors' finding that supervisory assessments are much less accurate than market assessments of banks' future performances.

On-site bank exams seem to generate additional useful information beyond what is publicly available. However, according to Flannery (1998), the limited available evidence does not support the view that supervisory assessments of bank conditions are uniformly better and timelier than market assessments.

The market for bank equity, which is about eight times larger than that for bank subordinated debt, was valued at more than $910 billion at year-end 1998. Thus, the academic literature on the extent to which private supervisory information affects stock prices is more extensive. For

example, Jordan, et al., (1999) find that the stock market views the announcement of formal enforcement actions as informative. That is, such announcements are associated with large negative stock returns for the affected banks. This result holds especially for banks that had not previously manifested serious problems.

Kolari et al. (2000) developed models and predicted bank failure, where the models initially included three measures of loan default disclosure along with 25 other financial measures. The loan default measures included allowance for loan losses to total assets, net loan charge-offs to total assets and provision for loan losses to total assets. In the final analysis, the allowance for loan losses to total assets was significant in rwo of the six predictions. As with many other studies, there was a lack of theory for the choice of variables, as stepwise logit was utilized for the decision of inclusion or elimination.

Dziobek, Hobbs, and Marston (2000) analyze the determinants of bank liquidity-defined as the degree to which a FI is able to meet its obligations under normal business conditions. Volatility in the depositor (and creditor) base depends on the type of depositor, insurance coverage, and maturity. Banks that rely on a narrow or highly volatile funding base are more prone to liquidity squeezes. Household deposits are typically more stable than, for instance, the deposits of institutional investors or corporate entities. Deposit concentration (i.e., fewer, larger-size deposits) can also be indicative of volatility. Deposit insurance increases the stability of the deposits it covers, with the important caveat that insurance schemes that are not credible may not have this effect. On the external front, foreign financing, for instance through commercial credit lines, and deposits of nonresidents (either in foreign or domestic currency) can become highly volatile in situations of distress and make the financial system vulnerable to external

shocks or adverse developments in the domestic economy. As regards instrument maturity, the longer the time before the liability matures (in terms of remaining maturity), the more stable is the funding; however, in countries where banks are required to meet early withdrawal requests with only minor penalties, maturity may be less relevant to determining funding stability.

Derviz and Podpiera (2004) based their assessment of commercial banking performance on bank ratings and studied with respect to detecting situations with the potential for adverse development towards failure, and owing to the costly nature of frequent supervisory examinations. In this paper they studied models of rating downgrades and consider a specific set of indicators that are suitable as determinants of a bank's rating. The conclusions about the predictors obtained from the analysis of downgrades are applicable in relatively stable banking sector situations. Banks experiencing minor liquidity trouble might raise their interest rates on deposits, but a regulator would have a hard time distinguishing which bank has increased its deposit rate because of liquidity problems and which has done so owing to an increase in its cost of funds caused by some other factor. Therefore, in their approach the cost of funds – one of the plausible downgrade indicators – was used in the form of the bank's "credit spread". In addition to credit spread, they tested the inclusion of the Value at Risk (VaR) indicator in the form of Total Asset VaR, as they believed that this type of indicator might play an important role in determining the level of the rating due to its easy computability and data availability to the public. They focused on the Capital-Assets-Management-Earnings-Liquidity-Market Risk based composite (CAMELS) rating and the Standard and Poors (S & P) ratings. The choice of their sample was determined by the fact that cross-section data is probably less appropriate given the specific character of the relatively small banking market in the Czech Republic. The three chosen banks, i.e., Česká Spořitelna (CS), Komerční Banka (KB) and Československá

Obchodní Banka (CSOB), cover a dominant portion of the market, the rest being occupied by small narrowly specialized banks or foreign bank branches. Therefore, they used panel data with three banks and their financial indicators to analyze the change in the CAMELS and S & P ratings. They found that the reliable predictors of a bank's S & P rating are Credit Spread, Capital Adequacy, and the Total Loans to Total Assets ratio. In the case of the CAMELS rating they verified the Total Asset VaR, the ratio of Total Loans to Total Assets, and Capital Adequacy as reliable predictors. In addition, they found that the CAMELS rating does not yield itself easily to predictions within any horizon with the studied technique. On the contrary, the S & P rating can be relatively precisely predicted one month in advance.

Baral (2005), using the annual reports data set of jont venture banks and NRB supervision reports, published his paper abstract in the Journal of Nepalese Business Studies (Volume II No.1, December 2005). The paper examined the financial health of joint venture banks in the CAMEL framework for a period ranging from FY 2001 to FY 2004. The health checkup which was conducted on the basis of publicly available financial data, concludes that the financial health of joint venture banks is better than that of the other commercial banks. The study further indicates that the CAMEL component indicators of the joint venture banks are not much encouraging to manage the possible shocks.

2.2.2 Review of Dissertations

Prior to this, several thesis works have been conducted by various researchers regarding different aspects of commercial banks like financial performance, capital structure, investment policy, interest rate structure, and resources mobilization. The excerpts from the findings of some of these research works are presented which are relevant for this study:

Amatya (1980) conducted a study on investment policy of Nepal Bank Ltd. The objective to that study was to evaluate the lending policy and to find out the ways to encourage the bank lending. This study has covered only five fiscal years BS 2028/29 through BS 2033/34. He used Karl Pearson's coefficient of correlation, ratio analysis and percentage analysis. He concluded with the positive relationship between deposits and loans and advances. But the same was not in a proportionate manner, greater increase in deposits led to little increase in the loans and advances. Increase in the interest rate was the main factor for the decrease in loan demand. The bank had investment only 3 percent of its total investment in the priority sector, which was lower than the percentage (7 percent) imposed by NRB.

Shrestha (1990) conducted a research work on portfolio behaviour for commercial banks in Nepal. She has analysed the debt to equity ratios of commercial banks in aggregate and Agriculture Development Bank from 1971 to 1990. She has found that the debt to equity ratio of minimum 8.30% in 1971 and the maximum of 1583.3% in 1974. Similarly the range of debt to equity ratios of ADBN is minimum of 21.44% in 1972 and maximum of 652.74%in 1974 in 1990. On the basis of this finding, she concluded that the Nepalese commercial banks are highly leveraged and highly risky. Further, she argued that the capital adequacy ratio explains the strength of the capital base of commercial banks. Higher the capital adequacy ratio, higher is its internal sources. Lower the value of capital adequacy ratio with regard to the standard value shows that the bank’s ability to attract deposit from the surplus units and inter bank funds also be limited.

Bohara (1992) has done a study on financial performance of Nepal Arab Bank Ltd. (NABIL) and Nepal Indosuez Bank Lid. (NIBL). The basic objectives of this study were to highlight on

the functions and policies of joint ventures banks and to evaluate the comparative financial performance of NABIL and NIBL. The study has covered the five fiscal years 1986/87 through 1990/91. In this study financial tools along with statistical tools have been used. Different ratios- liquidity, activity, coverage, leverage, profitability and other indicators like earning per share, dividend per share, market value to book value ratio, have been used to evaluate the performance of NABIL and NIBL. In statistical tool the least square method has been employed. The researcher has, on the basis of different financial indicators, concluded that performance of NABIL is better than that of NIBL. The researcher further concluded that bank performance can not be judged solely in term of profit as it may have earned profit by maintaining adequate liquidity and safety position. The researcher has recommended to NIBL to extend their banking facilities even in the rural areas by opening up branches besides the improvement in maintaining the adequate capital structure by increasing equity base.

Manandhar (1993) conducted a research work on portfolio behavior for commercial banks in Nepal. She has analyzed the debt to equity ratios of commercial banks in aggregate and Agriculture Development Bank from 1971 to 1990. The researcher has found that the debt to equity ratio in commercial banks minimum of 8.30% in 1971 and the maximum of 1583.3% in 1974. Similarly, the range of debt to equity ratios of ADB/N is minimum of 21.44% in 1972 and maximum of 652.74% in 1990. On the basis of the finding, the researcher concluded that the Nepalese commercial banks are highly leveraged and highly risky. Further, the researcher argued that the capital adequacy ratio explains the strength of the capital base of commercial banks. Higher the capital adequacy ratio, higher is its internal sources. Lower value of capital adequacy ratio with regard to the standard value shows that the bank's ability to attract deposit from the surplus units and inter bank funds also be limited.

Joshi (1993) conducted a study on commercial banks of Nepal with reference to financial analysis of Rastriya Banijya Bank. The objective of this study was to provide conceptual framework of commercial banks, and to analyze and interpret these financial variables of Rastriya Banijya Bank (RBB) on qualitative and quantitative performance basis. The study was based on the financial data of FYs 2042 B.S. through 2046 B.S. Researcher has used various financial ratios like-current. Liquidity, funded debt to total capitalization, and funded debt to equity in this study. The researcher had drawn the conclusion that performance of RBB was not satisfactory during the study period. Further, the researcher concluded that bank had not been managed in true professional approach but had managed in bureaucratic approach to sustain with political environment rather than commercial environment.

Sharma (2005) in his paper on Capital Structure of Selected Commercial Banks of Nepal concludes with following key points:

- Paid up Capital of Nepalese Commercial Banks is increasing indicating banks maintain the capital standards set by NRB
- Total equity capital is growing as compared to total debt.
- The fluctuating interest coverage ratio of the Nepalese Commercial Banks indicates the earnings stream and interest expenses are inconsistent over the period of past five years. The debt servicing capacity of the Nepalese Banks is not highly satisfactory but it is sufficient to meet the interest expenses in all years and is continuously improving.
- The capital adequacy ratios of the banks are adequate against set norms of NRB indicating sound financial health and sufficient to meet on banking operation.

- The total capital fund and capital adequacy ratios are fluctuating which indicate fluctuating risk adjusted assets of the banks.
- Core Capital and supplementary capital raios are in line with the NRB norms.

Bhandari (2006) used descriptive anlysis in his research work of evaluating financial performance of Himalayan Bank in the framework of CAMEL during 1999 to year 2004 A.D. The analysis revealed adequate Capital of the bank. The non-performing loans though in decreasing trend is still a matter of concern. The bank is still with better ROE however it is in decreasing trend. The decreasing trend of net interest margin shows management slack monitoring over the bank's earning assets. The liquid funds to total deposit ratio is above the industrial average ratio. NRB balance and cash in vault to total deposit ratios are bellow the industrial average ratio during the study period.

2.3 Research Gap:

Various studies have been conducted in the past on financial analysis of commercial banks in the US and other regions were found done. The research paper done in the context of Nepal mainly emphasized on liquidity, profitability and leverage of the commercial banks. These studies lack micro-level analysis and found applying traditional analysis of financial performance. In the context of Nepalese banking environment, there are a few academic researches found conducted in the frame work of CAMEL (Bhandari, 2006). However these researches lack analysis of the 6^{th} component i.e Sensitivity of Market Risk. This research attempts to evaluate financial performance of Nepal Investment Bank and Laxmi Bank Ltd. on all the six components of CAMELS framework. This reasearch will be helpful to understand the overall condition and performance of this two banks.

CHAPTER III

RESEARCH METHODOLOGY

This chapter includes research design, justification for the selection of study unit, nature and sources of data, methods of data collection, data analysis tools and limitations of methodology. The above research procedures are adopted comprehensively to accomplish the objectives set in Chapter 1.

3.1 RESEARCH DESIGN

The evaluation of the performance is designed to reflect an assessment of the financial condition of Nepal Investment Bank and Laxmi Bank Ltd. based on the CAMELS perspective prescribed by UFIRS/UBPRS in line with the BASEL II accord. Hence, the research is conducted on a historical and anlytical case study basis. Therefore descriptive-cum analytical research methodology has been followed, to achieve the desired objectives. In order to evaluate the the financial performance of selected two banks, some financial and statistical tools and descriptive techniques are applied.

3.2 NATURE AND SOURCES OF DATA

Basically the research is based on secondary information data. The annual reports of the banks form the major sources of data. The regulatory data were collected from NRB directives and reports. The basic conceptual information was collected through BASEL,

FDIC and NRB publications and workpapers. The information related to the past and current work conducted in the research field were collected from the following sources:

- NRB reports & bulletins and its official website
- Basel Committee publications through its official website
- Various research papers and Dissertations,
- Varous articles published in journals and financial magazines
- Nepal Stock Exchange reports
- Official Website of banks

Formal and informal discussions with the senior staff of the banks were held which was helpful in understanding and obtaining the additional information.

3.3 DATA COLLECTION PROCEDURE

The required information was collected by conducting visit to the Head office of each bank at, consulting library at Shanker Dev College of Management, Internet Surfing and related text books. The annual reports of each Bank for the study period were obtained from their Head offices through personal approach and internet surfing to the banks' official website. NRB regulatory directives, Statistics of the Commercial Banks of Nepal and other related publication were obtained through internet surfing to NRB's official website and periodicals. Existing literature on the subject matter was collected from various research papers placed in Library of Nepal Commerce Campus and Central Library (T.U.). Likewise, the review of working papers conducted by various international scholars on the related matter was done through internet surfing to various websites.

3.4 DATA PROCESSING

The financial data from the published documents and audited financial statements were manually extracted into the computer files of Microsoft Excel program which acted as master database file. The data was refined further into spreadsheets to carry out financial ratio calculation and graphical illustrations through mathematical functions and Chart program of the Excel program.

3.5 DATA ANALYSIS TOOLS

Financial ratios are the major tools used for the descriptive analysis of the study. In addition to the financial tools, simple statistical tools are also used.

3.5.1 Financial Ratio Analysis Tools

Financial Ratio Analysis tools are used to determine the performance of the banks in the framework CAMELS components. These ratios are categorized in accordance of the CAMELS components. Following category of key ratios are used to analyse the relevant components in terms of CAMELS:

Capital Adequacy Ratio: Capital Adequacy Ratios take into account the most important financial risks-foreign exchange, credit and interest rate risks, by assigning risk weightings to the institution's assets. Risk-weighted assets (RWA), Tier 1 capital, Tier 2 capital are used to calculate the capital adequacy ratios.

$$\text{Capital Adequacy Ratio} = \frac{\text{Tier I + Tier II Capital}}{\text{RWA}}$$

Tier I Capital Adequacy Ratio: Tier I ratio shows the relationship between the total core capital or internal sources and total risk adjusted assets. It is calculated by using the following model.

$$\text{Tier I Adequacy Ratio} = \frac{\text{Tier I Capital}}{\text{RWA}}$$

Tier II Capital Adequacy Ratio: This ratio 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.

$$\text{Tier II Adequacy Ratio} = \frac{\text{Tier II Capital}}{\text{RWA}}$$

Non- Performing Loan Ratio: The non-performing 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 asset quality of the bank and determined by using the given model.

$$\text{Non Performing Loan Ratio} = \frac{\text{Non Performing Loan}}{\text{Total Loans and Advances}}$$

Where, Non-performing Loan = Thoses loans which have been past due either in the form of interest servicing or principal repayment and graded as possible default.

Loan Loss Provision to Total Loans Ratio: The provision for loan losses is a charge to current earnings to build the Allowance for Loan and Lease Losses (ALLL). The ALLL is a general reserve kept by banks to absorb loan losses. While it measures the possibility of loan default, it reflects adequacy of to absorb estimated credit losses associated with the loan and lease portfolio, of the bank. For the purpose of this study following model is used to determine the loan loss ratio:

$$\text{Loan Loss Provision Ratio} = \frac{\text{Loan Loss Provision}}{\text{Total Loans and Advances}}$$

Total Expense to Total Income Ratio: The total expenses to total incomes ratio is the expression of numerical relationship between total expenses and total incomes of the bank. It measures the proportion of total expenses in total revenues. A high or increasing ratio of expenses to total revenues can indicate that FIs may not be operating efficiently. This can be, but is not necessarily due to management deficiencies. In any case, it is likely to negatively affect profitability (IMF, 2000). Following is the expression of total expenses to total revenues ratio.

$$\text{Total Expense to Income Ratio} = \frac{\text{Total Expense}}{\text{Total Income}}$$

Earning per Employee: Earning per employee is the numerical relationship between net profit after taxes to total numbers of employee. Low or decreasing earnings per employee can reflect inefficiencies as a result of overstaffing, with similar repercussions in terms of profitability (IMF, 2000). It is calculated by using the following model:

$$\text{Net Income After Tax}$$

$$\text{Earning Per Employee} = \frac{}{\text{Total Number of Employees}}$$

Return on Equity (ROE): The return on equity indicates the relationship between net profit after taxes to total equity capital. It measure of the rate of return flowing to the bank's shareholders. Higher is the return on equity, higher the investment which the shareholders will undertake. For the purpose of the study following model is used to determine the return on equity ratio:

$$\text{Earning Per Employee} = \frac{\text{Net Income After Tax}}{\text{Shareholders Equity}}$$

Return on Assets (ROA): Return on assets is the numerical relationship between net income after taxes to total assets of a bank. It is primarily an indicator of the quality of assets, managerial efficiency to utilize the institution's assets into net earnings (Rose, 1999). Higher the ROA, higher is the quality of assets and efficient asset utilization. It is calculated by using the following model.

$$\text{Return on Assets} = \frac{\text{Net Income After Tax}}{\text{Total Assets}}$$

Net Interest Margin: Net interest margin is the expression of numerical relationship between net interest income and total earning assets of a bank. It measures how large a

spread between interest revenues and interest costs management has been able to achieve by close control over the bank's earning assets and the pursuit of the cheapest sources of funding (Rose, 1999). For the purpose of the study following model is used to determine net interest margin:

$$\text{Net Interest Margin} = \frac{\text{Net Interest Income}}{\text{Total Earning Assets}}$$

Where, Net interest income = Interest Income- Interest Expense

Total Earning assets = Total Interest bearing Assets

Earning Per Share (EPS): Earning per share provides a direct measure of the returns flowing to the bank's owners- its stockholders- measured relative to the numbers of shares to the public (Rose, 1999). It gives the strength of the share in the market. Following is the expression of earning per share:

$$\text{EPS} = \frac{\text{Net Income After Tax}}{\text{Number of Shares of Common Stock}}$$

Cash Reserve Ratio (CRR): It is the minimum amount of reserves a bank must hold in the form account balance with NRB and cash held in vault. This ratio ensures minimum level of the bank's first line of defense in meeting depositor's obligations. Commercial banks are required to maintain cash reserve ratio in two forms; NRB Balance and Cash at Vault specified as the Percentage of total deposits as follows:

- **NRB Balance to Total Deposits Ratio:** NRB balance to total deposits ratio shows the numerical relationship between NRB balance and total deposits of a bank. It measures the proportion of NRB balance in total deposits. Following model is used to determine the NRB balance to total deposits ratio:

$$\text{NRB Balance to Deposit Ratio} = \frac{\text{NRB Balance}}{\text{Total Deposits}}$$

- **Cash in Vault to Total Deposit Ratio:** Cash in vault to total deposits ratio indicates the relationship between cash in vault to total deposits. It shows the percentage of total deposit maintained as vault. It is worked out by using the following model:

$$\text{Cash in Vault to Deposit Ratio} = \frac{\text{Cash in Vault}}{\text{Total Deposits}}$$

Where, Cash in vault = cash in hand + foreign currency in hand

Liquid Assets to Total Deposits Ratio: Total liquid assets to total deposits ratio is a numerical relationship between total liquid assets and total deposits of a bank. The higher ratio implies better liquidity position. It is calculated by using the following model:

$$\text{Total Liquid Assets to Deposits Ratio} = \frac{\text{Total Liquid Assets}}{}$$

Total Deposits

Where,

Total liquids assets = Cash in hand + NRB Balance + Domestic bank balance + Foreign Currency bank balance + Placements+ Investment in Government securities.

