COMPARATIVE ANALYSIS OF FINANCIAL STATUS AND PERFORMANCE EVALUATION OF HBL AND NABIL BANK LTD. IN THE FRAMEWORK OF "CAMELS" RATING SYSTEM

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RECOMMENDATION

This is to certify that the thesis

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

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DECLARATION

I, hereby declare that the work reported in this research report entitled "Comparative Analysis of Financial Status and Performance Evaluation of HBL and Nabil Bank Ltd. in the frame work of CAMELS rating system, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement of the Master's Degree of Business Studies (MBS) under the supervision of Mr. Avinash Pd. Singh, Reader of Thakur Ram Multiple Campus, Tribhuvan University.

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Investors are backbone of the capital market; a capital market 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 exploiting from the lack of transparent shareholders protection act. In addition, passive role played by the concerned departments have led to violation of shareholders rights. So we must be serious for the protection of shareholders in the field of company and industry.

The present study though particularly related to protection of investors of Nabil bank Limited from view of shareholders protection would help the shareholders to understand the different aspect related to the welfare and betterment of the shareholders.

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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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Suresh Prasad Rauniyar
Researcher

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ABBREVIATION

HBL	=	Himalayan Bank Limited
CAMELS	=	Capital adequecy, Asset quality, Management soundness, Earinngs, Liquidity and Sensitivity to market risk
MPI	=	Macroprudential Indicators
FFIEC	=	Federal Financial Institutions Ecamination Council
UFIRS	=	Uniform Financial Institutions Rating System
PCA	=	Prompt Corrective Action
BIS	=	Bank for International Settelments
NRB	=	Nepal Rastra Bank
ALLL	=	Allowance for Loan and Lease Losses
NPA	=	Non-Performing Assests
EWS	=	Early Working System
RWA	=	Risk-Weighted Assets
EPS	=	Earning Per Share
CRR	=	Cash Reserve Ratio
CAR	=	Capital Adequacy Ratio
TOE	=	Total Operating Expenses
NIM	=	Net Interest Margin
PAT	=	Profit After Tax
LA	=	Liquid Assets
TD	=	Total Deposite
ROE	=	Return On Equity
TU	=	Tribhuwan University

CHAPTER I

INTRODUCTION

1.1   BACKGROUND

Innovation, Deregulation and Globalization in banking sector have contributed to 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. These macroprudential indicators (MPIs) allow for assessments to be based on objective measures of financial soundness. If MPIs are made publicly available, they enhance disclosure of key financial information to the markets. 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.

Hilbers, Krueger & Moretti (September 2000) in their publication recommended CAMELS framework as one commonly used framework for analyzing the health of individual institutions, which looks at six major aspects of a FI: *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 picture—particularly an economy's vulnerability to capital flow reversals and currency crises.

On November 13, 1979, Federal Financial Institutions Examination Council (FFIEC), USA, adopted an internal rating system, the Uniform Financial Institutions Rating System (UFIRS). UFIRS is used by the Federal supervisory agencies and State supervisory agencies of USA for evaluating the soundness of FIs on a uniform basis and for identifying those institutions requiring special supervisory attention or concern. Explaining the importance of UFIRS, the FFIEC Federal Register Press Release Notice (December 1996) states that UFIRS takes into account of evaluation of managerial, operational, financial, and compliance performance factors common to all institutions and provides a means for the supervisory agencies to monitor, the types and severity of problems that institutions may be experiencing. The Fereral Register Press release further affirms in its introduction text of the revised 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.

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. However, the Office of Inspector General's (OIG) Audit report, USA (September 2002) replaced CAEL with SCOR for review program of the FDIC-Supervised Banks. SCOR uses quarterly Reports of Condition and Income (Call Reports) to rate institutions.

The research study is focused on assessing the financial condition and performance of Nabil Bank Limited (NABIL)& Himalayan Bank Ltd. (HBL) 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 and liquidity with respect to NRB standard and industrial averages during the period of past five years starting from FY 2001/02 to 2005/2006.

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 NABIL & HBL in the framework of CAMELS and is an attempt to come back with the following research questions:

⌡ How NABIL & HBL managing its 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 NABIL & HBL and what is the bank 's quality of Loans and Loan provision mix?

⟩ How NABIL & HBL 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 NABIL & HBL earnings?

⟩ Is the NABIL's & HBL'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 national and international economy has undergone through drastic changes over a decade and abruptly since last 5 years. 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 NABIL & HBL and following are the objectives on specific terms:

⟩ To analyse Capital Adequacy & Liquidity Position of HBL & NABIL and campare with regulatory minimum capital requirement.

⟩ To analyse quality of assets and evaluate Risk Weighted Assets of HBL & NABIL.

⟩ To evaluate the level, trend and stability of HBL & NABIL's earning.

1.5 SIGNIFICANCE OF THE STUDY

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

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 2001/02 to 2005/06 are the primary source of information and treated as authentic.

1.7   ORGANIZATION OF THE STUDY

This study is organized into five chapters; Introduction, Review of Literature, Research Methodology, Data Processing and Analysis and Summary, Conclusions and Recommendation. Introduction chapters includes background, Focus of the study, Statement of the problem, Objectives, Significance, Delimitations of the study and Organization of the study. Similarly, the second chapter deals with conceptual review and review of related studies. Research methodology describes the methodology adopted in this study . In the same way, presentation and analysis of data is included in Chapter IV. Finally, the Summary, Conclusions and Recommendations of the work are given in Chapter V.

CHAPTER II

REVIEW OF LITERATURE

This chapter focusses on the concept of commercial bank, bank supervision, CAMELS rating system and review of research papers and dissertataions. The basic concept of the functions of commercial bank, objective of bank supervison 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

Commercial 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.

Upadhaya and Tiwari (1998) stresses that the 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. In the same way, Abrol and Gupta (2002) explain that principally 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 (Crosse, 1963).

2.1.2 Functions of Commercial Banks

Kohn (2004) states that 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:

Accepting Deposits: This is the oldest function of a bank in which the banker charged 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 and 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 following ways:

Cash Credit: The bank advances collateral based loans to businessmen. The amount of the loan is credited to the current account of the borrower.

Term Loans: These are long term loans and are repayable yearly or quarterly in equal installments.

Hire purchase loan: In simple term we can say that it is the loan, bank provides to it's customer for the purchase. These are also the long term loan. Repayble generally on monthly basis in equal installment.

Call Loans: These are very short-term loans advanced to the bill brokers for not more than fifteen days. They are advanced against first class bills or securities. Such loans can be recalled at a very short notice.

Overdraft: A bank allows the borrower to over draw his current account upto a sum equal to the loan sanctioned.

Discounting Bills of Exchange: Banks purchase bills of exchange after discounting i.e charging rate of interest for the time to maturity, if the holder wants its proceeds before maturity. Banks is reimbursed by the accepting bank on maturity.

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.

Foreign Trade Operation: 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.

Miscellaneous 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   Bank Supervision

Tuning with the present scenario of globalization and increased economical activities in the country, commercial banks are now introducing complex and innovative banking products. This has amplified as well as diversified the functions to be performed by the Bank Supervision Department. This section deals with the concept of bank supervision, objective of bank supervision and the process of supervision.