GAP Ratio

GAP ratio is used to examine whether bank's rate sensitive assets (RSA) are sufficient enough to cover its rate sensitive liabilities (RSL). It is calculated as the ratio between RSA and RSL. It is computed by expressing RSA divided by RSL.

$$\text{GAP Ratio } X\frac{\text{RSA}}{\text{RSL}}\varepsilon\ 100\%$$

Interest Rate Sensitivity Ratio :

The interest rate sensitivity (IRS) is used to determine whether changes in interest rate positive or negatively affect the bank's net interest margin or profitability. It can be computed by expressing cumulative GAP as a percentage of total risk sensitive assets (RSA).

$$\textbf{IRS Ratio } X\frac{\textbf{Cumulative GAP}}{\textbf{RSA}}\varepsilon\ \textbf{100\%}$$

3.5.2 Statistical Tools

Average: A simple arithmetic average is used to summarize the data as a representation of mass data. A simple arithmetic average is a value obtained by dividing the sum of the values by their numbers (Kothari, 1989). Thus, the average is expressed as:

$$\text{Mean} = \frac{\Sigma x}{n}$$

Where, Mean =Mean of the values, N = Number of pairs of observation.

During the analysis of data, mean is calculated by using the statistical formula average on excel data sheet on computer.

Standard Deviation: Standard deviation is the absolute measure of dispersion of the values and shows the deviation or dispersion in absolute term (Kothari, 1989). Here, the standard deviation is used to find out the deviation in absolute term. Standard deviation is determined as:

$$\sigma = \sqrt{\left(\frac{\Sigma (x-\bar{x})^2}{n} \right)}$$

$$= \sqrt{\left(\frac{\Sigma x^2}{n} - \left(\frac{\Sigma x}{n} \right)^2 \right)}$$

Here, n= Number of observations

x=Individual value, $\bar{x}$ = Simple Arithematic mean

During the analysis of data, standard deviation is calculated by using the statistical function *'stdev' of E*xcel data sheet on computer.

Coefficient of Variation: Coefficient of variation is the relative measure of dispersion based on the standard deviation (Kothari, 1989). It is most commonly used to measure the

variation of data and more useful for the comparative study of variability in two or more series or graphs or distribution. Symbolically, the coefficient of variation is defined as:

$$CV = \frac{\sigma}{\bar{x}}$$

Here, **σ** = standard deviation , $\bar{x}$ =Mean , CV = Coefficient of variation

3.6 LIMITATIONS OF THE METHODOLOGY

The research is conducted to fulfill the academic requirement of Master of Business degreee. It is focused on the financial analysis of NIB and LBL in the frame work of all the six components of CAMELS system and are based on the audited financial annual reports of condition of each bank during the period 2003/04 to 2007/08. Since the research work on all the six components is little been done in Nepalese environment, the study may not reveal reliability and validity in every field. The basic limiting conditions within which the research work is conducted, are:

- The evaluation made herein of one sample unit of two banks only, hence cannot be reasoned for similar condition of the whole industry. However, it gives a particular direction to the industry if not actual.
- The study remains largely in the realms of Offsite Monitoring System hence qualitative assessment may not be reflected by the study. However, the proxy financial tools are helpful to give a close picture of such factors.
- The quarterly financial reports of the bank are not publicly available or if available not adequate whereas the effectiveness of CAMELS assessment requires quarterly financial reports. However, Cole and Gunther (1998) examined that a

statistical model using publicly available financial data is a better indicator of bank failure than CAMEL ratings that are more than two quarters old.

- The data figures from different other sources may not be congruent with the bank's published data. However audited data published by the bank are treated as authentic. The study is carried out within the framework of case study research design. So, it is difficulty to eliminate the limitations of the case study research design, in which the study as well as the methodology is bounded. Only a single unit is taken for the study, therefore, the study may not be able to represent the whole scenario.

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

This chapter deals with the presentation of data collected and its analysis with focus on the CAMELS six components has been made. The major findings from the analysis are made following the presentation.

4.1 DATA PRESENTATION AND ANALYSIS

The data collected from different sources has been refined and documented in Excel tables, which are further processed to analyze and arrive at the findings on the financial conditions of NIB Bank in terms of CAMELS framework.

4.1.1 Capital Adequacy

Capital adequacy component analysis NIB of and LBL is made based on the regulations and standard ascertain by NRB as to maintaining minimum risk-based Core & Total Capital Standard, and maximum risk based Supplementary capital standard. The minimum risk-based capital standard which includes a definition for Risk Based Capital, a system for calculating Risk Weighted Assets (RWA) by assigning on and off balance sheet items to broad risk categories. Capital Adequacy Ratios take into account the most important financial risks-foreign exchange, credit and interest rate risks, by assigning risk weightings to the institution's assets.

4.1.1.1 Core Capital Adequacy Ratio

Core (Tier I) Capital, which is a capital of permanent nature, comprise of Paid Up, Share premium, Non Redeemable Preference Share, General Reserve, Dividend Equalization Fund, Capital Adjustment Reserve, Retained Earning and Profit & Loss accounts. Table 4.1 presents the observed Core Capital Ratio during the study period and minimum core capital standard set by NRB in the corresponding period along with variance from NRB Standard.

Table 4.1: Core Capital Adequacy Ratio vs NRB Standard

NIB

Fiscal Year	Core Capital (Million)	RWA (Million)	Core Capital To RWA %	Min. NRB Standard %*	Variance (+/-%)
2003/04	710.61	9836.7	7.22	5.5	1.72
2004/05	1161.48	13632.91	8.52	5.5	3.02
2005/06	1393.27	17491.79	7.96	5.5	2.46
2006/07	1852.2	23435.63	7.9	5.5	2.4
2007/08	2658.91	34484.54	7.71	5.5	2.21

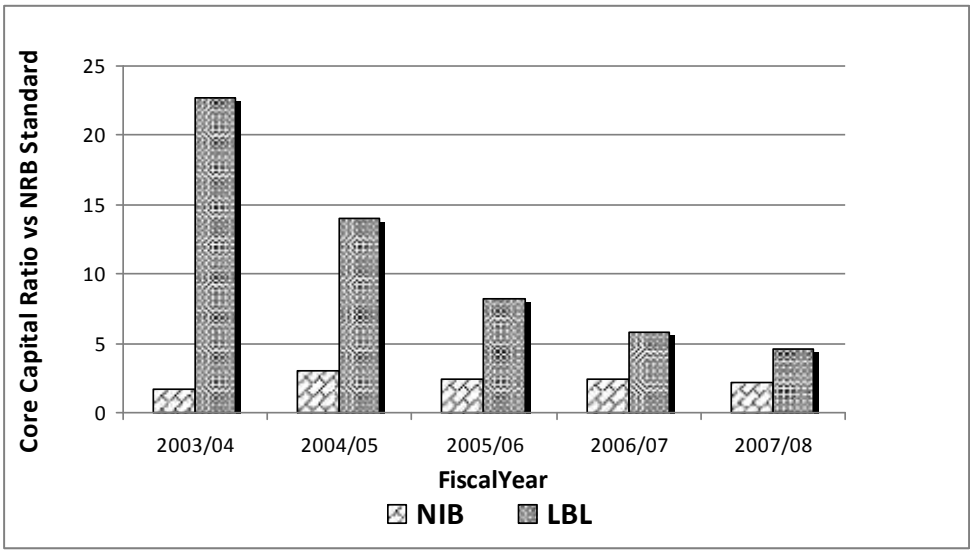
LBL

2003/04	552.39	1954.88	28.26	5.5	22.76
2004/05	604.34	3085.49	19.59	5.5	14.06
2005/06	645.94	4711.71	13.71	5.5	8.21
2006/07	840.5	7416.11	11.33	5.5	5.83
2007/08	1086.12	10750.04	10.1	5.5	4.6

See Appendix 2, 3, 9 &10

As shown in the table, the Tier I ratio of NIB of 8.52% was maximum in FY 2004/05 and minimum ratio of 7.22% in FY 2003/04. The Tier I ratio increased for next one year (2004/05) and decrease continuously till FY 2007/08 . The reason of this decrease was due to comparatively high increase of RWA . Whereas Tier I ratio of LBL of 28.26% was maximum in FY 2003/04 and minimum ratio of 10.10% in FY 2007/08, The tier ratio is continuously decreasing trend, its due to respective increase in Core Capital and RWA in the following year.

Diagram 4.1 Core Capital Adequacy Ratio vs NRB Standard



The graphical representation in Diagram 4.1 shows, Tier I capital ratio of Nepal Investment Bank variated positively in all the 5 years of the review period, with maximum positive variance of 3.02% in FY 2004/05 and minimum positive variance of 1.72% in FY 2003/04. The bank was able to maintain positive variance greater than 2% during the period 2004/05 to 2007/08 except in FY 2003/04 Bank maintained les than 2% (i.e.1.7) .

Tier I ratio of LBL also variated positively in all the five years, with maximum positive variance of 22.76% in FY 2003/04 and minimum positive variance of 4.6% in FY 2007/08.

Comparatively LBL shown the higher Core Capital Adequacy ratio than NIB, In general, both banks have maintained Tier I capital adequately above the NRB standard. It means the banks are applying adequate amount of internal sources of shareholders' fund with significant core capital adequacy ratio in all the years over the study period.

4.1.1.2 Supplementary Capital Adequacy Ratio]

Supplementary capital are collected by way of hybrid capital instruments, General Loan Loss Provision, Exchange Fluctuation reserve, Asset Revaluation reserve, Interest Spread Reserve, Subbordinate Term Debt, and other free reserve. 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 allowing Supplementary capital not exceeding 100% of the core capital for CA calculation

Table 4.2: Supplementary Capital Adequacy

NIB			
Fiscal Year	Supplementary Capital (Million)	RWA (Million)	Supplementary To RWA %
2003/04	388.77	9836.7	3.95
2004/05	417.3	13632.91	3.06
2005/06	700.93	17491.79	4.01
2006/07	999.42	23435.63	4.26
2007/08	1232.32	34484.54	3.57
LBL			
Fiscal Year	Supplementary Capital (Million)	RWA (Million)	Supplementary To RWA %
2003/04	18.22	1954.88	0.93
2004/05	34.31	3085.49	1.11
2005/06	58.74	4711.71	1.25
2006/07	81.43	7416.11	1.09
2007/08	114.96	10750.04	1.06

See Appendix 2, 3, 9 and 10

As shown in Table 4.2, the Tier II ratio of NIB was maximum in FY 2006/07 with 4.26% and minimum in FY 2004/05 with 3.06%. The ratio is in fluctuating trend during the study period.. The fluctuation occurred in increasing trend in the ratio owed due to increased in supplementary capital fund and also increase in RWA over the study period. Where as the Tier II ratio of LBL was maximum with 1.25% in FY 2004/05 and minimum with 0.93% in FY 2003/04. In case of LBL Tier II ratio is also in fluctuating increasing trend due to increased in Supplementary Capital Fund and increased in RWA.

4.2 Supplementary Capital ratio

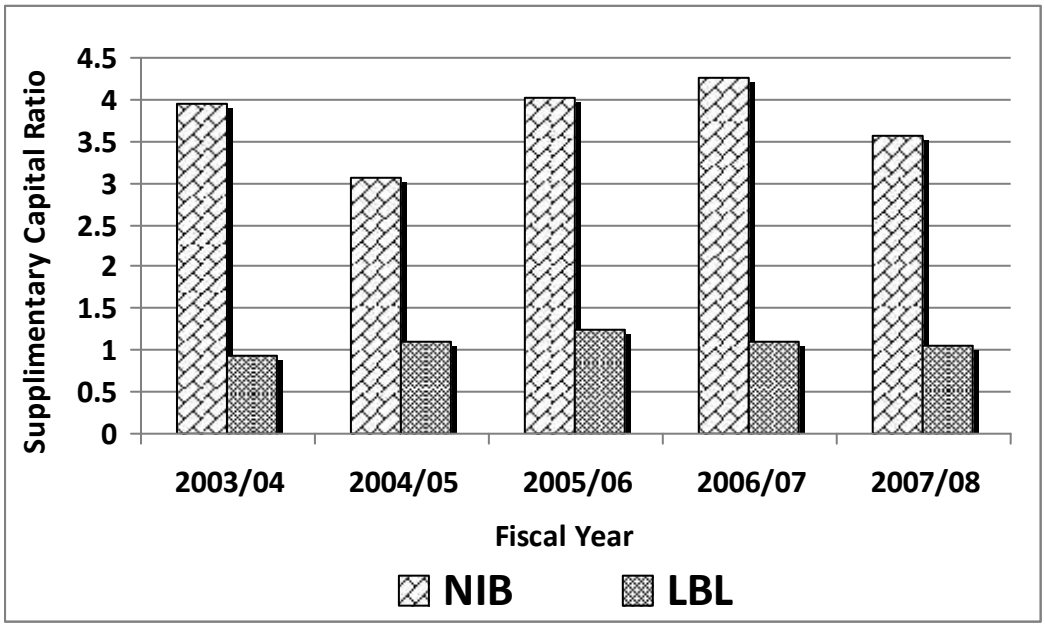


Diagram 4.2 shows, Tier II capital ratios of NIB is increasing in fluctuation trend and were well below the maximum level allowed by NRB norms in all the 5 years of the review period, with maximum ratio of 4.26% in FY 2006/07 and minimum ratio of 3.06% in FY 2004/05. Same as, Tier II capital ratio of LBL also were well below the maximum level allowed by NRB norms in all the years with maximum ratio of 1.25% in FY 2005/06 and minimum ratio of 0.93% FY 2003/04.

4.1.1.3 Total Capital Adequacy Ratio

Capital adequacy ratio above the NRB standard indicates adequacy of capital and signifies higher security to depositors, higher internal sources and higher ability to Cushion operational and unanticipated losses. The lower value, on the contrary, indicates lower internal sources, comparatively weak financial position and lower security to depositors.

Table 4.3: Total Capital Adequacy Vs NRB Standard

NIB					
Fiscal Year	Total Capital (Million)	RWA (Million)	Total Capital To RWA %	Min. NRB Standard %	Variance %
2003/04	1099.38	9836.7	11.18	11	.18
2004/05	1578.78	13632.91	11.58	11	.58
2005/06	2094.2	17491.79	11.97	11	.97
2006/07	2851.62	23435.63	12.17	11	1.17
2007/08	3891.23	34484.54	11.28	11	1.28

LBL					
Fiscal Year	Total Capital (Million)	RWA (Million)	Total Capital To RWA %	Min. NRB Standard %	Variance %
2003/04	570.61	1954.88	29.19	11	18.19
2004/05	638.65	3054.49	20.9	11	9.9
2004506	704.68	4711.71	14.96	11	3.96
2006/07	921.93	7416.11	12.43	11	1.43

2007/08	1201.08	10750.04	11.17	11	1.17

See Appendix 2, 3, 9 & 10

Table 4.3 tabulates the bank's , Total Capital, RWA, Total Capital Adequacy Ratio and its comparison with minimum NRB standard during the review period. As tabulated, the total capital to RWA of NIB with 12.17% is maximum in FY 2006/07 and minimum with 11.18% in FY 2003/04, The ratio was found above the minimum NRB standard in all the study period with maximum positive variance of 1.28% and minimum positive variance of 0.18 % in FY 2007/08 and 2003/04 respectively. Similarly in the case of LBL the total capital to RWA is maximum with 29.19% in FY 2003/04 and minimum with 11.17% in FY 2007/08, The ratio was found above the minimum NRB standard in all the study period with maximum positive variance of 18.19% in FY 2003/04 and minimum with positive variance of 1.17% in FY 2007/08.

Diagram 4.3 Total Capital Adequacy vs NRB Standard

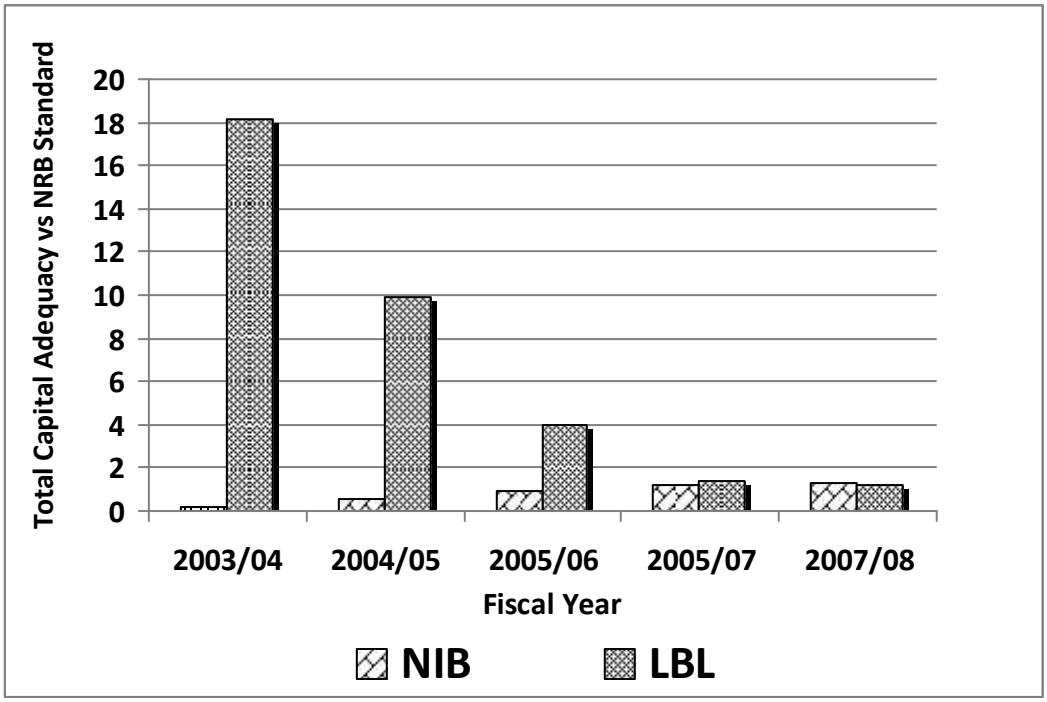


Diagram 4.3 exhibits the data tabulated in Table 4.3. As shown in the Diagram, the capital adequacy ratio of NIB was above the minimum NRB standard and positive variances were in increasing trend represented by the variance with NRB curve. Similarly Capital Adequacy ratio of LBL was also found above the minimum NRB Standard but found that the positive variances were in decreasing trend in the following years.