2.1.3.1 Concept of Bank Supervision

The success of the banking system helpless without an effective and efficient risk management of its operation. As commercial banks are now involved in complex and innovative banking products they are exposed to many risks. The Board of Governors of the Federal Reserve System defined six safety and soundness risks in SR Letter 95-51, issued in November 1995. These risks are defined as follows:

- Credit Risk arises from a potential borrower failing to perform on an obligation.

- Market Risk is the risk to a FI's condition resulting from adverse movements in market interest rates or prices.

- Liquidity Risk is the potential that an institution will be unable to meet its obligations as they come due because of an inability to liquidate assets or obtain adequate funding.

- Operational Risk arises from the potential that inadequate information systems, operational problems, breaches in internal controls, fraud or unforeseen catastrophes will result in unexpected losses.

- Legal Risk arises from the potential that unenforceable contracts, lawsuits or adverse judgments can disrupt or otherwise negatively affect the operations or condition of a banking organization.

- Reputational Risk is the potential that negative publicity regarding an institution's business practices, whether true or not, will cause a decline in the customer base, costly litigation or revenue reductions.

There is no theoretically optimal system or standard textbook blueprint for the structure and process of regulating and supervising FIs, including banks. In fact, arrangements for banking regulation and supervision differ considerably from country to country. Apart from differences in political structures, the most important factors that account for the differences in regulatory and supervisory approaches include the general complexity and state of development of the financial system, the number, size and concentration of banking institutions, the relative openness of the domestic financial system, the nature and extent of public disclosure of banks' financial positions, and the availability of technological and human resources for regulation and supervision.

However, an implicit framework for the regulation and supervision of banks can be found in the *Core Principles for Effective Banking Supervision* issued by the Basel Committee on Banking Supervision in 1997. The framework can be interpreted as comprising four distinct yet complementary sets of arrangements:

) Legal and institutional arrangements for the formulation and implementation of public policy with respect to the financial sector, and the banking system in particular;

) Regulatory arrangements regarding the formulation of laws, policies, prescriptions, guidelines or directives applicable to banking institutions (e.g. entry requirements, capital requirements, accounting and disclosure provisions, risk management guidelines);

) Supervisory arrangements with respect to the implementation of the banking regulations and the monitoring and policing of their application;

) Safety net arrangements providing a framework for the handling of liquidity and solvency difficulties that can affect individual banking institutions or the banking system as a whole and for the sharing of financial losses that can occur (e.g. deposit insurance schemes or winding-up procedures).

Objective of Bank Supervision: With respect to the supervisory arrangements, the *Core Principles* describe what could be termed a "cradle to grave" approach covering the licensing of individual banks, the process of ongoing supervision and mechanisms for taking prompt corrective actions in case institutions do not meet regulatory or supervisory requirements (the latter would also include exit arrangements for institutions facing serious losses or default and the possible resulting activation of safety net arrangements). The overall objective of this comprehensive process of supervision is to guarantee that banks can be established, operated and restructured in a safe, transparent and efficient manner.

Bank supervisory agencies (like NRB in Nepal) are responsible for monitoring the financial conditions of commercial banks and enforcing related legislation and regulatory policy. Although much of the information needed to do so can be gathered from regulatory reports, on-site examinations are needed to verify report accuracy and to gather further supervisory information. Much research has explored the value of this private information, both to the bank supervisors and to the public who monitor banks through the financial markets.

Over the last few years supervisors have adopted new approaches and developed new systems for ongoing banking supervision in order to be better equipped to face the many challenges presented by financial innovation and globalization. These new systems seek to assess and track changes in a bank's financial condition and risk profile and to generate timely warning for the supervisor to help initiate warranted action. G10 countries have developed recently supervisory risk assessment and early warning systems and are currently in use or being developed. Some other systems that were developed but subsequently not put to use, or used but subsequently

discontinued for one reason or another. As can be seen from Appendix 7, which lists the systems, many supervisors implemented one or more systems for risk assessment and early warning during the 1990s. While some of the systems are able to provide *ex post* indication of existing problems, other systems try to generate *ex ante* warnings of potential problems that may emerge or develop in the future on account of the current risk profile of the banking institution. Overall, supervisory risk assessment and early warning systems assist in:

) Systematic assessment of banking institutions within a formalized framework both at the time of on-site examination and in between examinations through off-site monitoring;

) Identification of institutions and areas within institutions where problems exist or are likely to emerge;

) Prioritization of bank examinations for optimal allocation of supervisory resources and pre-examination planning; and

) Initiation of warranted and timely action by the supervisor.

Process of Bank Supervision: Ongoing banking supervision consists of a differentiated mix of Off-Site monitoring procedures and On-Site examinations. Off-site monitoring is the minimum tool for ongoing supervision. Supervisory authorities, which do not have the mandate or resources to carry out periodic on-site examinations, rely extensively on this method to monitor the financial condition and performance of banks and to identify those institutions that may need closer scrutiny. The process involves analyzing and reviewing periodic financial and other information received by the supervisor relating to banks' activities. Supervisors typically subject regulated banks to reporting requirements covering, for instance, balance sheet and profit and loss statements, business profile, loans, investments, liabilities, capital and liquidity levels, loan loss provisions, etc.

During On-Site examinations, supervisors make an overall assessment of a banking institution on the premises of the organization. Examinations by specialized and trained bank examiners allow a more hands-on assessment of qualitative factors such as management capabilities and internal control procedures that may not be reflected adequately in regulatory reports. Supervisory authorities may also commission outside organizations such as external auditors to undertake a full on-site examination or to review specific areas of operations within a banking institution.

Of course, external auditors also conduct independently, annual statutory audits of the accounts of a banking firm as well as the firm's compliance with accounting procedures and best practices. In principle, this should provide the supervisor with an

additional assurance that the accounts of a bank provide a true and fair view of the bank's financial position. In many cases, bank examiners will pay particular attention to these audit reports and to the ways in which banks deal with recommendations formulated by their external auditors.

2.1.4   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.

2.1.5 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).

2.1.5.1 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 considered well 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 are 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).

2.1.5.2   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, Phillipines, 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

Dhungana (2006) in his column broadly categorised 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 misutilised. 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 programmes sponsored by the government are regarded as the source of NPAs. For political benefits government, without assessing the financial feasibility of the credit programme, 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 programmes. 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.

⟩ Quite often the definition of the NPAs and accounting norms adopted by concerned agencies also amount to higher or lower magnitude of such assets. Each institution may have different norms to declare the assets whether it is not-performing. The income cycle of the project and amount of loan involved, set the installments of loan repayment. The nature of project also determines the level of NPAs.

⟩ Slow down in economy, global as well as domestic particularly in industrial sector, contributed to adversely affect the bottomline of borrowal units and their capacity to service the debt (Taori-1999). Recession debars the economic activities to run smoothly which affect the performance of FIs.

Implications 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 was 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 honour 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 princiapl 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.

Loan Class	Loan Loss Provision
Pass	1%
Substandard	25%
Doubtful	50%
Loss	100%

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 upto 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 of top 1000 world international banks published by the london based magazine, "The Banker"), are excluded from the restriction. Likewise advances and facilities to be used for the purpose of importing specified merchandise by the following public corporation are aslo excluded:

Name of the corporation	Merchandise
Nepal Oil Corporation	Petrol, Diesel, Kerosene, L.P.G.
Nepal Food Corporation	Cereals

2.1.5.3   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.

) The extent that the board of directors and management is affected by, or susceptible to, dominant influence or concentration of authority.

) Reasonableness of compensation policies and avoidance of self-dealing.

- Demonstrated willingness to serve the legitimate banking needs of the community.
- The overall performance of the institution and its risk profile.

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.

Barr and Siems (1993) provide the only direct measurement of management quality, using data envelopment analysis (DEA) to quantify the quality of management. They concluded that the predictive performance of their failure-prediction model improves markedly with the inclusion of the DEA efficiency variable.

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.

2.1.5.4   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,
- The adequacy of provisions to maintain the ALLL and other valuation allowance accounts,
- The earnings exposure to market risk such as interest rate, foreign exchange, Price risks.

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.

Evaluation 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.

2.1.5.5　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 prfitability. 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 shiftability 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 itself, 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 behaviour, 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 Directives related to 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, following arrangements have been put into force by NRB effective from 22 July 2002 (2059/04/06).

Prevailing directives as to Cash Reserve Ratio Requirement

a)	Balance at NRB	1. 7% of Current & Savings deposit liabilities.
		2. 4.5% of Fixed deposit liabilities
b)	Cash at Vault	2% of Total deposit liabilities

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

a. The CRR maintaned by the banks will be examined on the basis of average weekly balance of deposit liability immediately preceding 4th week. A week shall comprise from each Sunday through Saturday.
b. CRR will not be calculated for the week which is fully off.
c. Weekly statement of deposit balances to be submitted to NRB inspection and Supervision department within 15 days from the date of end of the week.
d. Weekly average of Monday to Friday of Total Deposit, Cash in Vault and NRB balance is calculated by dividing by 5.

Penalty will be levied for failing to maintain the adequate liquidity as above under any of the following conditions:

a. In the case of shortfall in maintenance of NRB balance but Cash at vault is exactly 2%.
b. In case of shortfall in NRB balance but Cash at Vault is more than 2% then upto 1% excess cash of total deposit is added in the balance with NRB then on such shortfall account (after adding upto 1% excess)
c. In case of shorfall in Cash in Vault as well as shortfall in NRB balance then on total shortfall amount.

The applicable rate of penalty is as follows:

First time shortfall = Equivalent to bank rate/highest refinance rate

Second time shortfall = Equivalent to 2 times of bank rate

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

2.1.5.6   Sensitivity to Market Risk

The sensitivity to market risk component reflects the degree to which changes in interest rates, foreign exchange rates, commodity prices, or equity prices can adversely affect a FI's earnings or economic capital. When evaluating this component, consideration should be given to: management's ability to identify, measure, monitor, and control market risk; the institution's size; the nature and complexity of its activities; and the adequacy of its capital and earnings in relation to its level of market risk exposure. For many institutions, the primary source of market risk arises from non-trading positions and their sensitivity to changes in interest rates. In some larger institutions, foreign operations can be a significant source of market risk. For some institutions, trading activities are a major source of market risk. Market risk is rated based upon, but not limited to, an assessment of the following evaluation factors:

ʃ The sensitivity of the FI's earnings or the economic value of its capital to adverse changes in interest rates, foreign exchanges rates, commodity prices, or equity prices.

ʃ The ability of management to identify, measure, monitor, and control exposure to market risk given the institution's size,

ʃ Complexity, and risk profile.

ʃ The nature and complexity of interest rate risk exposure arising from non-trading positions.

ʃ Where appropriate, the nature and complexity of market risk exposure arising from trading and foreign operations.

Rating the Sensitivity to Market Risk factor

ʃ 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.

Interest Rate Risk Measurement System Approaches
Interest rate risk measurement systems use an earnings approach, an economic value approach, or a blend of those two approaches. NRB unified directive (2062 BS) number E.Pra. Ni. No.05/061/62 requires the banks to classify the assets and liabilities on the basis of repayment maturity and conduct Gap Analysis of the maturity mismatch. The FDIC, Risk Management Manual of Examination policies (2005) states different approaches to measure the Interest Rate Risk discussed as under.

The earnings approach focuses on risks to reported earnings, usually over a shorter-term time horizon. Typically, earnings systems estimate risk for up to two years. In addition, estimating future earnings permits regulatory capital forecasts. The earnings approach traditionally focuses on net interest income. However, many systems now incorporate components that measure the price risk from instruments accounted for at

market value or lower-of-cost or market value. Maturity gap analysis and simulation models are examples of earnings approaches to IRR measurement.

The economic value approach estimates the bank's Economic Value of Equity (EVE) for forecasted interest rate changes. EVE represents the net present value of all asset, liability, and off-balance sheet cash flows. Interest rate movements change the present values of those cash flows. This method assumes that all financial instruments will be held until final payout or maturity. The economic value approach might provide a broader scope than the earnings approach, since it captures all anticipated cash flows. The economic value approach best suits banks that mark most instruments to market. At banks that value most instruments at historical cost, economic value measurements can also effectively estimate interest rate risk. However, in those banks, EVE changes might be recognized over a longer time frame (through reported earnings). As a result, banks often blend the two approaches. Management may use an earnings approach to evaluate short-term performance and an economic approach to monitor the bank's long-term viability. Despite using different methodologies, the two approaches generally should provide a consistent view of interest rate risk exposures.

Gap Analysis

Gap systems use an accrual approach to identify risk to net interest income. Typically, gap systems identify maturity and repricing mismatches between assets, liabilities, and off-balance sheet instruments. Gap schedules segregate rate-sensitive assets, rate-sensitive liabilities, and off-balance sheet instruments according to their repricing characteristics. Then, the analysis summarizes the repricing mismatches for each defined time horizon. Additional calculations convert that mismatch into risk to net interest income. Gap analysis may identify periodic, cumulative, or average mismatches. The most common gap ratio formula is:

<u>Rate-Sensitive Assets - Rate-Sensitive Liabilities</u>

Average Earning Assets

Occasionally, average assets or total assets may be used in place of average earning assets. However, those denominators can underestimate interest rate risk. The gap ratio can and should be used to calculate the potential impact on interest income for a given rate change. This is done by multiplying the gap ratio by the assumed rate change. The result estimates the change to the net interest margin. For example, a bank has a 15% one-year average gap. If rates decline 2%, then the net interest margin will decline by 30 basis points (15% x .02). This estimate assumes a static balance sheet and an immediate, sustained interest rate shift. Gap analysis has several advantages. Specifically, it:

∫ Does not require sophisticated technology.

∫ May be relatively simple to develop and use.

∫ Can provide clear, easily interpreted results.

However, gap's weaknesses often overshadow its strengths, particularly for larger, more complex banks. For example, gap analysis:

∫ Generally captures only repricing risk.

∫ May not identify intra-period repricing risk.

∫ Does not measure EVE.