In general, Both banks were able to maintain CAR above the minimum NRB standard efficiently during the study period. Comparatively LBL was able to maintain minimum Total Capital Adequacy ratio than NIB.

4.1.2 Asset Quality Analysis

Out of the several indicators of asset quality, Asset composition, Non-Performing asset ratio and Loan Loss provisioning ratio are taken to examine the asset quality of NIB &

LBL. The total asset composition of NIB & LBL is analyzed using time series technique over the review period with major highlight on Investment component due to its sensitive exposure. The Loans & Advances having major exposure and sensitive to bank's performance, was carried out using time series and comparative analysis technique. The analysis of Loans & Advances contains examination of loan classification and Non-Performing Loans to Total Loans ratio which is used as a proxy for asset quality. The coverage ratio—the ratio of provisions to loans was examined since it provides a measure of the share of bad loans for which provisions have already been made.

The loan portfolio diversification analysis to assess inherent credit risks could not be conducted as the bank's financial data format in the annual reports lacked detailed sectorial loan portfolio unlike financial reports required in US region.

4.1.2.1 Asset Composition

The assets portfolio of the bank represents the varied nature and consequence of the bank's function and investment policies. Usually every banker seems to arrange their assets appearing in balance sheet in descending order of liquidity. The capital and liabilities of banks are invested in various assets in the form of Cash & Bank Balance, Placements, Investments, Bills purchase, Loans and advances and Fixed Assets. Of these, Loans usually make the largest portion of all the assets. As they are the least liquid form of assets, Loans and Advances contain the high proportion of potential risk to the bank's capital.

Table 4.4: Bank Asset Composition (in %)

NIB

	2003-04	2004-05	2005-06	2006-07	2007-08	Mean
Cash & Bank Balance	9.26	8.34	10.95	8.85	9.66	9.412
Money at Call or Short Notice	2.34	0.87	0.32	1.32	-	1.21
Investment (At Cost)	29.14	24.49	26.26	23.58	17.68	24.23
Loans, Advances & Overdrafts & Bills Purchases & Discounted	53.79	63.04	59.89	62.65	69.45	61.76
Fixed Assets	1.88	1.99	1.62	2.75	2.5	2.14
Other Assets	3.59	1.26	0.95	0.85	0.71	1.47

LBL

	2003-04	2004-05	2005-06	2006-07	2007-08	Mean
Cash & Bank Balance	14.68	12.28	4.33	5.47	9.75	9.3
Money at Call or Short Notice	3.87	1.51	1.34	0.15	1.98	1.77
Investment (At Cost)	11.41	10.76	9.6	16.74	9.78	11.66
Loans, Advances & Overdrafts & Bills Purchases & Discounted	67.04	69.57	80.73	75.0	76.26	73.72
Fixed Assets	1.26	3.26	2.4	1.63	1.61	2.03
Other Assets	1.74	2.63	1.6	1.00	0.62	1.51

See Appendix 1 & 8

Asset composition of NIB bank like in every banks remained largely in loans and investment during the last five financial years. As shown in the Table, percentage of cash and bank balance fluctuate during the study period with maximum balance of 10.95% in FY 2005/06 and minimum balance of 8.34% in FY 2004/05.. The average Cash & Bank Balance of 5 years were 9.41%. Money at Call was maximum in FY 2003/04 at 2.34% thereafter it decrease for two years at minimum in FY 2005/06 at 0.32% and its slightly increase next year at 1.32%. The Investments composition of the total assets has shown fluctuation e during the review period with maximum of 29.14% in 2003/04 and minimum of 17.68% in 2007/08.. The Investment proportion in the 5 year period averaged 24.23%. The Loan, Advances & Bills Purchase was 53.79% in 2003/04 and 69.45% in 2007/08 with an average of 61.76%. Similarly, fixed assets proportions is fluctuated and the other assets proportions decreased in the following years during the study period.

In the case of LBL, percentage of Bank and Cash Balance cumulatively ups and down in all the years with 14.68%, 12.28%, 4.33%, 5.47%, and 9.75% respectively with average balance of 9.302%. Money at call is maximum with 3.87% in FY 2003/04 after then decreases till FY 2006/07 to 0.15% then slightly increased to 1.98% in FY 2007/08. However the trend is in fluctuating but still the above mean with 1.77%.The Investment Composition is in Ups and dwns with maximum of 11.41% in 2003/04 and with minimum oo 9.60% in 2005/06.. Loan, Advances and Bills Purchase is in increasing trend in first three years and decreased in next year and against increased in the last year of the study period.. Similerly, Fixed assets and other assets proportion is in customary changing trend in the review period.

4.1.2.2 Loans And Advances

The fact that the Loans usually form the largest of the asset items and can carry the greatest amount of potential risk to the bank's capital account, the primary factor effecting overall asset quality is the quality of the loan portfolio and the credit administration program. For the evaluation of asset quality of NIB and LBL the adequacy of Allowance for Loan and Lease Losses has been considered and the exposure to counter-party, issuer, or borrower default under actual or implied contractual agreements is weighed. Assets with inherent credit weaknesses, categorized into non-performing assets components: Substandard, Doubtful and Loss grades are examined, as per minimum criteria laid down by NRB based on the overdue period of the advances. These graded loans are required require provisioning of 25%, 50% and 100% respectively, in order to safe guard the interest of the stakeholders. Quality of loans and advances of NIB is assessed based on its Loan Classification and Loan Loss Provision mix as below.

4.1.2.2.1 Loan Classification Mix Analysis

The default in repayment of interest or principal within the stipulated time frame, the performing loan turns into NPL. As per NRB directives, all Loans and Advances must be classified in order of Principal default aging into Pass (due up to 3 months), Sub-standard (due between 3-6 months), Doubtful (due between 6-12 months) and Loss (due over 1 year). NPL forms an aggregate of Substandard, Doubtful and Loss loans. The ratio of NPL to Total loan and advances shows the percentage of NPL in total loan. The lower the ratio the better is the proportion of performing loans and risk of default.

Table 4.5: Non Performing Loan Ratio. (Rs. In Millions)

NIB

	2003-04	2004-05	2005-06	2006-07	2007-08	Mean
Non-Performing Loan	181.43	280.87	272.49	421.97	309.47	293.24
Total Loan	7338.56	10453.16	13178.15	17769.1	27529.3	15253.65
NPL Ratio (%)	2.47	2.68	2.06	2.37	1.12	2.14

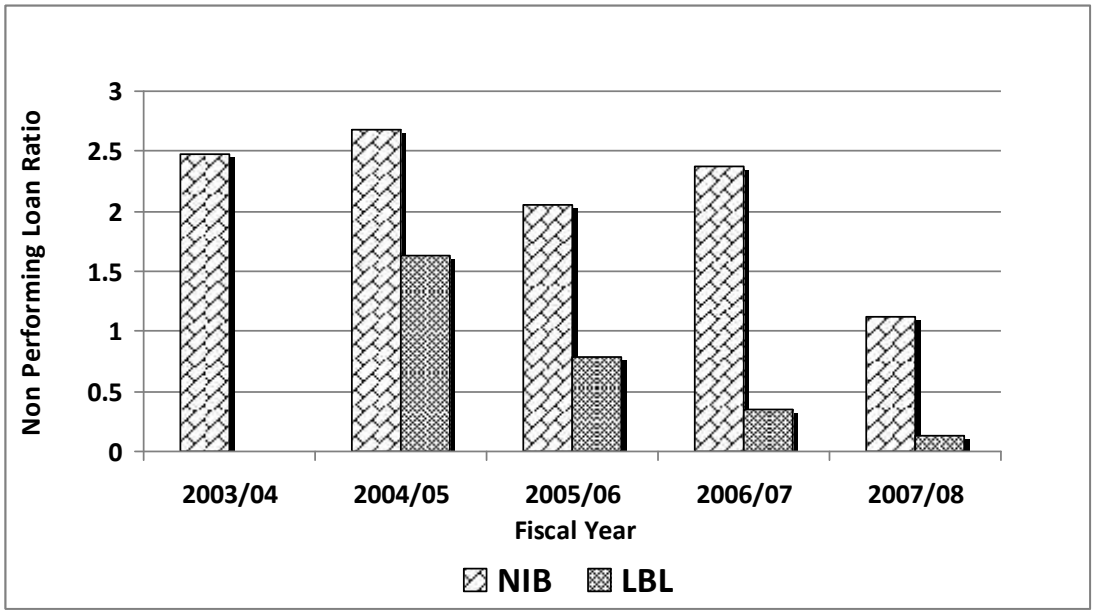
LBL

	2003-04	2004-05	2005-06	2006-07	2007-08	Mean
Non-Performing Loan		44.49	33.5	23.02	12.72	28.43
Total Loan	1750.93	2726.14	4280.11	6529.24	9794.43	6270.21
NPL Ratio (%)		1.63	.78	.35	.129	.72

See Appendix 5, 12

The mid figures of NPL of both of the banks were adequate to tell the trend analysis. The NPL ratio of NIB bank is in continuously ups and down with decreasing trend and was found maximum with 2.68% in FY 2004/05 and minimum with 1.12% in FY 2007/08. Whereas, NPL of LBL is in continuously decreasing trend was found maximum with 1.63% in FY 2004/05 and minimum with .129% in FY 2007/08.

Diagram 4.5: Non Performing Loan Ratio



In figure 4.5, the non-performing loan ratio curve of the both banks is very low. The ratios of both banks is positively standing. Generally, an internationally recognized non-performing loan benchmark is less than 5 percent. With regards to the Nepalese banking scenarios. Having non-performing loan ratio in a single digit is said to be acceptable.

4.1.2.2.2 Loan Loss Provisioning Ratio

The Loan Loss Provisioning ratio indicates adequacy of allowance for loans and trend in the collection of loan and the performance in loan portfolio. It is obtained by the ratio of loan loss provision to the total loan. Greater loan loss provision is required to allow in income statement if high loss is expected. This ratio shows the possibility of loan default of a bank. It indicates how efficiently it manages its loan and advances and makes effort for the loan recovery. Higher ratio implies higher portion of non-performing loan portfolio. The ratio of loan loss provision to total loans and advances describes the quality of assets that a bank is holding. The provision for loan loss reflects the increasing probability on non-performing loans in the volume of total loans and advances. The high ratio signifies the relatively more risky assets in the volume of loans and advances. The

high provision for loan loss shows the recovery of loan to be difficult and irregular and the age of the loan is increasing. More delay the bank gets to collect the loan, the provision will be higher and the ratio will be higher. This ratio is defined as the measure of prospective losses that are envisioned by the bank management in relation to the bank's overall loan and investment.

Table 4.6: Loan Loss Provisioning (%)

NIB

	2003-04	**2004-05**	**2005-06**	**2006-07**	**2007-08**
Total Loan Loss Provision (in Million)	208.44	327.108	401.94	482.67	532.65
Total Loan & Advances	7338.56	10453.16	13178.15	17769.09	27529.3
Total Provision to Total Loans (%)	2.84	3.13	3.05	2.72	1.93

LBL

	2003-04	**2004-05**	**2005-06**	**2006-07**	**2007-08**
Total Loan Loss Provision (in Million)	17.51	68.18	77.74	91.79	113.49
Total Loan & Advances	1750.93	2726.14	4280.11	6529.24	9794.44
Total Provision to Total Loans (%)	1	2.5	1.82	1.4	1.16

See Appendix 5 & 12

Table 4.6 exhibits that the loan loss provisioning ratio of NIB for the study period is in fluctuating trend. The ratio ranges from 2.84% in FY 2003/04 to 1.93% in FY 2007/08 with an average of 2.734%. The coefficient of variation between them is 9.29%, which indicates that the ratios are variable and not consistent with the decreasing trend. Where in the case of LBL the loan loss provisioning ratio for FY 2003/04 to 2004/05 is in

increasing trend and thereafter it is in continuously decreasing trend. The ratio ranges from 1% in FY 2003/04 to 1.16% in FY 2007/08 with an average of 1.57%. The coefficient of Variation between them is 38.19%, which indicates that the ratios are consistent but with slightly decreasing trend.

Diagram 4.6: Trend of Loan Loss Provision Ratio

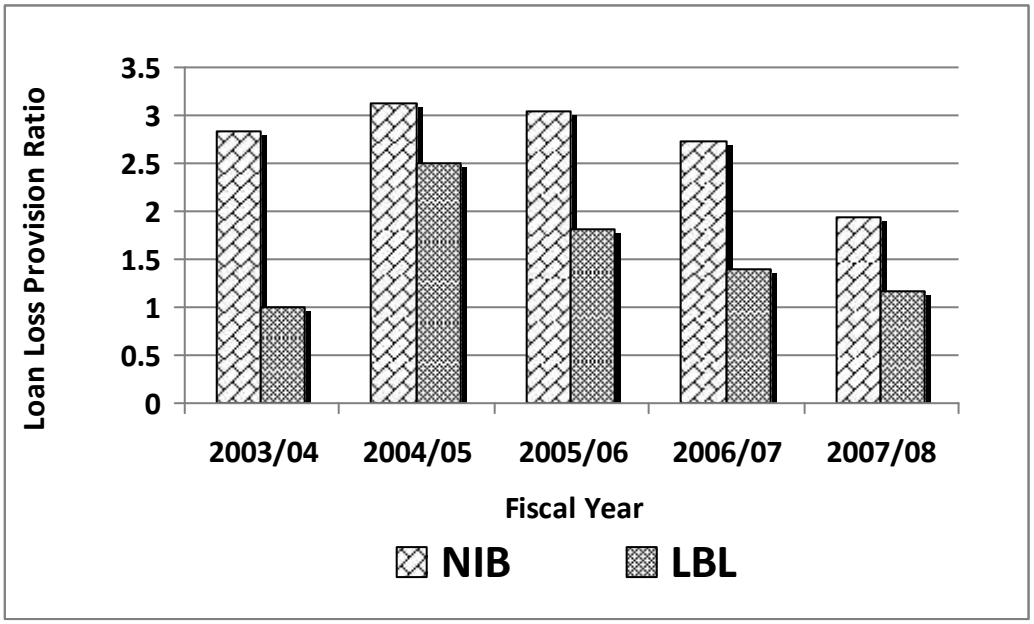


Diagram 4.6 shows the observed value of loan loss provisioning ratio of NIB ups & downs trend, The ratio is fluctuating till FY 2007/08 which indicates the trend of the loan loss ratio is fluctuating over the study period. On the other hand loan loss provisioning of LBL is increasing trend up to year 2004/05 thereafter it is observed declining over the study period. It indicates the trend of the loan loss ratio is in decreasing over the study period.

4.1.3 Management Component Analysis

Management role is very important in the performance of FIs. The key distinct areas that reflect the overall quality of management are governance, general management, human resource policy, management information system, internal control and audit strategic planning and budgeting.

While the others factors can be quantified fairly easily from current financial statements, management quality being subjective is difficult to quantify. As such no particular factor can be pointed out as a concrete measure for assessing Management quality. The qualitative assessment of aspects like Depth and succession of top management, Technical Aspects, Internal Control decisions, Operating and Lending decisions, Involvement of Board of Directors, Willingness to serve community needs etc, illustrate the level of management quality as these decisions are reflected in the final balance sheet. There is one measure that is relevant to management is the ratio of Total expenses to Total revenue. Since the profitability of an institution is determined by the gap of Total Revenues and Total Expenses which are well in direct control and monitoring of the management, it is used to represent the management quality. Another measure that is also relevant to management is the ratio of earnings per employee is used as a proxy of management quality.

4.1.3.1 Total Expense to Total Revenue Ratio

The ratio of total expenses to total revenue is used as a proxy measure of the management quality. This ratio is calculated by dividing the total expenses by total revenues. Commercial bank's earnings originate from interest on Loans & Advances, Investments, Commissions & Discounts, Foreign Exchange Rate Gains and other miscellaneous income. Conversely, it expends on, Depositors' Interest, Staff Salary, Provident Fund

allowances and other operating expenses like rent, water & electricity, fuel expenses, audit fee expenses, management expenses, depreciation, miscellaneous expenses, and all other expenses directly related to the operation of bank. Expenses such as loss on sale of assets, write off expenses, losses shortage, written off, provision for income tax are non-operating expenses.

Table 4.7: Total Expenses to Total Revenues Ratio

NIB

FY (as at mid July)	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**
Total Expenses (TE) (in million)	761.04	913.48	1110.89	1498.36	2053.68
Total Revenues (TI) (in million)	913.71	1145.63	1461.43	1999.76	2750.41
TE /TI Ratio (%)	83.29	79.74	76.01	74.93	74.66

LBL

FY (as at mid July)	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**
Total Expenses (TE) (in million)	131.99	226.8	323.99	467.65	695.85
Total Revenues (TI) (in million)	142.45	253.26	359.37	533.23	815.88
TE /TI Ratio (%)	92.65	89.55	90.15	87.7	85.29

See Appendix 4 & 11

As shown in Table 4.7, the total expenses (TE) to total revenue(TI) ratio of NIB has decreased continuously over the study period from 83.29% to 74.66%. Whereas, TE to TI ratio of LBL is in maximum, with 92.63% in 2003/04 then it decreased for next year by

89.55% thereafter once again it increased up to 90.15% in 2005/06 then continuously decreased up to 2007/08 with 85.29%. The mean ratio of the review period was 89.068% which indicates the ratio are variables and not consistent.