∫ Generally can not analyze complex instruments.

Gap analysis may provide sufficient interest rate risk measurements for some banks. However, gap analysis may be ineffective for banks with complex structures, sophisticated activities, or significant exposures to embedded options.

Simulation Analysis

Simulation analysis determines the effect of interest rate changes on short-term net interest income, net income, and, in some cases, EVE. Simulation models generate results for a range of possible interest rate scenarios and exposures. Banks may vary simulation rate scenarios based on factors such as pricing strategies, balance sheet composition, and hedging activities. Simulation may also measure risk presented by non-parallel yield curve shifts. Any simulation system's accuracy, though, depends on the assumptions and data used. Inaccurate data or unreasonable assumptions render simulation results meaningless. Simulation models are often not "user friendly" and may require more data and expertise than other interest rate risk measurement systems.

Duration Analysis

Duration is a measure of the percentage change in the economic value of a position that will occur given a small change in the level of interest rates. It reflects the timing and size of cash flows that occur before the instrument's contractual maturity.

Macaulay duration, duration's simplest form, calculates the weighted average term to maturity of a security's cash flows.

Modified duration, calculated from Macaulay duration, estimates price sensitivity for small interest rate changes. An instrument's modified duration represents its percentage price change given a small change in the level of interest rates. Thus, it serves as a proxy interest rate risk measure.

Effective duration estimates price sensitivity more accurately than modified duration for instruments with embedded options and is calculated using valuation models that contain option pricing components. First, the user must determine the instrument's

current value. Next, the valuation model assumes an interest rate change (usually 100 basis points) and estimates the new instrument's value, based on that assumption. The percentage change between the current and forecasted values represents the instrument's effective duration.

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 conductd by Nepalase 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.

Jackson (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.

Martins (1977) study set the standard for discrete-response models of bank failure prediction. Whereas most other research focused on a small sample of banks over two or three years, Martin used all Fed-supervised institutions during a seven-year period in the 1970s, yielding over 33,000 observations. In what would become a standard approach, he confronted the data agnostically with 25 financial ratios and ran several different specifications in search of the best fit. He found that capital ratios, liquidity measures, and profitability were the most significant determinants of failure over his sample period. Although Martin did not employ direct measures of asset quality, his indirect measures- provision expense and loan concentration- also turned out 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 financ   ial 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.

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.

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.

Berger and Davies (1994) evaluate the impact of CAMEL rating changes on the parent holding company's stock price. They separate stock price changes into two components: a 'private information' effect (which identifies the public's awareness of new information discovered by examiners), and a 'regulatory discipline' effect (which values the regulators' presumed ability to force a bank to change its behavior). Berger and Davies' empirical results provide only weak evidence of a regulatory discipline effect, but they find a strong private information effect. However, the information effect applies only to CAMEL downgrades, which tend to precede stock price declines. Consistent with the findings of Hand, Holthausen and Leftwich (1992), Berger and Davies find no movement in stock prices following a CAMEL upgrade.

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.

Morgan (1998) finds that rating agencies disagree more about banks than about other types of firms. As a result, supervisors with direct access to private bank information could generate additional information useful to the financial markets, at least by certifying that a bank's financial condition is accurately reported.

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.

Hirtle and Lopez (1999) examine the usefulness of past CAMEL ratings in assessing banks' current conditions. They find that, conditional on current public information, the private supervisory information contained in past CAMEL ratings provides further insight into bank current conditions, as summarized by current CAMEL ratings. The authors find that, over the period from 1989 to 1995, the private supervisory information gathered during the last on-site exam remains useful with respect to the current condition of a bank for up to 6 to 12 quarters (or 1.5 to 3 years). The overall conclusion drawn from academic studies is that private supervisory information, as summarized by CAMELS ratings, is clearly useful in the supervisory monitoring of bank conditions.

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.

Sahajwala and Van den Bergh (2000) based their work paper of Basel Committee on Banking Supervision on a study of a number of new bank monitoring systems currently in use or under development in various G10 countries. Such systems are collectively termed "supervisory risk assessment and early warning systems". The objective of the paper was to provide an overview of the different approaches taken by bank supervisors and to make a preliminary general assessment of the methods that are being used or developed. The study reveals that supervisory authorities are now clearly moving towards putting in place more formal, structured and risk focused procedures for ongoing banking supervision. Individual approaches and systems have been developed and adopted, typically in the 1990s, with a greater focus on risk profiles and risk management capabilities of individual banking institutions and on the generation of timely warning of potential changes to a bank's financial position. These new and modified systems have contributed positively to the supervisory process, and supervisors are working towards refining the systems further in order to improve the systems' accuracy and predictive power.

Gytan and Johnson (2001) have presented their work paper on a review of alternative methodologies for early detection of banking distress. The various methodologies proposed by different researchers, in the paper are aimed to the early identification of financial distress for countries without an important recent history of bank failure, but facing an unstable international environment. They evaluate several indicators and methodologies to measure financial distress such as qualitative indicators, the signal extraction approach, limited dependent estimation and finally duration models. In the Early Warning System (EWS) of Systemic Banking Crises section they reviewed the literature aimed to predict crises of the complete banking system of a country. They also include some methodological approaches that have been used as early warning systems for currency crises, but have a potential application for the prediction of banking crises. The prediction of banking crises by statistical methods requires a

sample in which the events have appeared repeatedly. Since there has not been so may repeated episodes in any given country, the estimation must rely on a sample of different countries that have suffered banking problems. According to them, the literature on indicators and EWS of systemic crises can be classified by their methodological approach: (1) Qualitative indicators, (2) Signal Extraction, (3) Limited Dependent Regression, (4) Other models.

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 CAMELS 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 reseach works are presented which are relevant for this study:

Pradhan (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 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.

K.C.(1991) has done a study on dividend policy of joint venture banks in Nepal. The objective of this study was to provide conceptual framework of dividend models and

to analyse the financial variables affecting the stock value and interpret the implication of paying dividend in dividend valuation models. The study has covered the time span of FYs 1984/85 through 1989/90. In this study, various financial ratios have been analyzed with the help of two types of analytical tools -investment and statistical tools. Investment tools consist of dividend payout ratio, earning per share, rerum on paid-up capital, retention ratio and dividend valuation model. In addition to the coefficient of correlation, the researcher has used financial tools in this study. The researcher concluded that earning per share of all three joint ventures banks (Nepal Arab Bank Ltd., Nepal Indosuez Bank Ltd. and Nepal Grindlays Bank Ltd.) were satisfactory and actual capitalization rate was higher than the normal capitalization rate.

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.

Adhikari (1993) conducted a study on evaluation of the financial performance of Nepal Bank Ltd. The objective of the study was to evaluate the financial performance of Nepal Bank Ltd. The study has been limited to FYs 2038/39 BS through 2046/47 BS. The main indicators of financial performance used were financial ratios- current, loan to deposit, return on capital, return in net worth , return on total assets, earning per share, dividend per share, pay out and net worth per share vs. market price per share. The researcher concluded that the bank had not managed investment portfolio efficiently. Operational efficiency was not satisfactory. During the study period, except liquidity position all other financial indicators were not satisfactory.

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.

Shakya (1995) performs a study on financial analysis of joint venture banks in Nepal. The objective of this study was to carry out the comparative financial performance evaluation of Nepal Arab Bank Ltd. (Nabil) and Nepal Grindlays Bank Ltd. (NGBL). This study has covered the time span of FYs 1988/89 through 1993/94. In this study, he has financial ratios viz. liquidity, leverage, activity, profitability, growth and valuation, and statistical tools viz. Karl Pearson's correlation coefficient, student t-test, simple average, and index. The researcher has found that in spite of the increase in loans and deposits of both banks, their performance measured in terms of deposit utilization rate is not satisfactory. Further, the study showed that financial performance of Nabil is better than that of NGBL.

Gurung (1995) conducted a research on,"A financial study of joint venture banks in Nepal." The objective of this study was to examine the financial strengths and weaknesses of Nepal Grindlays Bank Ltd. (NGBL) and Nepal Indosuez Bank Ltd. (NIBL). The study has covered the period of seven fiscal years i.e. 1986/87 through 1992/93. In this study, he has used financial ratios viz. current, activity, profitability, capital structure and statistical tool viz. Karl Pearson's coefficient of correlation. The researcher has, on the basis of different financial indicators; found that performance of NGBL is better than that of NIBL.

Thapa (2001) has conducted her study "A comparative Study on Investment Policy of Nepal Bangladesh Bank Ltd. and other joint ventures banks." The researcher's main objective of study was to evaluate the liquidity, assets management efficiency, profitability and risk position of NBBL in comparison Nabil and NGBL and to examine the fund mobilization and investment policy of NBBL through off-balance sheet and on-balance sheet activities in comparison to other two banks. Through research the researcher found that the liquidity position of NBBL is comparatively not better than of Nabil and NGBL.The liquidity ratios are moderately fluctuating which means the bank has not properly formulated stable policy. As per the study, NBBL is not in better position regarding its on-balance sheet as well as off-balance sheet activities in compare to Nabil and NGBL and it does not seem to follow any definite policy regarding the management of its assets. The researcher at the last suggested following a specific policy in investment and she further recommended to maintain

the optimum level of relationship among deposit and loan and advances, outside assets and net profit and to maintain the adequate recovery rate.

Likewise, Deoja (2001) conducted study entitled "A Comparative Study of the Financial Performance between Nepal State Bank of India Limited and Nepal Bangladesh Bank Limited." The researcher's main objective of study was to evaluate the trend of deposits and loan and advances of NSBIL and NBBL and to evaluate the liquidity, profitability, capital structure, turnover and capital adequacy position of NSBIL and NBBL. Through research found that the cash and bank balance to current assets, saving deposit to total deposit etc. of NABIL are higher while fixed deposit to total deposits, loans and advances to current assets of NBBL are higher and NBBL has better turnover than NSBIL in terms of loan and advances to total deposits ratio and loan and advances to fixed deposit ratio. Through the study of the different ratios has concluded that both banks are highly leveraged.

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 discriptive analysis 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-performaing 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 below the industrial average ratio during the study period.

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 analyses and found applying traditional analysis of financial performance. In the context of Nepalese banking environment, there are few academic researches found conducted in the frame work of CAMEL (Bhandari, 2006). However these researches lack analysis of the 6th component i.e Sensitivity of Market Risk. This study attempts to evaluate financial performance of Himalayan Bank Ltd and NABIL Bank Ltd. on all the six components of CAMELS framework.

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 reseach 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 Himalayan Bank and Nabil Bank 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 branch office of each bank at Pokhara, consulting library at P.N. Campus and Pokhara College of Management, Internet Surfing and related text books. The annual reports of each Bank for the study period were obtained from its Pokhara branch 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 Western Regional Library (T.U.), Pokhara, 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:

$$\text{Earning Per Employee} = \frac{\text{Net Income After Tax}}{\text{Total Number of Employees Income}}$$

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:

$$\text{Earning Per Employee} = \frac{\text{Net Income After Tax}}{\text{Total Number of Employees Income}}$$

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 eficient 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:

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

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:

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

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 defence 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:

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

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:

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

Where,

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

Interest Rate Sensitivity: Interest rate sensitivity is estimated by GAP Analysis. If $\angle R_i$ is the average interest rate change affecting assets and liabilities that can be

repriced within i^{th} maturity bucket, the effect on the bank's net interest income (NII) in the ith maturity bucket is calculated by (Saunders and Cornett, 2004):

$$\measuredangle NII_i = \left(\sum_{i=1\,DAY}^{i=1th\,Maturity\,Bucket} RSA_i - \sum_{i=1\,DAY}^{i=1th\,Maturity\,Bucket} RSL_i\right) \times \measuredangle R_i$$

$$= GAP_i \times \measuredangle R_i$$

Where $\measuredangle NII_i$ = Change in Interest income in the ith maturity bucket

GAP$_i$ = Rupee size of gap between book value of Rate Sensitive Assets (RSA) and Rate Sensitive Liabilities (RLA) in maturity bucket i.

Similarly Cumulative GAP (CGAP) of interest is the One-Year repricing gap estimated as:

$$\measuredangle NII_i = CGAP_i \times \measuredangle R_i$$

Where,

$$CGAP_i = \left(\sum_{i=1\,DAY}^{i=90\,Days} RSA_i - \sum_{i=1\,DAY}^{i=90\,Days} RSL_i\right) + \left(\sum_{I=91\,DAY}^{i=180\,Days} RSA_i - \sum_{i=91\,DAY}^{i=180\,Days} RSL_i\right) + \left(\sum_{i=181\,DAY}^{I=270\,Days} RSA_i - \sum_{i=181\,DAY}^{i=270\,Days} RSL_i\right)$$

$$= \left(\sum_{i=271\,DAY}^{i=365\,Days} RSA_i - \sum_{i=271\,Days}^{i=365\,Days} RSL_i\right)$$

Interest Rate Sensitivity: Interest Rate Sensitivity can be computed by expressing Cummulative GAP as a percentage of total risk sensitive assets (A) as:

Interest Rate Sensitivity Ratio = $\dfrac{CGAP}{A}$ X 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:

$$\cdot\ X\ \frac{\Sigma x}{N}\ |\ \ |$$

Where, $\cdot$ =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 in the following way:

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

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

Here, n= Number of observations

x=Individual value, □ = 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 NABIL & HBL 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 2004/05 to 2008/09. 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.

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 analyse and arrive at the findings on the financial conditions of Nabil Bank in terms of CAMELS framework.