Diagram 4.7 Trend Analysis of Total Expenses/ Total Revenue Ratio

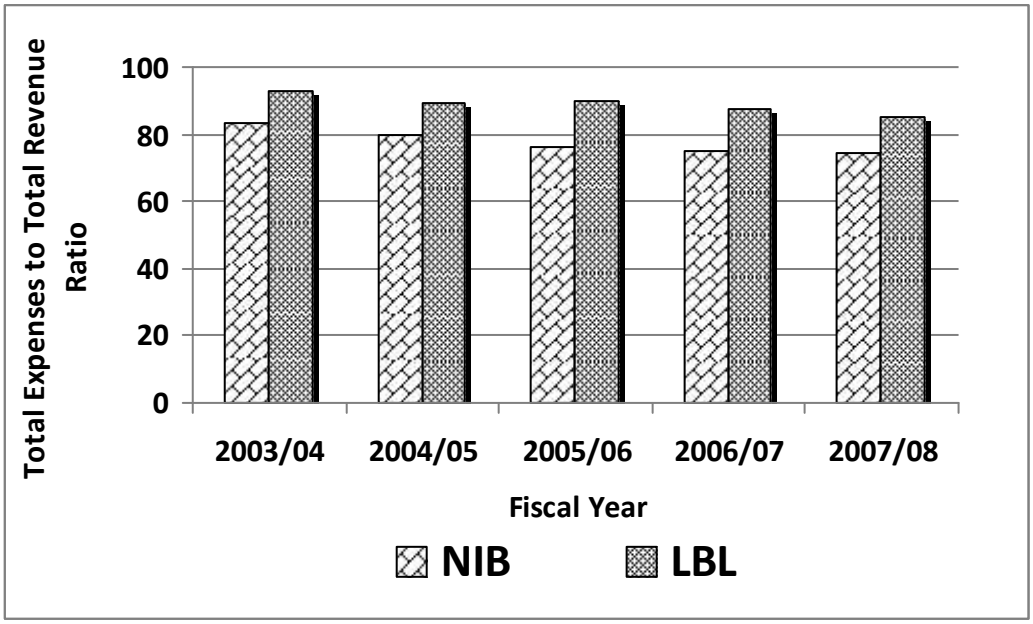


Diagram 4.7 exhibits the observed TE to TI ratio of NIB and LBL within the study period of last five years. As shown in the Diagram, the observed ratio of NIB continuously downwards over study period. In case of LBL the slope of the curve is in slightly decreased in 2004/05 then slightly increased in 2005/06 thereafter continuously decreased upto FY 2007/08.Hence the negative slope of both banks except increase in one year (FY 2005/06) of LBL, thus indicates decreasing expenses with respect to income which is accredited to good management quality.

4.1.3.2 Earnings per Employee

Earning per Employee is calculated by dividing net profit after taxes by number of employees. Low or decreasing earnings per employee can reflect inefficiencies as a result of overstaffing, with similar repercussions in terms of profitability.

Table 4.8: Earnings per Employee

NIB

	2003-04	2004-05	2005-06	2006-07	2007-08
Net Profit (Rs.)	152670976	232147098	350536413	501398852	696731516
Number of Employees	325	353	390	514	622
Earning per Employee (Rs.)	896541.96	657640.5	898811.31	975484.15	1120147

LBL

	2003-04	2004-05	2005-06	2006-07	2007-08
Net Profit (Rs.)	10449665	26464785	35385333	65579489	120031347
Number of Employees	75	108	145	186	252
Earning per Employee (Rs.)	139328.86	245044.3	244036.77	352577.89	476314.86

See Appendix 4 & 11

Table 4.8 shows the Earnings per Employee in rupees during the study period. The ratio of NIB at first decreased in 2004/05 and thereafter it continuously increased upto 2007/08. The mean earning per employee of the study period was Rs.909724.98. In the case of LBL, EPE at first increased in 2004/05 then slightly decreases up to Rs. 244036.77 in FY 2005/06, thereafter it increase continuously over study period.

So, the Earning Per Employee of both the Banks NIB & LBL were satisfactory.

Diagram 4.8: Earning per Employee Trend

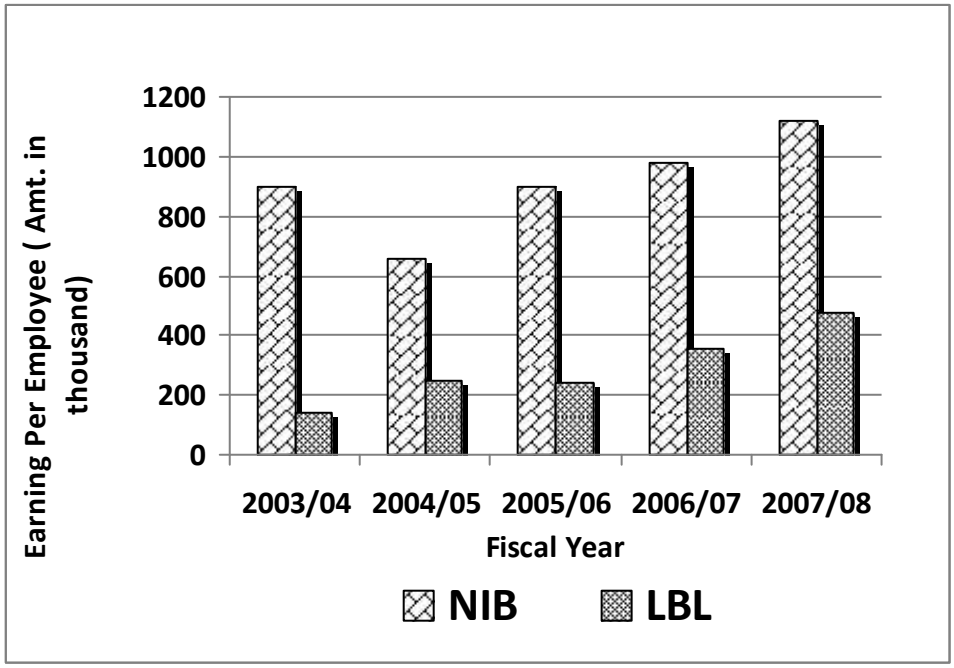


Diagram 4.8 shows the observed earning per Employee the banks. The slope of the curve of NIB is positive, which indicates the Earning per Employee is increasing over the study period. This indicates that, in the review period the increased number of staff have decreased the earnings per employee with similar repercussion in terms of profitability. Whereas, the slope of the curve of LBL is also positive, and indicates the earning per employee is inclining (except in FY 2005/06) during the study period. Thus the table shows the Earning Per Employee trend of LBL is better than NIB.

4.1.4 Earning Quality :

Earning Factors are the initial safeguard against the risks of engaging in the banking business, and represent the first line of defence against capital depletion resulting from shrinkage in asset value. Earnings performance should also allow the bank to remain competitive by providing the resources required to implement management's strategic initiatives.

4.1.4.1 Return On Equity (ROE)

ROE is measure of the rate of return flowing to the bank's shareholders. ROE is the profit as a percentage return on the owner's stake in a firm. The level of profit depends on the ROE i.e. the profit per dollar invested. Computed as the ratio of net income to the equity, it reflects the income earned from its internal sources. The ROE measures the book return to the owners of the firm. It is a "bottom line ratio' in that sense. Return on equity reveals how well the bank uses the resources of owners. The higher ratio represents sound management and efficient mobilization of the owner's equity and vice- versa. ROE of 15% is treated as standard and banking industry are desired to have higher than this

Table 4.9: Return on Equity

NIB

Year (as at mid July)	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**
Net Profit After Taxes (in million)	152.67	232.15	350.54	501.4	696.73
Shareholders' Equity (in million)	295.29	587.74	590.59	801.35	1203.91
Return on Equity (%)	51.7	39.5	59.35	62.54	57.87

LBL

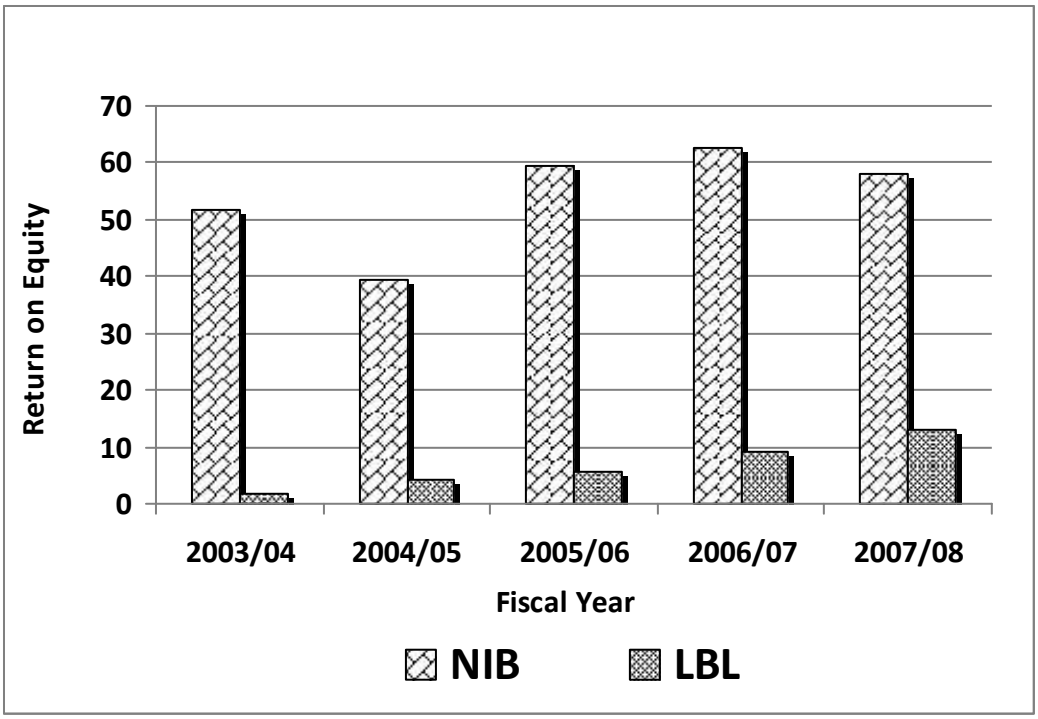
Year (as at mid July)	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**
Net Profit After Taxes (in million)	10.50	26.46	35.38	65.57	120.03

Shareholders' Equity (in million)	549.79	609.84	609.92	729.69	913.19
Return on Equity (%)	1.9	4.34	5.8	9	13.14

See Appendix 1, 4, 8 & 11

As shown in Table 4.9, the Return on Equity of NIB of 39.5% is the minimum in 2004/05 and 62.54% is maximum 2006/07. The ratio fluctuated between 51.7% in the initial period of 2003/04 and 57.87% of the final period of 2007/08. The mean ratio of the bank is 54.19% and the coefficient of variation of them is 16.81% which is adjustable and consistent. In all years of the review period and obviously the mean ratio is above the 15% benchmark. Hence the bank's Return on Equity ratio is very sound. In the other hand, Return on Equity of Laxmi Bank Limited is maximum with 13.14% in the FY 2006/07 and minimum of 1.9% in FY 2003/04, the ratio slightly increased to 13.14%. The mean ratio of the bank is 6.84% and the coefficient of variation of them is 63.80%. The average mean ratio is below the 15% benchmark so this shows that the bank’s disable to use the resources of owners. So the Return On Equity of LBL is below the benchmark

Diagram 4.9: Return on Equity Trend



As shown in Diagram 4.9, the ratio of NIB has slightly decreased in 2004/05 and abruptly rose in 2005/06 & 2006/07. It slightly decreased in the following year . The observed values of the ratio are fluctuating over study period. The slope of the curve is positive which indicates the upward trend in ratio of bank during the period of five years. The average ratio is also above the benchmark. The increasing trend of ratios implies that earning quality of bank is getting better comparatively, the ratio of LBL is in increasing trend, the slope of curve is positive, but Return On Equity is disable to meet the Average Mean ratio of 15% benchmark which indicates the steady upward movement or in creasing trend in ratio of the bank during the period of 5 years. But the observed ratio is not stuffiest in the Nepalese Commercial Banks. The Performance of bank shows that earning quality of Bank is not satisfactory.

4.1.4.2 Return On Assets (ROA)

ROA determines the net income produced per dollar of assets. It is a measure of profitability linked to the asset size of the bank. It is primarily an indicator of managerial efficiency; it indicates how capably the management of the bank has been converting the institution's assets into net earnings. ROA is a popular tool to measure how well their assets are utilized in generating profit. It measures the profit earning capacity by utilizing available resources i.e. total assets. Return will be higher if the banks resources are well managed and efficiently utilized. Generally, the return on assets ratio should be 1% and higher is desired to the banking industry.

Table 4.10: Return on Asset

NIB

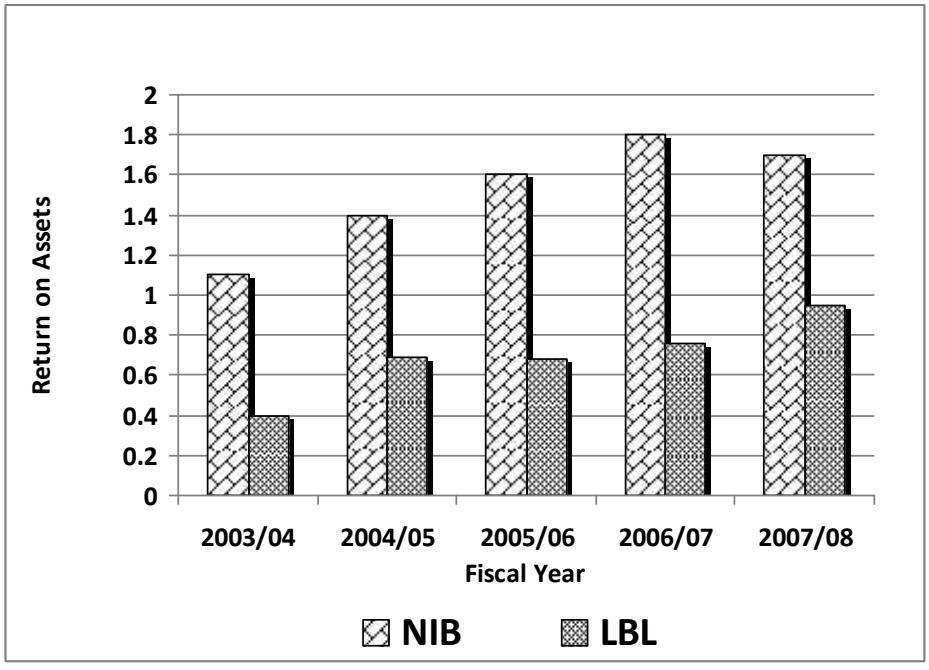
Year (as at mid July)	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**
Net Profit After Taxes (million)	152.670976	232.147098	350.536413	501.398852	696.731516
Total Assets (million)*	13255.49	16063.54	21330.14	27590.84	38873.31
Return on Assets (%)	1.1	1.4	1.6	1.8	1.7

LBL

Year (as at mid July)	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**
Net Profit After Taxes (million)	10.449665	26.464785	35.385333	65.579489	120.031437
Total Assets (million)*	2585.49	3802.77	5205.19	8582.69	12695.02
Return on Assets (%)	0.4	0.69	0.68	0.76	0.95

See Appendix 1, 4, 8 & 11

Diagram 4.10 Return on Assets



As shown in Table 4.10, the return on asset ratio of NIB was minimum in 2003/04 with 1.1% and maximum in 2006/07 with 1.8%. The ratio increased up to 2006/07 with 1.8, and thereafter the ratio is slightly decreased with 1.7% in following year. The mean ratio of the bank is 1.52% and the coefficient of variation of them is 18.22% which is not variable and consistent. The bank's mean ratio is above the 1% benchmark. The bank's ROA is in increasing trend which shows the quality of assets and their efficiency to generate return is increasing. Whereas, the ROA of LBL is minimum of 0.41% in FY 2003/04 and maximum of 0.95% in FY 2007/08. The bank's mean ratio is 0.696% and the coefficient of variation of them 28.41%, which is consistent but less than the benchmark of 1%. On the basis of mean ratio of the bank is under the benchmark 1% so this indicates that the bank's ratio is not good enough but it is in increasing tendency.

4.1.4.3 Net Interest Margin (NIM)

The net interest margin measures the net return on the bank's earning assets (investment securities and loans and leases). It is calculated by dividing the Net Interest Income (NII) with the earning assets.

Generally, the net interest margin ratio should be 3% to 4% and higher is better in banking industry. Generally the higher this ratio, the better. However it highlights the fact that looking at returns without looking at risk can be misleading and potentially dangerous in terms of bank solvency and long run profitability.

Table 4.11: Net Interest Margin

NIB

Year (as at mid July)	2003/04	2004/05	2005/06	2006/07	2007/08
Net Interest Income (in million)	405.2	532.25	681.79	899.46	1202.12
Earning Assets (in million)	9131.22	12074.55	15298.51	20542.83	30151.65
Net Interest Margin (%)	4.44	4.41	4.46	4.38	3.99

LBL

Year (as at mid July)	2003/04	2004/05	2005/06	2006/07	2007/08
Net Interest Income (in million)	60.87	95.69	128.66	190.22	289.13
Earning Assets (in million)	2017.36	3058.97	4626.55	7415.27	10365.65
Net Interest Margin (%)	3.01	3.13	2.78	2.56	2.79

See Appendix 1, 4, 8 & 11

In the past five years, the NIM ratio of NIB was distributed over 4.44% of 2003/04 and 3.99% of 2007/08. The minimum ratio was observed in 2007/08 with 3.99% and the maximum ratio was found in the FY year 2005/06 with 4.46%. The ratio decrease for the FY 2004/05 and increased in the following FY and then decreased till the final year of the study period. Throughout the review period the NIM ratio was found slightly above the generally accepted benchmark. Comparatively, NIM ratio of LBL was distributed as a maximum ratio 3.13% in the FY 2004/05 and minimum ratio 2.56% in FY 2006/07. The ratio increased in FY 2004/05 with 3.13% then decreased in the following two FY then again slightly increased in the concluding year. The mean ratio for the period is 2.854% and the coefficient of variation is found 7.77%. On the basis of the mean ratios it can be concluded that the ratios are stable and it was below the benchmark of 3% to 4%.