4.1.1 Capital Adequacy

Capital adequacy component analysis of Nabil & HBL 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

NABIL

Fiscal Year	Core Capital (Million)	RWA (Million)	Core Capital To RWA %	Min. NRB Standard %*	Variance (+/-%)
2004/05	1,032	NA	6.50	4.50	+2.00
2005/06	1,112	10,564	10.53	4.50	+6.03
2006/07	1,277	11,146	11.45	5.00	+6.45
2007/08	1,439	11,872	12.12	5.50	+6.62
2008/09	1,611	14,193	11.35	5.50	+5.85

HBL

Fiscal Year	Core Capital (Million)	RWA (Million)	Core Capital To RWA %	Min. NRB Standard %*	Variance (+/-%)
2004/05	580	13,059	4.44	4.50	-0.06
2005/06	699	14,957	4.67	4.50	+0.17
2006/07	835	12,746	6.50	5.00	+1.50
2007/08	1,039	14,681	7.10	5.50	+1.60
2008/09	1,297	16,861	7.70	5.50	+2.20

Source : Annual Reports

As shown in the table, the Tier I ratio of NABIL of 12.12% was maximum in FY 2007/08 and minimum ratio of 6.50% in FY 2004/05. The Tier I ratio increased continuously till FY 2007/08 and decreased thereafter in FY 2008/09. The reason of this decrease was due to compartively high increase of RWA by 19.55% in FY 2008/09. Whereas Tier ratio of HBL of 7.70% was maximum in FY 2008/09 and minimum ratio of 4.44% in FY 2004/05, The tier ratio continously increasing trend, its due to respective increase in Core Capital and RWA in the following year.

Chart 4.1 Core Capital Ratio
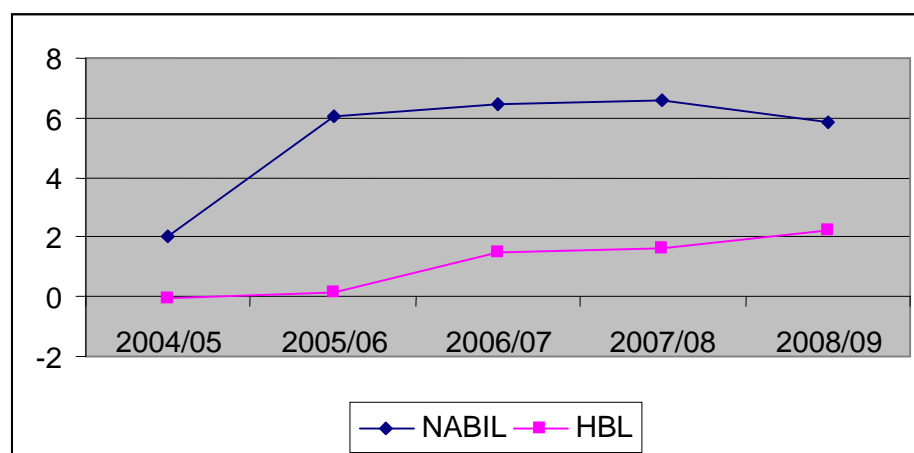
The graphical representation in Chart 4.1 shows, Tier I capital ratio of NABIL variated positively in all the 5 years of the review period, with maximum positve variance of 6.62% in FY 2004/05 and minimum positive variance of 2.00% in FY

2004/05. The bank was able to maintain positive variance greater than 6% during the period 2005/06 to 2007/08 however it slightly decreased in the concluding FY of 2008/09. Similerly, Tier I ratio of HBL also varied positively during the study period except in FY 2004/05, which is negative by 0.06%. Maximum Positive variance of 1.60% in FY 2007/08.

In general, both bank has maintained Tier I capital adequately above the NRB standard during the study period. It means the banks are applying adequte amount of internal sources of shareholders' fund with significant core capital adequecy 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 CAR calculation.

Table 4.2: Supplementary Capital Adequacy

NABIL

Fiscal Year	Supplementary Capital (Million)	RWA (Million)	Supplementary To RWA %	Max.NRB Standard %*	Variance (+/-%)
2004/05	630	N/A	3.96	6.50	+2.54
2005/06	353	10,564	3.34	10.53	+7.19
2006/07	178	11,146	1.60	11.45	+9.85
2007/08	167	11,872	1.43	12.12	+10.69
2008/09	156	14,193	1.10	11.35	+10.25

HBL

Fiscal Year	Supplementary Capital (Million)	RWA (Million)	Supplementary To RWA %	Max.NRB Standard %*	Variance (+/-%)
2004/05	469	13,059	3.59	6.50	+2.91
2005/06	500	14,957	3.34	10.53	+7.19
2006/07	639	12,746	5.01	11.45	+6.14
2007/08	565	14,681	3.85	12.12	+8.27
2008/09	499	16,861	2.96	11.35	+8.39

Source:Annual Reports,

Journal of Nepalese Business Studies, Dec 2009, p47, Health Check-up of Commercial Banks in the Framework of CAMEL: A Case Study of Joint Venture Banks in Nepal by Keshar J Baral

* NRB, Directive# 1, 2005-06, p.1-2

As shown in Table 4.2, the Tier II ratio of NABIL was maximum in FY 2004/05 with 3.96% and minimum in FY 2008/09 with 1.10%. The ratio is in continuous decreasing trend since 2004/05 till 2008/09. The continuous decrease owed due to regular decrease in Supplementry Capital Fund and regular increase in RWA over the study period, However, the Tier II ratio of HBL was maximum with 5.01% in FY 2006/07 and minimum with 2.96% in FY 2008/09. The ratio is in volatile trend during the study period. The fluctuating ratio is due to the fluctuation in Supplementry Capital Fund and RWA over the study period.

Chart 4.2 Supplementary Capital ratio
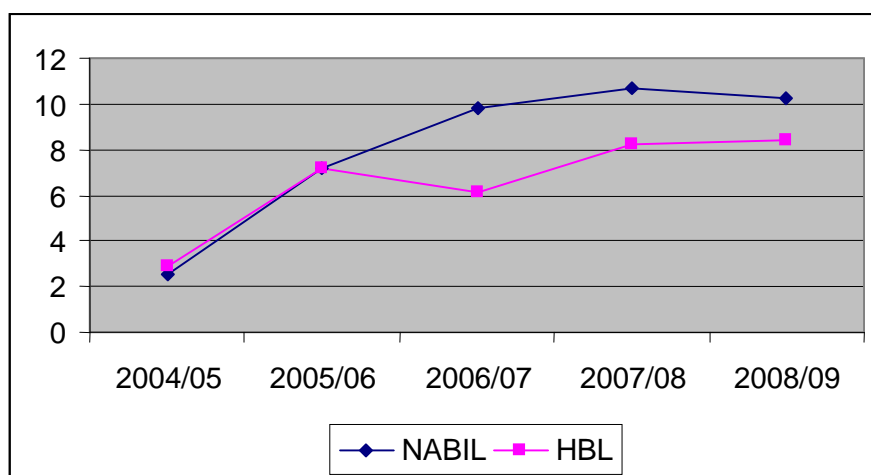
Chart 4.2 shows, Tier II capital ratios is in decreasing trend and were well below the maximum level allowed by NRB norms and thus variated positively in all the 5 years of the review period, with maximum positve variance of 10.69% in FY 2007/08 and minimum positive variance of 2.54% in FY 2004/05. Same as, Tier II capital ratio of HBL also were well below the maximum level allowed by NRB norms and variated positively in all the years with maximum positive variance of 8.39% in FY 2008/09 and minimum positive variance of 2.91% in FY 2004/05. Hence, both banks were able to maintain positive variance greater than 2% throughout the study period.