Diagram 4.11: Net Interest Margin

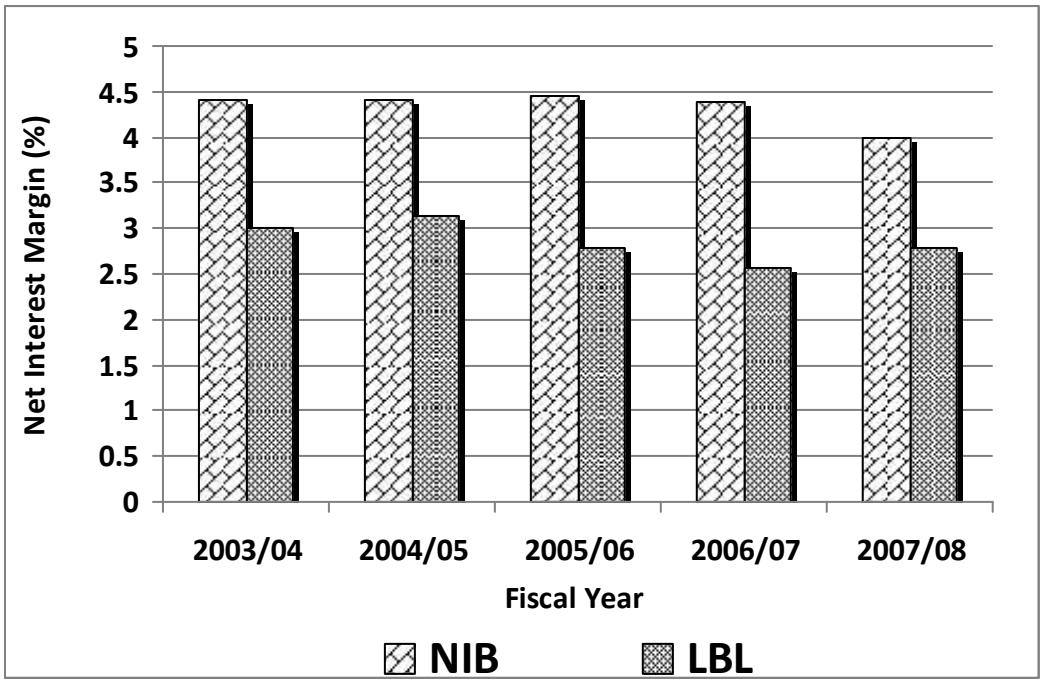


Diagram 4.11 shows the trend of NIM of the banks from 2003/04 to 2007/08. The slope of the trend line of NIB is positive but shows decreasing trend of NIM ratio during the study period. Even if it indicates bank's capacity to maintain higher interest margin than the benchmark during the study period. Comparatively, the trend of LBL is negative which shows decreasing trend of NIM ratio during the study period also the bank was not able to maintain higher interest margin than the benchmark.

4.1.4.4 Earning Per Share (EPS)

The profitability of a firm from the point of view of the ordinary shareholders is the Earning per Share. It measures the profit available to the equity shareholders on per share basis (Shiva Prasad Munankarmi, 2002). The earnings per share of an organization give the strength of the share in the market. The higher the EPS is supposed to be a best comparing between two banks.

Table 4.12: Earning Per Share

NIB

Year (as at mid July)	2003/04	2004/05	2005/06	2006/07	2007/08
Net Profit (in million)	152.67	232.15	350.54	501.40	696.73
No. of Shares (in Million)	2.95	5.87	5.90	8.01	12.03
Earning Per Share	51.7	39.5	59.41	62.59	57.9

LBL

Year (as at mid July)	2003/04	2004/05	2005/06	2006/07	2007/08
Net Profit (in million)	10.44	26.46	35.38	655.58	120.031
No. of Shares (in Million)	5.5	6.1	6.1	7.29	9.13
Earning Per Share	1.9	4.3	5.8	8.9	13.15

See Appendix 1, 4, 8 & 11

Table 4.12 reveals that EPS of NIB fluctuated in the first year of the review period thereafter it increased continuously till the FY 2006/07 and it decreased in the final year of the review period. EPS was minimum in 2004/05 with Rs.39.5/ per share and maximum in 2006/07 with Rs.62.59/ per share. The average EPS of the period was Rs.54.22/share and coefficient of variation of the bank is 16.84% which shows that the ratios are less consistent during the study period. Whereas, in the case of LBL EPS of the bank has increased over the study period. The EPS of the bank has ranged between Rs. 1.9 in FY 2003/04 to Rs. 13.15 in FY 2007/08, which is increasing trend during the study period. The mean average of EPS is Rs. 6.8/ per share and coefficient variation is 64% which shows increasing tendency but not satisfactory. EPS OF LBL is less appreciable in comparison to NIB.

Diagram 4.12: Earning Per Share

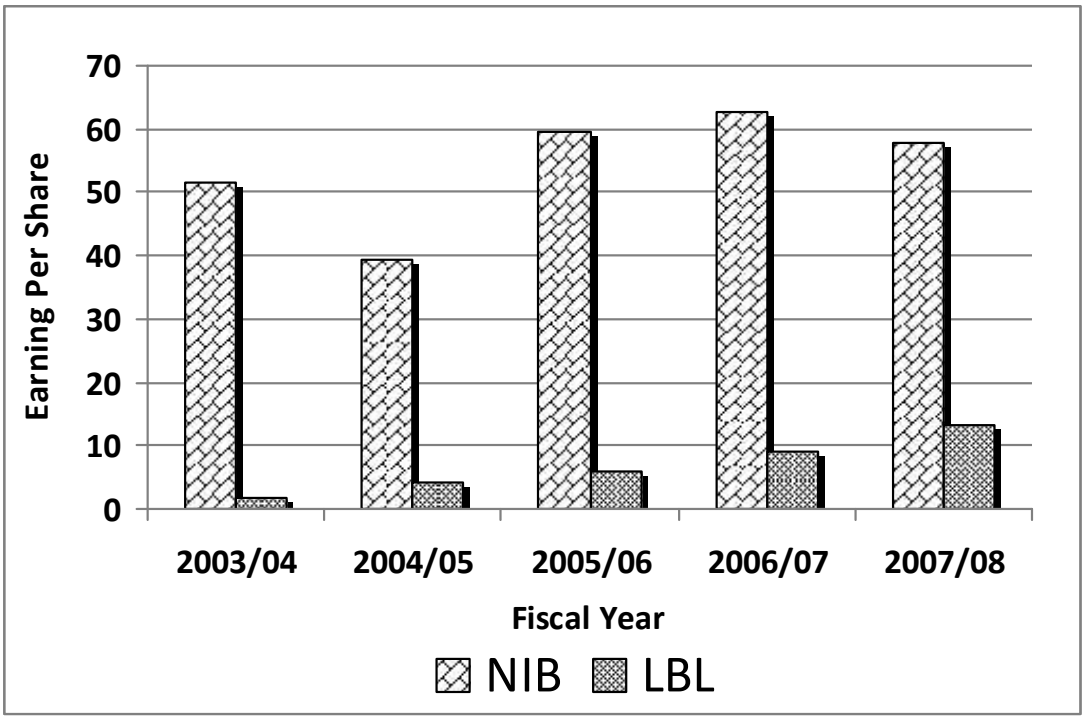


Diagram 4.12 shows the EPS of NIB fluctuated down in 2004/05 from Rs.51.7/ per share to the all time minimum of Rs.39.5/ per share. Thereafter it increased continuously in the following two years and again decreased in2007/08. The maximum EPS was reached in 2006/07 with Rs.62.59/ per share. The increasing trend of EPS is also supported by positive slope of the trend line. However, the trend line of LBL is also positive and also indicates that the trend of earning per share is inclining over the study period but the EPS is very low in comparison to NIB..

4.1.5 Liquidity component Analysis

The level of liquidity influences the ability of a banking system to withstand shocks. Liquidity risk arises when an FI's liability holders like depositors demand immediate

cash for the financial claims they hold with an FI. The most liquid asset is cash, which FIs can use directly to meet liability holders' demands to withdraw funds. Day to day withdrawals by liability holders are generally predictable and large FIs can expect to borrow additional funds on the money and financial markets to meet any sudden shortfalls of cash. At times FIs face a liquidity crisis due to either a lack of confidence on the FIs problem or some unexpected need for cash, the liability holders may demand larger withdrawals than usual.

Liquid Assets to Total Deposit Ratio

The ratio of Liquid assets to Deposit measures the levels of liquid assets available with the bank to meet short term obligations. This ratio is computed by dividing liquid assets by total deposits. The higher ratio implies the better liquidity position and lower ratio shows the inefficient liquidity position of the bank. As per NRB direction, only investments in government securities are considered as liquid.

Table 4.13: Liquid Assets to Total Deposit Ratio

NIB

Fiscal Year (as at mid July)	2003/04	2004/05	2005/06	2006/07	2007/08
Liquid Assets (in million Rs.)	3538.02	3428.98	4928.82	6060.88	6909.94
Total Deposits (in million Rs.)	11524.68	14254.58	18927.3	24488.85	34451.72
Liquid Assets/Total Deposits (%)	30.7	24.05	26.04	24.75	20.05

LBL

Fiscal Year (as at mid July)	2003/04	2004/05	2005/06	2006/07	2007/08
Liquid Assets (in million Rs.)	763.41	928.06	600.17	1460.57	2174.6
Total Deposits (in million Rs.)	1684.16	3051.76	4444.35	7611.65	10917.23
Liquid Assets/Total Deposits (%)	45.33	30.41	13.50	19.19	19.91

See Appendix 1,6, 8 &13

Table 4.13 shows that the liquid assets to total deposit ratio of NIB during the period FY 2003/04 to FY 2007/08 is in decreasing trend except in FY 2005/06. The liquid assets to deposit ratio was minimum in 2007/08 with 20.05% when the deposit were the highest with Rs.34451.72 million. The ratio was maximum in 2003/04 with 30.7% when the deposit volume was minimum with Rs.11524.68 millions. Whereas, liquid funds to total deposit ratio of LBL during the period of FY 2003/04 to 2007/08 was in fluctuating trend. The highest ratio was 45.33% in FY 2003/04 when the deposits were lowest with Rs. 1684.16 millions and the lowest ratio was 19.19% in FY 2006/07 when the deposits were Rs.7611.65 million.

Diagram 4.13: Trend of Liquid Asset to Total Deposits

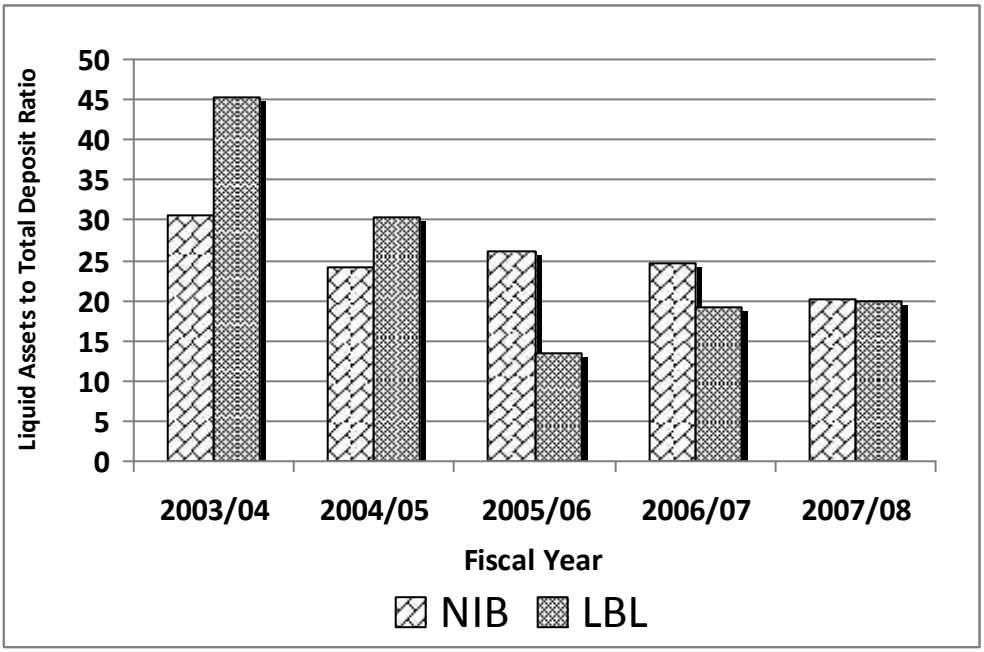


Diagram 4.13 exhibits the liquid fund to total deposits ratio of NIB in comparison to the LBL ratio within the study period of last five years. In the Diagram, the total liquid fund to total deposit curve of the NIB is above the LBL in all observed fiscal years except in

2003/04 and 2004/05. This fact implies that the overall liquidity position of the bank is better than LBL.

Hence the Liquid Assets to Total Deposits of both NIB and LBL is in decreasing trend. As the both of banks has switched to investing on more profitable assets.

4.1.5.1 NRB Balance to Total Deposit Ratio

This ratio shows whether bank is holding the balance as required to NRB. To ensure adequate liquidity in the commercial banks, to meet the depositors' demand for cash at any time, to inject the confidence in depositors regarding the safety of their deposited funds NRB has put the directives to maintain certain percent of total deposit in NRB by the commercial Banks. Total Deposit means Current, Savings and Fixed Deposit Account as well as Call Account deposit and certificates of deposits. For the purpose, deposits held in convertible foreign currency, employees guarantee amount and margin account will not be included. The following table shows the NRB Balance to Total Deposit Ratio.

Table 4.14: NRB Balance to Total Deposit Ratio

NIB

Fiscal Year (as at mid July)	2003/04	2004/05	2005/06	2006/07	2007/08
NRB Balance (in million Rs.)	545.62	780.24	1526.06	1381.35	1820.06
Total Deposit less Margin & FCY Dep.(million)	9368.13	11804.5	15342.3	20495.7	30113.34
NRB Balance/ Total Deposit (%)	5.82	6.61	9.95	6.74	6.04

LBL

Fiscal Year (as at mid July)	2003/04	2004/05	2005/06	2006/07	2007/08
NRB Balance (in million Rs.)	222.59	254.90	132.38	323.69	720.39

Total Deposit less Margin & FCY Dep.(million)	1654.02	2942.2	4326.8	7223.77	10181.01
NRB Balance/ Total Deposit (%)	13.45	8.67	3.06	4.48	7.07

See Appendix 1,6,8 &13

Table 4.14 shows that NIB has maintained adequate reserve with NRB during the observed period . NRB balance was increasing up to 2005/06 and is in decreasing thereafter till the final year. As regard to the deposit volume, it is in increasing trend up to the concluding year. The NRB balance to deposit ratio showed maximum in 2005/06 with9.95% and minimum in 2003/04 with 5.82%when the deposit volume was 9368.13 millions. Despite the highest deposit volume was observed in 2007/08, the lowest ratio was seen only in 2003/04. Whereas LBL maintained reserved with NRB balance were decreasing fluctuating up to 2005/06 and thereafter increased till the final year of the observed period. The ratio was maximum in 2003/04 with 13.45% when deposit volume was minimum with Rs. 1654.02 millions and minimum ratio was in 2005/06 with 3.06%.

Instead of fluctuation and decreasing trend NIB was able to maintain NRB balance to Total Deposit ratio in an adequate ratio. where as LBL seems inadequate ratio in FY 2005/06 and 2006/07. This indicates that the Bank has less expose towards the balance with NRB. However it does not necessarily mean that the cash reserve ratio at NRB is not maintained. The above calculation is based on year end volumes and NRB Balance where as NRB calculates CRR on weekly average balances. Hence this is a limitation of the study.

Diagram 4.14: NRB Balance/Total Deposit ratio

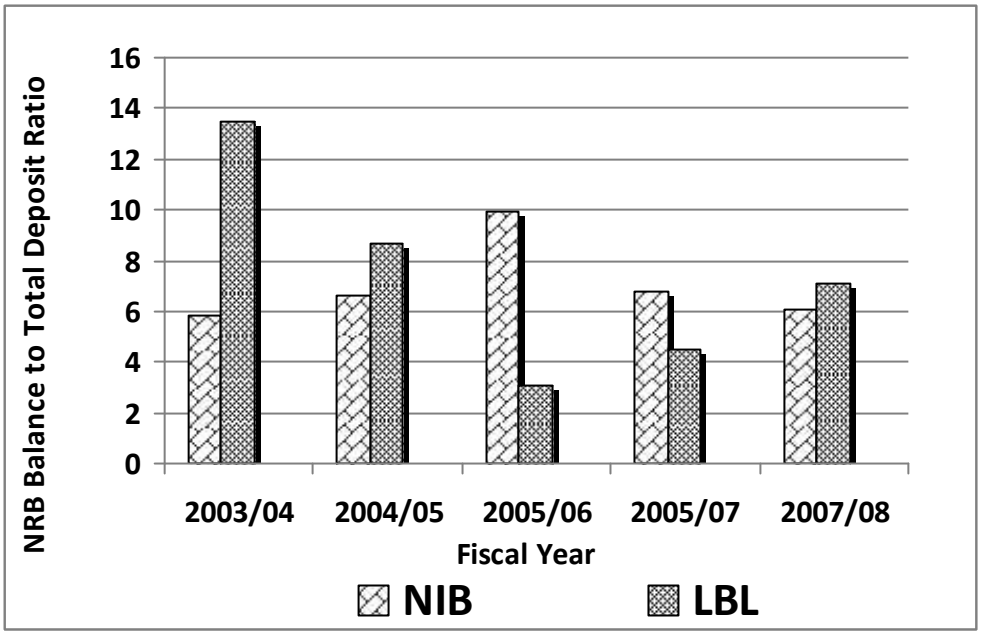


Diagram 4.14 shows the NRB balance to total deposit ratio of NIB and LBL with in the study period of last five years. As shown in the Diagram, the NRB balance to total deposit curve of NIB is above the minimum NRB Balance in all years during the study period. This fact implies that the balance with NRB of the bank is more than the minimum balance. Same as, NRB balance to total deposit curve of LBL is below the NRB Balance in FY 2005/06 and 2006/07 Which indicates the balance with NRB of the bank must be maintain is less than the minimum balance. This shows that the bank has not maintained the balance with NRB as per directives over those two FY.

4.1.5.2 Cash at Vault to Total Deposit Ratio

This ratio shows the percentage of total deposits held at vault at a particular time. It is computed by dividing cash at vault by total deposits. Cash and foreign currencies in hand are included as cash in vault. Total Deposit means Current, Savings and Fixed Deposit. Deposits held in convertible foreign currency will not be included as Total deposit.