4.1.1.2 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 & Industrial Average

NABIL

Fiscal Year	Total Capital (Million)	RWA (Million)	Total Capital To RWA %	Min. NRB Standard %	Variance %	Industry Average%
2004/05	1,662	NA	10.46	8.00	+2.46	11.18
2005/06	1,464	10,564	13.86	9.00	+4.86	13.82
2006/07	1,455	11,146	13.05	10.00	+3.05	11.95
2007/08	1,609	11,872	13.56	11.00	+2.56	11.62
2008/09	1,766	14,193	12.44	11.00	+1.44	NA

HBL

Fiscal Year	Total Capital (Million)	RWA (Million)	Total Capital To RWA %	Min. NRB Standard %	Variance %	Industry Average%
2004/05	1,049	13,059	8.03	8.00	+0.03	11.18
2005/06	1,199	14,957	8.02	9.00	-1.97	13.82
2006/07	1,474	12,746	11.56	10.00	+1.56	11.95
2007/08	1,604	14,681	10.93	11.00	-0.07	11.62
2008/09	1,796	16,861	10.65	11.00	-0.35	NA

Source:Annual Reports,

Journal of Nepalese Business Studies, Dec 2009, p47, Health Check-up of Commercial Banks in the Framework of CAMEL: A Case Study of Joint Venture Banks in Nepal by Keshar J Baral

* NRB, Directive# 1, 2005-06, p.1-2

Table 4.3 tabulates the bank's , Total Capital, RWA, Total Capital Adequacy Ratio and its comparision with minimum NRB standard and Industry average; during the review period. As tabulated, the total capital to RWA of NABIL with 13.86% is maximum in FY 2005/06 and minimum with 10.46% in FY 2004/05, The ratio was found above the minimum NRB standard in all the study period with maximum positive variance of 4.86% and minimum positive variance of 1.44% in FY 2005/06 and 2008/09 respectively. In the case of HBL the total capital to RWA is maximum with 11.56% in FY 2006/07 and minimum with 8.02% in FY 2005/06, The ratio is found fluctuating with minimum NRB standard in all the study period with maximum positive variance of 1.56% in FY 2006/07 and minimum with negative variance of 1.97% in FY 2005/06.

Chart 4.3 Total Capital Adequacy ratio
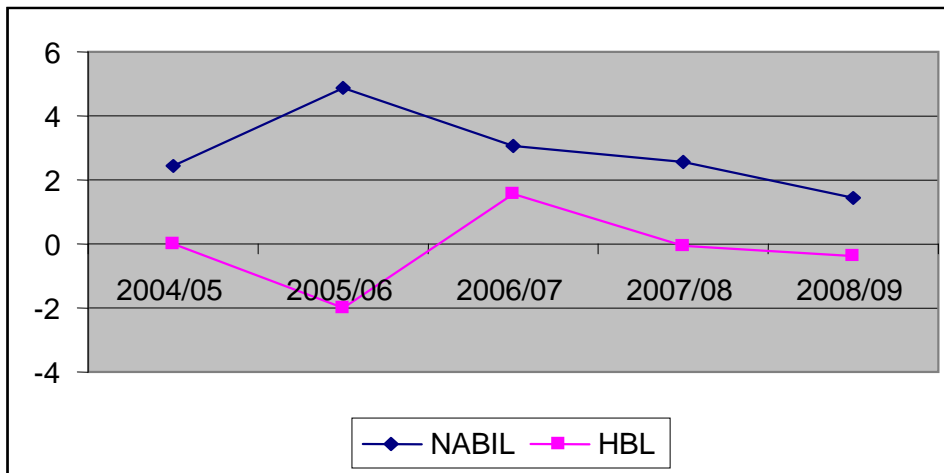
Chart 4.3 exhibits the data tabulated in Table 4.3. As shown in the chart, the capital adequacy ratio of NABIL was above the minimum NRB standard but getting closer in later years which means the positive variance is in decreasing trend represented by the variance with NRB curve. Except in Fy 2004/05, the capital ratio was seen above the industry average ratio FY 2005/06 onwards. Whereas, Capital adequecy ratio of HBL was below the minimum NRB standard in FY 2005/06, 2007/08 and 2008/09. Maximum positive variance of HBL is 1.56% in FY 2006/07.

In general, NABIL was able to maintain CAR above the minimum NRB standard effciently during the study period. Also the ratio was seen above the industry average in the later years. But HBL was not able to maintained CAR above the minimum NRB standard efficiently during the review period. Hence the bank requires to increase its capital fund either through internal sources or decrease risky assets investments in the coming future.

4.1.2 Asset Quality Analysis

Here, out of the several indicators of asset quality, Asset compostion, Non-Performing asset ratio and Loan Loss provisioning ratio are taken to examine the asset quality of Nabil. The total asset composition of Nabil is analysed 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 perfomance, was carried out using time series and comparative analysis technique. The analysis of Loans & Advances contains examination of loan classification and Non-Performing Loans (NPLs) 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 anlaysis to assess inherent credit risks could not be conducted as the bank's financial data format (prescribed by NRB) in the annual reports lacked detailed sectoral loan portfolio unlike financial reports required in US region. It is advisible NRB to stipulate banks present with detailed Loan & Advances exposures for signalling vulnerability of, the financial system, economy and inherent credit risks.

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%)

NABIL

	2004-05	2005-06	2006-07	2007-08	2008-09	Mean
Cash & Bank Banalce	4.43	5.96	6.91	5.79	3.25	5.93
*Industry Average**		9.81	8.46	9.77	N/A	
Money at Call or Short Notice	2.85	0.18	4.05	5.49	5.05	3.48
*Industry Average**		2.11	1.69	2.15		
Investment (At Cost)	41.95	46.51	36.41	34.85	24.83	37.04
*Industry Average**		20.78	23.32	21.86	N/A	
Loans, Advances & Overdrafts & Bills Purchases & Discounted	45.32	42.2	46.83	48.91	61.59	48.97
*Industry Average(Loans, Adv & B/P)**		47.13	47.38	47.42	N/A	
Fixed Assets	1.35	1.35	1.52	2.02	2.10	1.66
*Industry Average**		0.88	0.93	0.92	N/A	
Other Assets	4.11	3.81	4.28	2.94	3.16	3.67
*Industry Average**		19.29	18.23	17.87	N/A	

HBL

	2004-05	2005-06	2006-07	2007-08	2008-09	Mean
Cash & Bank Balance	5.69	7.36	5.93	8.18	7.78	6.99
*Industry Average**		9.81	8.46	9.77	N/A	
Money at Call or Short Notice	29.51	20.80	1.65	0.62	1.43	10.80
*Industry Average**		2.11	1.69	2.15		
Investment (At Cost)	13.97	20.90	42.96	42.10	36.12	26.70
*Industry Average**		20.78	23.32	21.86	N/A	
Loans, Advances & Overdrafts & Bills Purchases & Discounted	45.54	46.23	44.84	44.82	50.21	46.33
*Industry Average(Loans, Adv & B/P)**		47.13	47.38	47.42	N/A	
Fixed Assets	1.22	1.08	1.50	0.90	1.16	1.17
*Industry Average**		0.88	0.93	0.92	N/A	
Other Assets	4.07	3.63	3.12	3.38	3.30	3.50
*Industry Average**		19.29	18.23	17.87	N/A	