Table 4.15: Cash at vault to Total Deposit Ratio

NIB

Fiscal Year (as at mid July)	2003/04	2004/05	2005/06	2006/07	2007/08
Cash in Vault (in million Rs.)	315.38	374.26	562.56	763.98	1464.48
Total Deposit less Margin & FCY Dep.(in million)	9368.13	11804.52	15342.34	20495.7	30113.34
Cash at Vault / Total Deposits (%)	3.37	3.17	3.67	3.73	4.86

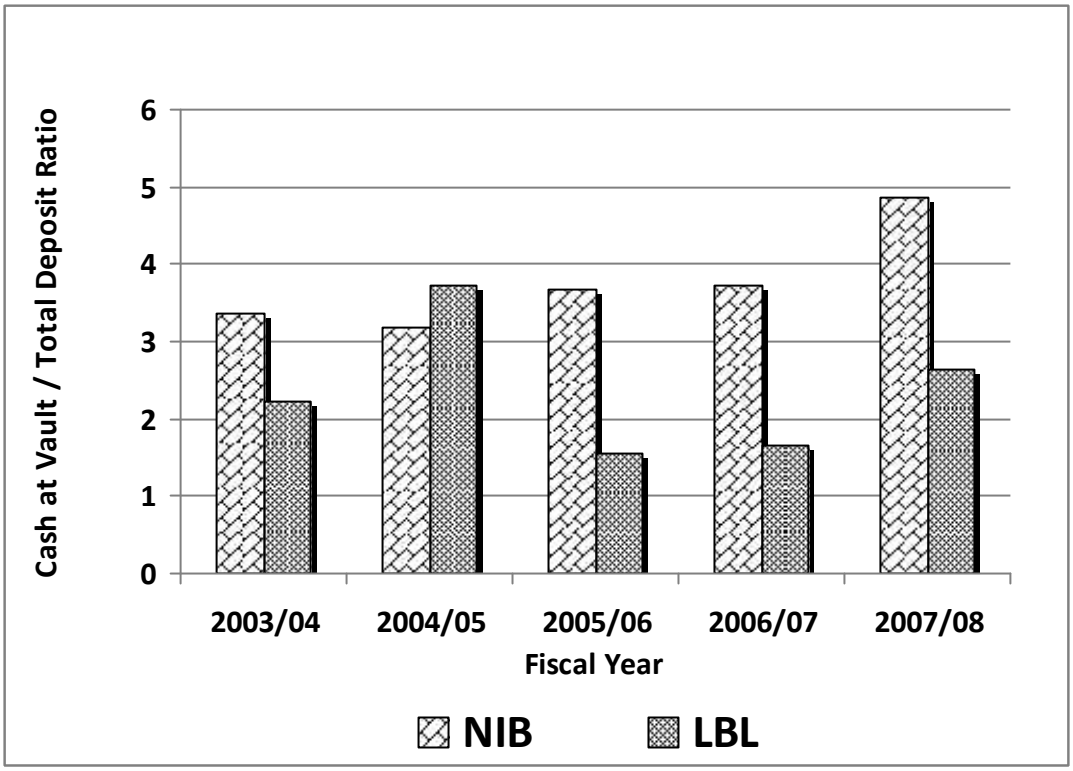
LBL

Fiscal Year (as at mid July)	2003/04	2004/05	2005/06	2006/07	2007/08
Cash in Vault (in million Rs.)	36.97	109.85	66.6	119.43	267.93
Total Deposit less Margin & FCY Dep.(in million)	1654.02	2942.2	4326.8	7223.77	10181.01
Cash at Vault / Total Deposits (%)	2.23	3.73	1.54	1.65	2.63

See Appendix 1,6,8 &13

The volume of cash at vault to total deposits ratio of NIB is in increasing trend except in FY 2004/2005. The ratio was increased during the period from 3.37% of FY 2003/04 to 4.86% of 2007/08. The ratio was maximum in FY 2007/08 with 4.86% in line with the highest deposit volume during the year. The ratio was minimum in FY 2004/05with 3017%. Whereas the ratio of LBL is in fluctuating trend. The highest ratio is 3.73% in FY 2004/05 and the lowest ratio is 1.54% in FY 2005/06.The ratio has increase till the FY 2004/05 and then decrease for next two years and then again increase in the final year. Vault have increased at lower rate than deposit has. So, increase in vault relatively lower rate has decreasing trend in the ratio for these years.

Diagram 4.15 Cash at vault/ Total Deposit Ratio



As shown in the Diagram 4.15, NIB has maintained the cash at vault in increasing trend except in FY 2004/05. NIB has maintained cash at vault ratio from 3.17% to 4.86% during the observed period. In case of LBL bank has maintained the cash at vault in fluctuating trend. It increased for initial two years then decreased for next two years and then increase in the final year. LBL has maintained cash at vault ratio from 1.54% to 3.73% during the observed period.

The cash at vault to total deposit ratio of NIB is higher than LBL in all the study period except in FY 2004/05 LBL ratio was slightly higher than NIB.

4.1.6 Sensitivity to Market Risk

Sensitivity to market risk refers to the risk that causes due to the changes in market conditions which would adversely affect the earnings and/or capital. One of the market

risks is the interest rate risk also called price risk. It is the risk that is caused by changes in market interest rate. A bank may have different types of assets and liabilities. Some assets and liabilities are sensitive to changes in interest rate. Such assets and liabilities are called rate sensitive assets (RSA) and rate sensitive liabilities (RSL).

The assets and liabilities having maturity less than a year need to be re-priced periodically. Therefore, when a bank has more liabilities re-pricing in a rising rate environment than assets re-pricing, the net interest margin decreases. Conversely, if the bank is asset sensitive in a rising interest rate environment, net interest margin will increase because the bank has more assets re-pricing at higher rates.

There are various methods of measuring interest rate risk. Such as gap analysis, simulation, duration analysis etc. This study focuses on the gap analysis which simply measures the net quantity of assets or liabilities re-pricing within a given period to estimate the likely impact that changes in interest rates will have on earnings. With a view to minimize the IRR NRB requires the banks to use gap analysis for minimization of liquidity risk.

4.1.6.1 Measuring Interest Rate Sensitivity

The interest rate sensitivity (IRS) is used to determine whether changes in interest rate positive or negatively affect the bank's net interest margin or profitability. It can be computed by expressing cumulative GAP as a percentage of total risk sensitive assets (RSA).

$$\textbf{IRS Ratio } X \frac{\textbf{Cumulative GAP}}{\textbf{RSA}} \varepsilon \textbf{ 100\%}$$

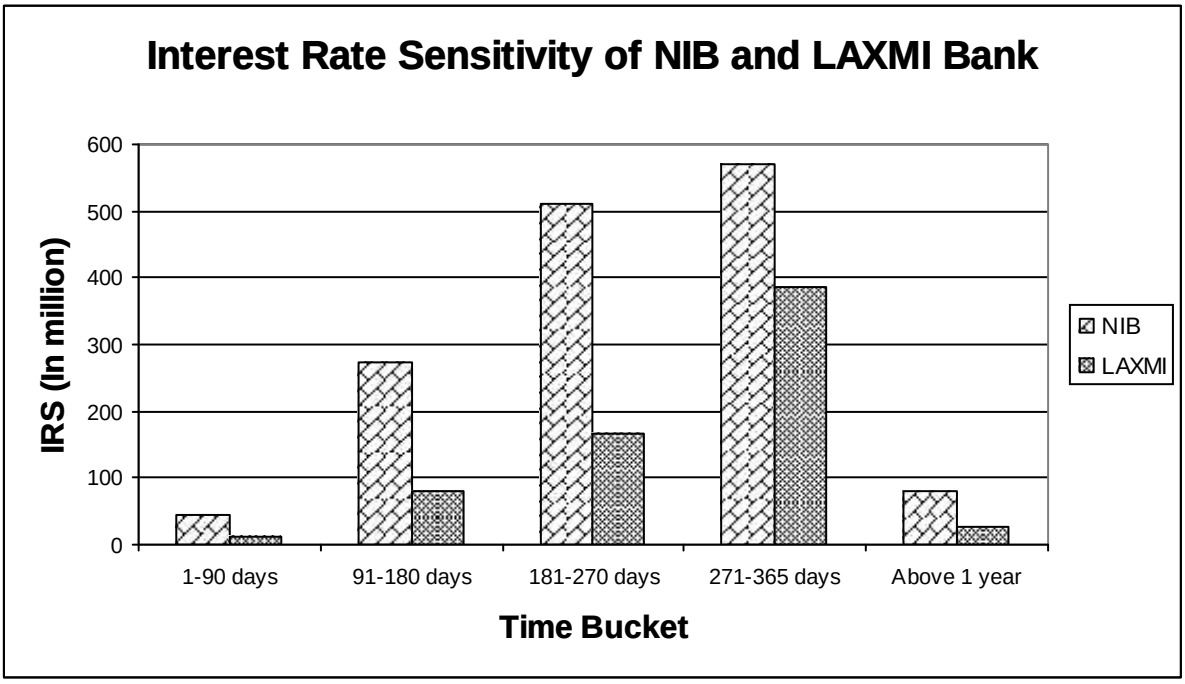
Table No. 4.16 Interest Rate Sensitivity
Nepal Investment Bank

Year	1-90 days	91-180 days	181-270 days	271-365 days	Above 1 year
2003/04	37.01	319.75	495.36	1016.70	89.47
2004/05	45.33	279.94	762.21	718.00	70.83
2005/06	53.58	365.96	568.33	417.55	83.66
2006/07	36.98	193.46	385.33	371.90	56.23
2007/08	45.02	211.97	348.49	321.40	99.98
Mean	**43.58**	**274.22**	**511.94**	**569.11**	**80.03**
LAXMI Bank Ltd.					
Year	**1-90 days**	**91-180 days**	**181-270 days**	**271-365 days**	**Above 1 year**
2003/04	-30.11	70.67	255.10	149.00	-78.58
2004/05	32.70	163.09	489.30	674.28	0.00
2005/06	10.48	68.85	145.42	69.87	59.81
2006/07	52.42	172.86	410.77	1393.10	127.58
2007/08	-8.95	-78.04	-471.20	-362.56	28.08

Mean	**11.31**	**79.49**	**165.88**	**384.74**	**27.38**

See Appendix 7 & 14

Diagram 4.16 Interest Rate Sensitivity of NIB and LAXMI Bank



The above table shows the interest rate sensitivity as measured by cumulative gap divided by total rate sensitive asset for Nepal Investment Bank and Laxmi Bank. For NIB, during all time buckets, the mean gap is positive. A positive mean gap indicates an increase in interest rate will lead to a positive increase in bank's net interest margin. In the sample period 2003-2008, the gap for this bank is always positive. It indicates that assets coming due in all period are sufficient to cover liabilities coming due. Therefore, if the banking company had been analyzed on a quarterly or yearly basis, no liquidity problem would be evident.

Similarly, for Laxmi Bank, the mean gap indicated a positive difference between RSA and RSL. It indicated a positive increase in bank's net interest margin with an increase in interest rate. However, taking the data of each sample year, there is some variation. In the first quarter of year 2003 and 2004, second, third, and fourth quarter of year 2008, and over 1 year of year 2003 showed a negative gap. It indicates that during these time

bucket, asset coming due are insufficient to cover liabilities coming due. However, average figure showed a positive gap indicating that asset are sufficient enough to satisfy liabilities. The graph shows that the gap of NIB is always greater than that of Laxmi bank. It indicates that the net interest margin or the profitability of NIB is more sensitive to interest rate changes than Laxmi bank.

4.1.6.2 GAP Ratio

GAP ratio is used to examine whether bank's rate sensitive assets (RSA) are sufficient enough to cover its rate sensitive liabilities (RSL). It is calculated as the ratio between RSA and RSL. It is computed by expressing RSA divided by RSL.

$$\textbf{GAP Ratio } X \frac{\textbf{RSA}}{\textbf{RSL}} \varepsilon \textbf{ 100\%}$$

Table No. 4.17 Gap Ratio

Nepal Investment Bank Ltd.					
Year	**1-90 days**	**91-180 days**	**181-270 days**	**271-365 days**	**Above 1 year**
2003/04	1.59	1.60	8.30	1.67	0.35
2004/05	1.83	1.82	3.43	2.87	0.22
2005/06	2.15	5.29	1.37	11.49	0.21
2006/07	1.59	4.27	1.49	8.64	0.20
2007/08	1.82	6.55	1.25	4.34	0.19
Mean	**1.8**	**3.91**	**3.17**	**5.8**	**0.23**
LAXMI Bank Ltd.					
Year	**1-90 days**	**91-180 days**	**181-270 days**	**271-365 days**	**Above 1 year**
2003/04	0.77	16.48	4.17	0.33	0.45
2004/05	1.49	16.48	4.17	1.06	0.35
2005/06	1.12	1.69	0.63	0.57	1.85
2006/07	2.10	1.12	1.01	0.23	1.40

2007/08	0.92	0.74	0.33	0.58	5.45
Mean	**1.28**	**7.3**	**2.06**	**0.55**	**1.9**

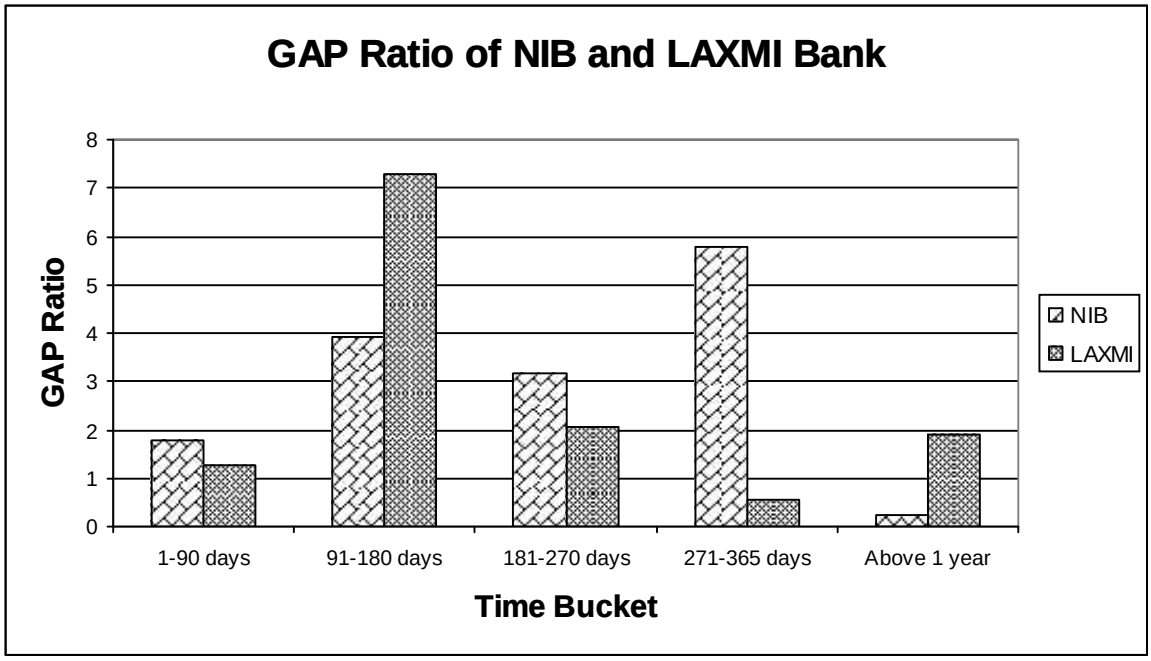
See Appendix 7 & 14

The table 4.17 shows the gap ratio as measured by rate sensitive assets divided by rate sensitive liabilities for different time period or bucket. The ratio of greater than 1 indicates a positive gap i.e. RSA is greater than RSL. Similarly, ratio of less than 1 indicates a negative gap i.e. RSA is lesser than RSL. Both of these situations are considered as the gap mismatch. However, the ratio of 1 indicates a perfect match.

The mean gap ratio of NIB for all four quarters is greater than 1 indicating a positive gap. For all liabilities maturing within a year, bank has sufficient amount of assets. However, for liabilities maturing above a year, bank's assets are not sufficient indicating a negative gap. This result indicates that bank's liquidity position for satisfying liabilities maturing in a year or above seems poor.

Similarly, the mean gap ratio of Laxmi bank for first 3 quarter and above 1 year is positive. However, it is negative for fourth quarter. In average the liquidity position is sound. Bank's assets are sufficient to meet liabilities. The graph shows that NIB has greater gap ratio than Laxmi bank for first, third, and fourth quarters. For the rest, Laxmi bank has more gap ratio.

Diagram 4.17 Gap Ratio



4.1.6.3 Measurement of Interest Rate Risk

A maturity mismatch approach is a commonly used tool to measure a banking company's exposure to interest rate risk. Interest rate risk occurs when a bank is exposed to operating gains and losses arising because the maturities of fixed-rate assets and liabilities do not match. That is, the bank has a mismatch in amount of assets and liabilities that are subject to repricing with a given time span.

A positive mismatch would mean that more assets than liabilities are repriced in a given period. With a positive mismatch, a rise in market interest rates will have a positive effect on the bank's earnings. On the other hand, a negative mismatch, where more liabilities are repriced than assets in a given period, would mean a drop in earnings if interest rates had increased.

Interest rate risk can arise from two distinct types of rate movement, a sustained shift in the yield curve or sharp swings in rates over a short period of time. Since the situation in

Nepal is far more likely to the former case, the analysis will focus on a sustained upward (+1%) shift in the interest rates inherent to the yield curve.

Table 4.18 Bank's Exposure to Interest Rate Risk

Nepal Investment Bank

('000)

	1-90 days	**91-180 days**	**181-270 days**	**271-365 days**	**> 1 year**
1. Total Assets	Rs.6, 930.91	Rs.1, 774.14	Rs.1, 075.31	Rs.1, 506.77	Rs.1, 313.46
2. Total Liabilities	3, 808.95	443.63	723.10	278.21	6, 267.39
3. Gap	3, 121.96	1, 330.51	352.21	1, 228.56	-4, 953.93
4. Cumulative Gap	3, 121.96	4, 452.47	4, 804.68	6, 033.24	1, 079.31
5. Adjusted Interest Rate Change (IRC)	0.0025	0.0025	0.0025	0.0025	0.001
6. Quarterly Earnings Impact (Cum Gap X IRC)	7.8049	11.1312	12.0117	15.0831	1.07931
7. Accumulated Earnings Impact to date	Rs.7.8049	Rs.18.9361	Rs.30.9478	Rs.46.0309	Rs.47.1102

Bank's Exposure to Interest Rate Risk

Laxmi Bank

('000)

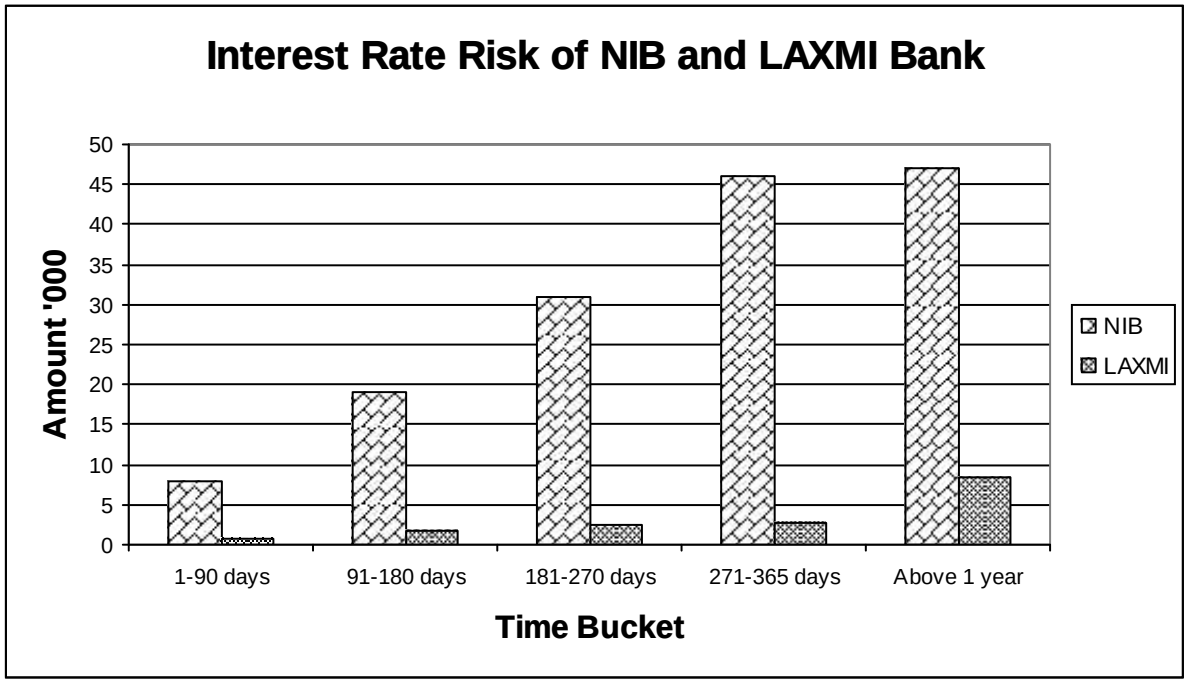
	1-90 days	**91-180 days**	**181-270 days**	**271-365 days**	**> 1 year**
1. Total Assets	2, 360.32	757.95	270.98	240.43	1, 480.30
2. Total Liabilities	2, 112.52	579.49	382.32	473.36	992.68
3. Gap	247.80	178.46	(111.34)	(232.93)	487.62
4. Cumulative Gap	247.8	426.26	314.93	82.00	569.61
5. Adjusted Interest Rate Change (IRC)	0.0025	0.0025	0.0025	0.0025	0.01
6. Quarterly Earnings Impact (Cum Gap X IRC)	0.6195	1.0656	0.7873	0.205	5.6961
7. Accumulated Earnings Impact to date	Rs.0.6195	Rs.1.6851	Rs.2.4724	Rs.2.6774	Rs.8.3735

See Appendix 7 & 14

In the above table, the adjusted interest rate change (IRC) is calculated assuming a sustained 1% increase in interest rate. For a 90 days asset, it is calculated as 0.01 × 90/365 = 0.0025. Similarly, the IRC for one year asset, it is calculated as 0.01 × 365/365 = 0.01.

The table shows that for both banks, over the all periods, the banks had a positive earnings impact (gains). NIB has a positive earning impact of Rs.47, 110.20 indicating the accumulated earnings impact for the year owing to a 1% increase in interest rate is a profit of Rs.47, 110.20. Similarly, for Laxmi bank also has a positive earning impact of Rs.8, 373.50 indicating the accumulated earnings impact for the year owing to 1% increase in interest rate is a profit of Rs.8, 373.50. However, this figure is lesser than that of NIB. Both banks have a positive earning impact with each percent increase in interest rate.

Diagram 4.18 Interest Rate Risk



4.2 Statistical Tools :

Co-relation of Earning Per Share between NIB and LBL

Table 4.19

Earning Per Share of NIB

Fiscal Year	Earning Per Share (R)	(R- $\bar{R}$)	$\sum R \, Z \bar{R}$
2003/04	51.70	-2.492	6.210
2004/05	39.50	-14.692	215.85
2005/06	59.35	5.158	26.604
2006/07	62.54	8.348	69.68
2007/08	57.87	3.678	13.53
			331.874

We have,

Expected Return $\sum \bar{R}$ AX $\frac{R}{n}$ X

Standard Deviation $\pm$ AX $\sqrt{\frac{\sum R \, Z \bar{R}}{n \, Z 1}}$ X $\sqrt{\frac{331.874}{4}}$ X9.11

Coefficient of Variation (C.V.) = $\frac{\pm}{\bar{R}} = \frac{9.11}{54.192}$ X16.81

Earning Per Share of LBL

Fiscal Year	Earning Per Share(R)	(R- $\bar{R}$)	$\sum (R-\bar{R})^2$
2003/04	1.9	-4.936	24.36
2004/05	4.34	-2.496	6.23
2005/06	5.8	-1.036	1.07
2006/07	9	2.164	4.68
2007/08	13.14	6.304	39.74
			76.08

We have,

Expected Return $\bar{R} = \frac{R}{n} = \frac{34.18}{5} = 6.836$

Standard Deviation $\sigma = \sqrt{\frac{\sum (R-\bar{R})^2}{n-1}} = \sqrt{\frac{76.08}{4}} = 4.36$

Coefficient of Variation (C.V.) $= \frac{\sigma}{\bar{R}} = \frac{4.36}{6.836} = 63.8$

Above calculation shows that the earning per share of NIB is higher than LBL. Because from the angel of the standard deviation the NIB (9.11) is more riskier than that of LBL(4.36).

4.3 MAJOR FINDINGS

The major findings of the study on financial performance analysis of NIB Bank Limited and Laxmi Bank Limited in the framework CAMEL are as follows:

4.3.1 The NIB bank maintained maximum Tier I ratio capital adequacy ratio i.e. 8.52% in FY 2004/05 and the minimum ratio of 7.22% was found in FY 2003/04. The Tier I ratio increased for next one year and decreased continuously till FY 2007/08. In all the 5 years of the review period, the Tier I capital ratio was above the NRB standard with maximum positive variance of 3.02% in FY 2004/05 and minimum. positive variance of 1.72% in FY 2003/04. The bank was able to maintain more than 5% above the NRB requirement in Tier I ratio during the period 2003/04 to 2007/08 however it has slightly decreased in initial year of study period. In general, the bank has maintained Tier I capital adequately above the NRB standard during the study period. Similarly, Tier I ratio of LBL is distributed from the minimum of 10.1% in FY 2007/08 to maximum of 28.26% in FY 2003/04. The Core Capital (Tier I) of the bank is continuously decreasing trend over the study period. Even if the bank was able to maintain not less than 4% NRB standard and it reached up to 22.76% in 2003/04. Hence the core capital adequacy ratio of LBL is adequate and sufficient.

4.3.2 The Tier II ratio of NIB was maximum in FY 2006/07 with 4.26% and minimum in FY 2004/05 with 3.06%. The ratio is in fluctuating trend since 2003/04 till 2007/08. The fluctuating occurred due to increase in supplementary capital and increasing in RWA during the period. Tier II capital of the bank in all years , is

below the Tier I capital (3.95%, 3.06%, 4.01% , 4.26% and 3.57%). Likewise , Tier II ratio of LBL is distributed from minimum of 0.93% in FY 2003/04 to maximum of 1.25% in FY 2004/05. The ratios of LBL were 0.93%, 1.11%, 1.25%, 1.09% ands2007/08. Hence the Supplementary capital ratio of both bank are with in the boundary of NRB during the period.

4.3.3 Total Capital adequacy ratio of NIB in the review period were 11.18%, 11.58%, 11.97%, 12.17%, and 11.28%. The ratio of 12.17% was maximum in FY 2006/07 and ratio of 11.18% was minimum in FY 2003/04. The total capital adequacy ratio is increasing continuously except in the last year of the observed period. In general, both of the banks were able to maintain CAR as per NRB standard during the study period. In the same way, Total capital adequacy ratio of LBL in the review period were 29.19%, 20.9%, 14.96%, 12.43% and 11.17% . The ratio of maximum of 29.19% in FY 2003/04 and minimum of 11.17% in FY 2007/08. The total capital ratio of the bank is above the NRB standard in all the years. In general, both of the banks were able to maintain CAR as per NRB standard during the study period.

4.3.4 Assets composition of NIB bank like in every banks remained largely in the loans and investment in the last five financial years. In the study period of 5 years, the average composition of Cash & Bank Balance Money at Call, Investment, Loan & Advances, Fixed and Other Assets were 9.412%, 1.21%, 24.23%, 61.76, 2.14% and 1.47% respectively. In the same way, the average composition of Cash & Bank Balance Money at Call, Investment, Loan & Advances, Fixed and Other

Assets of LBL were 9.3%. 1.77%, 11.66%, 73.72%, 2.03%and 1.51% respectively during the study period.

4.3.5 The NPL ratios of NIB were distributed 2.47%, 2.68%, 2.06%, 2.37% and 1.12% during the FY 2003/04 to 2007/08. Likewise, the NPL ratios of LBL were 1.63%, 0.78%, 0.35%, and 0.129% for the FY 2004/05 to FY2007/08. The trend speaks of NPL ratio of NIB and LBL well in control and below international standard of 5% in general. It also shows efficient credit management and recovery efforts

4.3.6 The loan loss provisioning ratio of NIB for the study period is in fluctuating trend. The ratio ranges from 2.84% in FY 2003/04 to 1.95% in FY 2007/08 with an average of 2.734%. The first three financial year the increasing trend of NPL to total loan ratio also requires higher provisioning hence Loan loss ratio also increased accordingly .Therefore this ratio decreased for last last two FY with 2.72% & 1.93% respectively. It also indicates bank's quality of loan assets is getting better. Differently, the loan loss provisioning ratio of LBL for the study period was in increased for first FY 2004/05 with 1% to 2.5%.Thereafter it is in continuously decreasing trend. The ratios range from 1% in FY 2003/04 to 1.16% in FY 2007/08with an average of 1.57%. Hence, the decreasing trend of NPL of LBL also requires the lower provision for loan loss. Loan loss provisioning also decreased accordingly.

4.3.7 The observed TE to TI ratio of NIB decreased continuously over the study period from 83.29% to 74.66%. The ratio has reached 74.66% in 2007/08 which is the minimum of all the years of the review period, which implies decreasing expenses

with respect to income and is credited to good management quality. Likewise, the absorbed TE to TI ratio of LBL increased upto2005/06 and then decreeing in year 2006/07 & 2007/08. The ratios distributed from a minimum of 85.29% in FY 2007/08 to maximum of 92.68% in FY 2003/04. Decreasing trend of ratio is favorable on measure management quality of LBL.

4.3.8 The Earnings per Employee in rupees during the study period, the ratio of NIB at first decreased in 2004/05 and thereafter it continuously increased upto 2007/08. The mean earning per employee of the study period was Rs.909724.98. The trend is positive, which indicates the Earning per Employee is increasing over the study period. Whereas, the earning per employee of LBL increased at first in FY 2004/05 the slightly decreased upto Rs. 244036.77 in FY 2005/06 thereafter it increased continuously over the study period. The mean earning of the employee is Rs. 291460.54, the trend of ratio is positive, which indicates the earning of the employee is inclining over the study period. This indicates that high or inclining earning per employee can reflect efficiencies of well staffing.

4.3.9 The mean ROE of NIB was 54.19%. The ratio is fluctuating in upward trend. The increasing trend of ratios implies that earning quality of bank is getting better. Hence the bank's ROE ratio is sound. In the same way, the mean value of ROE of LBL is 6.84% which is below the 15% bench mark, it indicates the bank’s ratio of ROE is not better & it shows the disability of used the resources.

4.3.10 The mean ROA ratio of NIB is 1.52%. The upward movement of ROA since FY 2003/04 is also supported by the positive slope of the trend line. Whereas, the

mean ROA ratio of LBL is. 696%. The ratio of the bank is in increasing trend but mean ratio is below the benchmark 1%. Hence, NIB mean ratio is above the .696% benchmark, which shows the quality of assets and their efficiency to generate return is better. Where as LBL is failed to generate the better return.

4.3.11 The net interest margin of NIB, despite fluctuated only once, the NIM ratio is in decreasing trend. The mean ratio for the study period was found 4.34%. Throughout the review period the NIM ratio was found slightly above the generally accepted benchmark. This indicates bank's capacity to maintain higher interest margin than the benchmark in the later half of the review period, despite increase in earning assets. On the other hand, the mean ratio of NIM of LBL is 2.85% which is less than that of generally accepted benchmark. Hence, the bank's ratio is lower and it is in decreasing tendency.

4.3.12 EPS of NIB bank fluctuated in the first year of the review period thereafter it increased for next two years again it decreased till the final year of the review period. The increasing trend of EPS is also supported by positive slope of the trend line. Whereas, the EPS of LBL is continously increased over the study period. The slope of the trend line is increasing, indicates good sign but in comparison with NIB EPS is very low.

4.3.13 The liquid assets to total deposit ratio of NIB is in decreasing trend during the FY 2003/04 to FY 2007/08 except in FY 2005/06. The Liquid Assets to Total Deposit ratio was minimum in FY 2006/07with 20.05% when the Deposit were highest with Rs. 34451.72 millions. The ratio was maximum in FY 2003/04 with 30.71.

Hence maintain of Liquid Assets were in decreasing trend but the ratio of Liquid Assets to Total Deposit ratio were good. Whereas Liquid Assets to Total Deposits of LBL during the period of FY 2004/04 to 2007/08 were in fluctuating trend. The highest ratio was 45.33% in FY 2003/04 and lowest was 19.19% in FY 2006/07 when deposits were highest with Rs.7611.65 millions. The Liquid Assets to Total Deposits of NIB and LBL were in decreasing trend. This fact implies that the overall position of liquidity of the NIB is slightly better than LBL because more liquidity impacts profitability negatively.

4.3.13 NIB has maintained adequate cash reserve with NRB in increasing trend up to 2005/06 with 9.95% and decreasing till the final year eith 6.04%. This implies the bank is following the directives of NRB in respect to balance must held in NRB. Where as LBL has not maintained adequate cash reserve with NRB balance in FY 2005/06 and 2006/07 which indicates the bank has not strictly following the NRB directions in respect to balance must maintained with NRB. Thus the lack of balance of LBL in NRB does not conclude inadequate Cash Reserve Ratio at NRB. Since the calculation is based on year end volumes of deposit and NRB balance and NRB calculates CRR on weekly average balances, ratio is observed low which is a limitation of the study.

4.3.14 The volume of cash at vault to total deposits ratio of NIB is in increasing trend except in FY 2004/2005. The ratio was increased during the period from 3.37% of FY 2003/04 to 4.86% of 2007/08. The ratio was maximum in FY 2007/08 with 4.86% in line with the highest deposit volume during the year. The ratio was minium in FY 2004/05with 3017%. Whereas the ratio of LBL is in fluctuating

trend. The highest ratio is 3.73% in FY 2004/05 and the lowest ratio is 1.54% in FY 2005/06.The ratio has increase till the FY 2004/05 and then decrease for next two years and then again increase in the final year. Vault have increased at lower rate than deposit has. So, increase in vault relatively lower rate has decreasing trend in the ratio for these years.

4.3.15 The mean Gap ratio of NIB for all four quarters is greater than one indicating a positive gap. For all Liabilities maturing with in a year Bank has sufficient amount of assets. However , for Liabilities maturing above a year , Banks assets are not sufficient indicating a negative gap. Similarly the mean gap of Laxmi Bank for first three quarters and above one year is positive. However its find negative for fourth quarters.

4.3.16 Interest rate sensitivity of NIB during all time buckets, the mean gap is positive. Similarly the interest rate sensitivity of Laxmi Bank during all the time buckets, the mean gap is positive except in the first quarter of F/Y 2003/04, second, third and fourth quarter of FY 2007/08 and over one year of FY 2003/04.

Interest rate risk of both Banks NIB and Laxmi Bank found a positive earning impacts during the study period.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMENDATIONS

5.1 SUMMARY

The research study is focused on CAMELS rating of Nepal Investment Bank Limited (NIB) and Laxmi Bank Ltd (LBL) comperatively in the framework CAMELS, by using descriptive and analytical research design in accordance to BASEL accord. The study scrutinises the financial performance of NIB and LBL as regards to their capital adecuacy, level and trend of risk weighted assets, asset composition and quality of loan assets, management of revenues and expenses, level and trend of earnings, liquidity position, and sensitivity to interest rate risk. The banks' audited annual reports of condition for the period 2003/04 to 2007/08 are the primary source of information and treated as authentic. As CAMELS has little been researched in Nepal, this research would be beneficial to forewarn risk.

As commercial banks are now introducing complex and innovative banking products, they are exposed to many risks and therefore have amplified as well as diversified the functions performed by the Bank Supervision Department. A key product of such supervision is a rating of the bank's overall condition, commonly referred to as a CAMELS rating. CAMELS rating system is used by the three federal banking supervisors the Federal Reserve, the FDIC, and the Office of the Comptroller of the Currency (OCC)] and other financial supervisory agencies to provide a convenient

summary of bank conditions at the time of an exam. Various studies have been conducted in the past on financial analysis of commercial banks in the US and other regions were found done. In context of Nepalese banking environment, there are only few researches found conducted in the frame work of CAMEL (Baral, 2005 ; Bhandari, 2006). The study analyzes the level, trend and comparative analysis of Capital Adequacy, Non Performing Loans, Loan Loss Provision, Asset composition, Management Quality ratios, Earning capacity, Liquidity position and Sensitivity to Market risk components of the bank during a 5 year period from 2003/04 to 2007/08. A.D. Various material were reviewed in order to build up the conceptual foundation of this study and reach to the clear destination of research. During the research the areas that formed part of the research review were; Functions of Commercial Bank, Concept of CAMELS rating system and component evaluation system, Basel Capital Accord, NRB guidelines of different time. Besides these, review of research papers, work papers, dissertations and related reports were conducted.

The research was conducted within the framework of descriptive and analytical research design. The required data and information were collected from secondary sources. Financial ratios along with other ratios, simple mathematical and statistical tools have been applied to get the meaningful result of the collected data in this research work.

The analysis has been made to compare the both banks' ratios with Nepal Rastra Bank standard, and analyze the trend of ratios. The capital adequacy ratios of the banks are generally above than Nepal Rastra Bank standard in all the study years which leads to conclude that the bank is running with adequate capital. The capital adequacy ratios

above the NRB standard of the Nepal Investment Bank and Laxmi Bank Limited shows additional protection and security to the stakeholders and financial soundness of the bank and financial institutions. The assets are mainly composed of Loans and advances, Investments. The non-performing loans to loan ratios are well below the international standard. The loan loss provision of NIB is fluctuating. Once it increased for two years then continuously decrease till final year of observed period. The management proxy ratios are favorable to the bank. Whereas, the loan loss provision of LBL is in decreasing trend except FY 2004/05. Where the total expenses to revenue ratio is in decreasing trend and the Earning per Employee is in increasing trend which indicates effective management on NIB. Similarly in case of LBL, total expenses to revenue ratio is in decreasing trend and earning per employee is in increasing trend, which implies, well staffing in the bank. The earning quality ratios like return on equity, return on assets, net interest margin, earning per share of NIB is generally above the benchmark prescribed by World Bank and in increasing trend this shows that the quality of earning is increasing. But in case of LBL earning quality ratios like return on assets, return on equity, net interest margin are below the benchmark . The Cash in Vault to Total Deposits ratio of NIB is increasing trend except 2004/05. Where as the cash at vault to total deposit of LBL is in fluctuating trend. The ratio of NIB is higher than LBL. NRB balance to Total Deposits ratio of NIB bank is fluctuating and sometimes it is above NRB standard. where as the Liquid Assets to Total Deposits ratios is in decreasing trend during the study periods. Overall the liquidity position of the bank in is good if we look at the composition investment in government securities. Whereas, NRB balance to total deposit ratio of LBL are below the NRB standard in FY 2005/06 and 2006/07. There is limitation in CRR ratio

calculation as it is based on year end volume only rather than weekly average and hence cannot be justifiable when compared with NRB norms. NRB directives where the liquid funds to total deposit ratios are in good standing position during the study periods. This shows that the liquidity position of LBL in overall is good but the bank is do not strictly follow the NRB directives i.e. the amount must be maintained as a vault and NRB balance is little. The Gap ratio of rate sensitive assets and rate sensitive liabilities repriced over the one year maturity bucket of NIB for all four quarters is greater than 1 indicating a positive gap. However, for liabilities maturing above a year, bank's assets are not sufficient indicating a negative gap. Similarly, the mean gap ratio of Laxmi bank for first 3 quarter and above 1 year is positive. However, it is negative for fourth quarter. In average the liquidity position is sound.

CONCLUSIONS

Based on the findings, the performance of NIB and LBL in the framework of CAMELS is concluded as under:

5.2.1 The both banks' Core capital adequacy ratio variated positively NRB standard during the review period. Supplementary capital ratio of the banks is with in the boundary of NRB regulation over the study period though the proportion of Supplementary capital in the total capital fund is in declining trend. The total capital adequacy ratio is above NRB norms. This means the bank has adequately maintained its internal sources during the past five years. The bank is running with adequate capital and the capital fund of the bank is sound and sufficient to meet the banking operation as per NRB standard.

5.2.2 Assets composition of both banks like in every banks remained largely in the loans and investment. There is a switch over of asset composition observed since 2003/04 from Net investments on to Loan and advances which falls under high-risk category of assets. The decreasing trend of non-performing loans and advances ratio of both banks helps to conclude that the bank is aware of non-performing loans and adopting the appropriate policies to manage this problem and to increase the quality of asset. The performing loans are increasing steadily and conversely the NPL are decreasing during the review period. A unique movement of chronic substandard loans being converted to doubtful, doubtful into loss loans, despite the overall NPL ratio is in decreasing trend was observed. The NPL ratio trend speaks of NPL ratio well in control and below international standard of 5% in general. It can therefore, concluded that bank has placed efficient credit management and recovery efforts. Here in case of LBL the decreasing trend of loan loss provisioning ratio speaks of good quality loans are increasing i.e., it seems that amount default associated in loans is decreasing in future. In case of NIB loan loss provisioning ratio is in fluctuating trend and shows degrading for the first two years of the observed period But the last two years the decreasing trend ratio described that the good quality of assets that the bank is holding.

5.2.3 The both banks is managed and operating efficiently since the total expenses to total revenues ratios are in decreasing trend. This could be, but not limited to management efficiencies. In any case, the decreasing trend will positively affect the bank's profitability in future. The increasing trend of earning per employee of

NIB and LBL depicts management capacity to control overhead expenses due to overstaffing with similar repercussions in terms of profitability. Overall it can be concluded that the management decisions related to operation and investment have assisted in controlling over the recovery of bad debt.

5.2.4 The ROE ratio of NIB is above the universal benchmark. The increasing trend of ROE shows that the return per unit of equity invested by the shareholders is increasing year by year. The bank's mean ROA ratio is above the 1% benchmark. The bank's ROA is in continuous increasing trend. The bank has net interest margin above the benchmark in all years . The net interest margin is in decreasing trend except in FY 2005/06. The earnings per share held by the shareholders is increasing. Based on these findings it can thus be concluded that bank is able to establish investor's and public faith. It has good quality of assets and efficient enough to generate increasing return in future. The management has been able to control the interest spread and cost effective sources of funds. This has helped the bank in increasing the market strength. On the contrary, even the increasing trend of ROE of LBL shows that the rate of return flowing to the bank's shareholders' is degraded. Still the bank has better return on equity. Similarly, increasing trend of Return on Assets concludes that the net income for each unit of asset of the bank is appreciating; still the bank has better return on asset but Return on Equity and Return on Assets are still under the international benchmark. Likewise, decreasing trend of NIM shows that spread between interest revenues and interest cost of management has been not able to achieve by close control over the banks earning assets and pursuit of the cheapest sources of funding, and increasing trend

of EPS of the bank reflects that the returns flowing to the bank's owner is inclining which impacts the strength of the share in the market is also inclining.

5.2.5 The liquid assets to total deposit ratio of NIB is in decreasing trend in the study period. The investment in liquid assets is in decreasing trend and switched into more profitable but high risk assets. The bank invest in income generating assets and adopt specific policy of invest of additional ideal fund to high income generating assets in the form of investment. The NRB balance is ups and down. The NRB balance to total deposits ratio is above the NRB standard and the bank is able to maintained the NRB criteria. The ratio is in increasing trend and it was above 5% NRB requirement. The cash in vault to total deposit ratio is in increasing trend and it was above the LBL during the study period. On the other hand, the liquid funds to total deposit ratio of LBL is also in decreasing trend and found slightly above the NIB in the study period. It also indicates that the investment in liquid assets is in decreasing trend and switched into more profitable income generating but high risk as NIB. In case of LBL , the NRB balance to total deposit ratio of the bank is in fluctuating trend during the study period which indicates that the bank has not sufficient amount of balance must held in NRB in the FY 2005/06 and 2006/07. However the calculations are based on year end balances whereas NRB takes average weekly balances for NRB balance calculation which is a limitation of the study. and the cash in vault to total deposit ratio of the bank is also below NIB that depicts the bank is not maintaining the adequate balance at vault to satisfy the short-term obligation, that might create the financial crunch at the bank sometimes.

5.2.6 The interest rate sensitivity of NIB is positive during all the time bucket, this indicates an increase in interest rate will lead to a positive increase in banks' net interest margin. Therefore there is no liquidity problem seen under the analysis on a quarterly or yearly basis. Similarly the interest rate sensitivity of LBL is also positive during the time bucket, however analyzing the data of each sample year there is some variation, in the first quarter of year 2003 and 2004, second, third, and fourth of year, and over 1 year of 2003 showed a negative gap. However average figure showed a positive gap.

5.3 RECOMMENDATIONS

The following recommendations are made based on the conclusions as regard to financial performance of NIB and LBL.

The proportion of Tier I Capital in the Total Capital fund of NIB bank is decreasing from the mid of the observed period and Tier II capital is fluctuating trend. This means the bank is slightly decreasing the capital of permanent nature. The bank needs to keep additional cushion reserve in the form of general reserve, capital adjustment reserve, dividend equalization fund. The variance of CAR from NRB standard is positive and also in increasing trend. Besides this bank is recommended to increase its capital fund either through internal sources or decrease investment in risky assets in the future. In the case of LBL, the proportion of Tier I capital in the total fund of LBL is decreasing and Tier II capital is fluctuating trend. Hence the bank is recommended to maintain the stable capital adequacy ratio.

Although both of the banks has been decreasing the proportion on non-performing loans to total loans and advances of NIB and LBL during the study period, the bank requires checking this tendency before they are ultimately written-off from the books. The loan loss provision to total loans and advances is decreasing which is a good sign however the provision for Doubtful Loans has increased in later years which are a matter of concern. The banks need to pay attention in recovering the Doubtful and Loss Loans and lower the provision accordingly.

The total expenses to total revenue of both banks is in decreasing trend which is good indication for organization. Although the bank need to generate additional

operating revenues in the coming years and to maintain the current level. And the earning per employee of both banks is in increasing trend and it is also a favorable sign. The increasing earning per employee ratios of both banks are satisfactory. Hence both of the banks are recommended to adopt the further more corrective actions in order to enhance the earning per employee.

During the study period, the earning quality ratios i.e. return on equity, return on assets, net interest margin and earning per share of NIB bank are sound and the bank need to maintain this level. The bank needs to increase the revenues and further control the operating expenses which would be cushion in competitive environment. Whereas, the earning quality ratios i.e. return on equity, return on assets and net interest margin of LBL is increasing trend but all those earning assets are below the international standard and earning per share is in growing situation but it is also not in satisfactory condition. Of course, profit is essential and a crucial part of any business, without it no firm can survive and grow. To increase profit the bank should minimized its operating cost by increasing the operating efficiencies of its employees. Thus, the bank is recommended to increase its yield as its net profit. The decreasing trend of profit of the bank may loose the confidence of the shareholders and other stakeholders.

The liquid assets to deposit ratio of NIB is sound. Even the more reserve of liquidity adversely effects in profitability. Hence it is recommended to explore new investments opportunities for proper utilization of the idle liquid assets. Cash at vault to total deposit ratio of NIB ratio was in increasing trend which reflects the sound operation of financial activities But the increasing trend also adversely effect on the profitability. So the bank is recommended to invest the liquidity of cash in secured field without having troublesome in management part. The NRB

balance to total deposit ratio of bank was above the NRB standard. It is a good sign of a perfect organization. This tendency must keep it on in future also. As the liquidity position of LBL is found to be high in an average especially in liquid funds, the bank is recommended to look upon new area of lending and investment that helps in minimizing the idle funds. Otherwise, this may impact the profitability negatively. And the bank's cash at vault to total deposit ratio of bank was found more better than NIB because it is less than the NIB. Less cash at vault effect on better improvement on profitability. Even the bank is recommend to be cautious in investment part which should be hazardous to management. The NRB balance to total deposits ratio is below the NRB standard in FY 2005/06 and 2006/07 during the study period which needs to monitored and compiled in accordance with the NRB requirements. So the bank is recommend to strictly following the NRD directions in respects to the balance should be maintained is better for regularity mandatory.

Under the sensitivity to market risk Mean Gap Ratio of NIB and LBL is positive and the Bank's Exposure to Interest Rate also have a positive earning impact, whatever the sources of interest rate exposes, the discovery of significant imbalances in a banking asset/liability structure , leading to a potentially large impact on earnings (positive or negative) should form the basis for determining whether the banking company's exposer is: (a) minimal; (b) large and bears watching; or (c) currently excessive and needs immediate action to reduce it.

BIBLIOGRAPHY

Adhikari, Dev R. (1993). *Evaluating the Financial Performance of Nepal Bank Ltd*. Kathmandu: An Unpublished Masters Degree Thesis Submitted to Tribhuvan University, Kathmandu.

Benjamin, James J., and Stewart C. Myres, (1991). ***Principle of Finance.*** USA: International

Bhandari, Krishna (2006). *The financial performance of Himalayan Bank Ltd. in the framework of CAMEL*. Kathmandu: An unpublished Masters Degree Thesis submitted to Tribhuvan University, Kathmandu.

Bohara, Bhoj R. (1992). *A Comparative Study of the Financial Performance of Nepal Arab Bank Ltd. and Indosuez Bank Ltd*. Kathmandu: An unpublished Masters Degree Thesis submitted to Tribhuvan University, Kathmandu.

Brigham Eugene F., and Louis C. Gapenski, (1995). ***Intermediate Financial Management.*** New York: The Dryden Press.

Brigham, Engene F., (1982). ***financial management Theory and practice.*** New York: The Dryden Press.

Charles P. Jones, (1988). ***Investment: Analysis and Management***. New York: Johnwiley and Sons.

Cheney, John M., and Edward A. Moses, (1999). ***Fundamentals of Investment.*** San Francisco: West Publishing company.

Cottle, Sidney, Roger F. Murray, and Frank E. Black, (1989). ***Security Analysis***. McGraw-Hill

Deoja, S. (2001). *A Comparative Study of the Financial Performance between Nepal State Bank of India Ltd. and Nepal Bangladesh Bank Ltd*. Kathmandu: An

unpublished Masters Degree Thesis submitted to Tribhuvan University, Kathmandu.

Dowrie, George W & Fuller, Rauglas R**, (**1995). ***Investment***. New York: John Wiely & Sons,

Editions.

Edward R.D. and John Magee, (1958). ***Technical Analysis of Stock Trends.*** Springfield Mass,

Francis Jack Clark, (1992). ***Investment Analysis and Management.*** McGraw-Hill Intonation Editions, Finance Series.

Gurung. V. C. (1995*). A Financial Study of Joint Venture Banks in Nepal*. Kathmandu: An unpublished Masters Degree Thesis submitted to Tribhuvan University, Kathmandu.

Joshi. D. (1993). *A Study on Commercial Banks of Nepal with Special Reference Financial Analysis of Rastriya Banijya Bank*. Kathmandu: An unpublished Masters Degree Thesis submitted to Tribhuvan university, Kathmandu.

K.C., Ramesh (1991*). Dividend Policy of Joint Venture Banks in Nepal*. Kathmandu: An Unpublished Masters Degree Thesis submitted to Tribhuvan university, Kathmandu.

Shakya, D. R. (1995**).** *Financial Analysis of Joint Venture Banks in Nepal*. *Kathmandu*: An Unpublished Masters Degree Thesis submitted to Tribhuvan university, Kathmandu.

Sharma, Resham (2005). *Capital Structure of Selected Commercial Banks of Nepal*. Kathmandu: An Unpublished Masters Degree Thesis submitted to Tribhuvan University, Kathmandu.

Solomon, Ezra, (1963). ***The theory of Financial Management***. Colombia University Press.

Thapa, Samiksha (2001). *A Comparative Study on the Financial Performance of Nepal Arab Bank Ltd. and Nepal Indosuez Bank Ltd*. Kathmandu: An unpublished Masters Degree Thesis submitted to Tribhuvan University, Kathmandu.

Van Horne, James C.,(2000). ***Financial Management and Policy.*** New Delhi: Prentice Hall of India Pvt. Ltd.

Weston, J. Fred and Eugene E. Brigham, (1996). ***Essential of Managerial Finance***. New York: The Dryden Press.

Weston, J. Fred, and Thomas E. Copeland, (1992). ***Managerial Finance***. New York: The Dryden Press.

Journals and Publications:

Agrawal, Jagdish, (2000). ***Nepal's Capital Market: What it Take to Improve.*** *Business Age* vol.2 No.5 pp 43-45.

Baral, Keshar J. (2005). Health Check-up of Commercial Banks in the Framework of CAMEL. A Case Study of Joint Venture Banks n Nepal. ***Journal of Nepalese Business Studies,*** **Vol 2, No 1.**

Barker, D., and D. Holdsworth (1993). ***The Causes of Bank Failures in the 1990s***. Federal Reserve Bank of New York. Research Paper No. 9325.

Barr, R.S., L.M. Seiford, and T.F. Siems (1993). ***An Envelopment-Analysis Approach to Pleasuring the anagement Quality of Banks***. *Annals of Operations Research,* 38.

Berger, A.N., and S.M. Davies (1994). The Information Content of Bank Examinations. ***Journal of Financial Services Research 14, pp. 117-144.***

Berger. Alien N., Sally M. Davies. and Mark J. Flannery (1988). ***Comparing Market and Regulatory Assessments of Bank Performance.*** Who Knows What When? Federal Reserve Board of Governors FEDS Working Paper.

Cantor, R. (2001). A New Capital Adequacy Framework. ***Journal of Banking and Finance, 25: 171-185.***

Comptroller's Handbook. (1997 June). ***Interest Rate Risk.***

Crosse, H.D. (1963*).* ***Management Policies for Commercial Banks***. USA: Prentice Hall Inc.

Dhungana, Bhisma Raj (BS 2062). ***NPLs and its Management.*** *Banking Pravardhan*, Vol-20.

FDIC (2004, November*).* ***Examination Handbook.*** 070 A.1. Office of Thrift Supervision, USA.

Heyliger, W. E., and D.P. Holdren (1991). Predicting Small Bank Failure**.** ***The Journal of Small Business Finance, 1 (2): 125-140.***

Jackson, W. (1975, June). Commercial Bank Regulation Structure and Performance**.** ***The Journal of Finance, XXX(III): 917-920.***

Kursat Aydogan.. (1991 Sept.). ***Interest Rate Risk and Bank Profitability: The Case of Turkey.*** Discuss Paper.

Laxmi Bank Limited, Annual Reports (FY 2003/04 to 2007/08), Kathmandu

Meyer, P. A., and H. W. Piffer (1970, September**).** Prediction of Bank Failures. **The Journal of**

Finance, 25: 835-868.

Ministry of Finance, GON (BS 2061). ***Banking and Financial Institution Ordinance***. Nepal Gazette, Kathmandu.

Nepal Investment Bank Limited, Annual Reports (FY 2003/04 to 2007/08), Kathmandu

The Bank of Jamaica (2005). ***Interest Rate Management.*** Monthly Magazine.

Websites:

www.laxmibank.com

www.nibl.com.np.

www.nepalstock.com

www.nrb.org.np

www.sebonp.com