Source: Annual Reports

Asset composition of Nabil 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 (which form the most liquid of all assets) cumulatively increased in the initial 3 years with 4.43%, 5.96%, 6.91% and decreased in later 2 years with 5.79% and 3.25% cummulatively. The average Cash & Bank Balance of 5 years was 5.25%. Money at Call was minimum in FY 2005/06 at 0.18% then increased rapidly for the next 2 years to reach the maximum in FY 2007/08 at 5.49%. However the following year the figure decreased but was still above the mean of 3.48%. The Investments composition of the total assets has shown steady decrease during the review period with 41.95% in 2004/05 and 24.83% in 2008/09. The Investment proportion in the 5 year period averaged 37.04%. The Loan, Advances & Bills Purchase was 45.32% in 2004/05 and 61.59% in 2008/09 with an average of 48.90%. Similarly, fixed assets proportions increased steadily during the period while the other assets proportions remained fluctuating around average 3.67%.

In the case of HBL, percentage of Bank and Cash Balance cumulatively ups and down in all the years with 5.69%, 7.36%, 5.93%, 8.18% and 7.78% respectively with average balance of 6.99%. Money at call is maximum with 29.51% in FY 2004/05 after then rapidly decreases till FY 2007/08 to 0.62% then slightly increased to 1.43% in FY 2008/09. However the trend is in tremendously fluctuating but still the above mean with 10.80%. The investment composition in in rapidly increasing trend in first 3 years from 13.97% in FY 2004/05 to 42.96% in FY 2006/07, later on the trend decreased slightly to 36.12% in FY 2008/09. Loan, Advances and Bills Purchase is in slightly fluctuating trend over the period with maximum of 50.21% in FY 2008/09 and minimum of 44.82% in FY 2007/08 with average of 46.33% of 5 years. 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 Nabil, the adequacy of Allowance for Loan and Lease Losses (ALLL) 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, categorised 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 NABIL 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 non-performing loan. As per NRB directives, all Loans and Advances must be classified in order of Principal default aging into Pass (past due upto 3 months), Sub-standard (past due between 3-6 months), Doubtful (past due between 6-12 months) and Loss (past 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)

NABIL

	2004-05	2005-06	2006-07	2007-08	2008-09	Mean
Non-Performing Loan	NA	557	450	287	145	287.8
Total Loan	8324	7802	8114	8549	10947	8747.20
NPL Ratio (%)	NA	7.14	5.54	3.35	1.32	2.87
*Industry Average**	29.31	30.41	28.68	22.77	N/A	

HBL

	2004-05	2005-06	2006-07	2007-08	2008-09	Mean
Non-Performing Loan	NA	1367	797.6	1092.8	1147.5	880.98
Total Loan	7224.7	9015.3	9557.1	10844.6	12919.6	9912.26
NPL Ratio (%)	NA	15.16	8.35	10.18	8.88	8.51
*Industry Average**	29.31	30.41	28.68	22.77	N/A	

Source: Annual Reports,
*NRB, Bank & Supervision Report 2007/08

Table 4.5 presents the NPL Ratio of the banks, The figures for the FY 2004/05 was not available and could not be examined. Likewise the industry average figures of FY 2008/09 was also not examined due to non-availability. However the mid figures were adequate to tell the trend analysis. The NPL ratio of NABIL bank is in continously decresing trend and was found maximum with 7.14% in FY 2005/06 and minimum with 1.32% in FY 2008/09. Whereas, NPL of HBL was found maximum with 15.16% in FY 2005/06 and minimum with 8.35% in FY 2006/07. The average NPL ratio of both bank found below the industrial average in all the years

Chart 4.4: Non Performing Loan Ratio
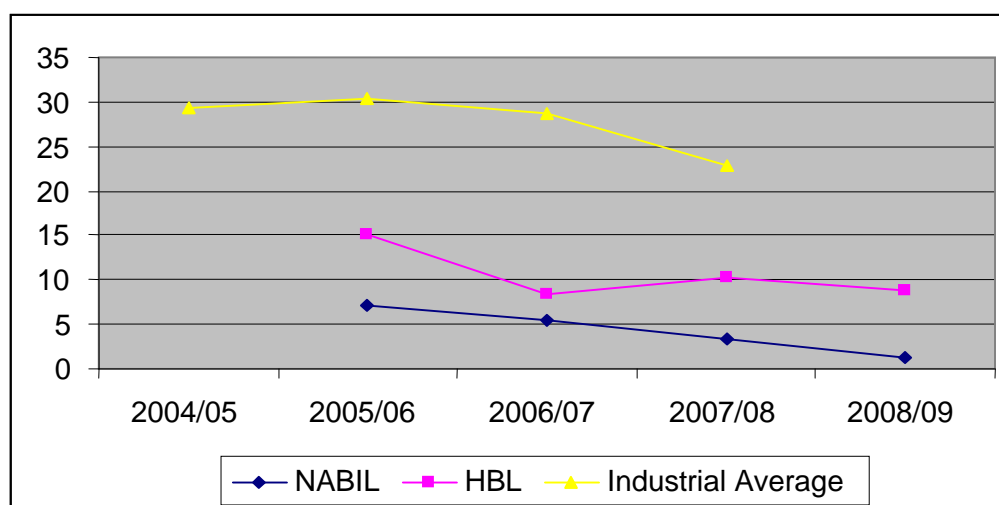
In figure 4.4, the non-performing loan ratio curve of the both banks are below the industry average curve in all observed fiscal years. Due to the public sectors bank in Nepal have very high value of non-performing loan so the industrial average is also came very high. Thus, this industrial average ratios can not taken as a benchmark for non-performing loan ratio. Generally, an internationally recognized non-performing loan benchmark is less than 8 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 (Garden and Miller, 1988). Loan loss ratio provides useful insight into the quality of a banks loan portfolio and bad debts coverage, and the adequacy of loan loss provisions. 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. Loan loss provision on the other hand signifies the cushion against future contingency created by the default of the borrowers. 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. Altman and Sametz (1977) have identified few early warning variables based on the balance sheet data. The loan loss ratio as defined by them is the ratio of provision for loss to the total loan and investments. 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 (%)

NABIL

	2004-05	2005-06	2006-07	2007-08	2008-09
Total Loan Loss Provision (in Million)	591.80	363.95	357.73	358.66	360.57
Total Loan & Advances	8,324.44	7,801.85	8,113.68	8,548.66	10,946.74
Total Provision to Total Loans (%)	7.11	4.66	4.41	4.20	3.29

HBL

	2004-05	2005-06	2006-07	2007-08	2008-09
Total Loan Loss Provision (in Million)	-	344.50	643.40	842.80	967.80
Total Loan & Advances	7224.70	9015.30	9557.10	10,844.60	12919.60
Total Provision to Total Loans (%)	-	3.82	6.73	7.77	7.49

Source Annual Reports, 2004-05, 2005-06, 2006-07, 2007-08, 2008-09

Table 4.6 exhibits that the loan loss provisioning ratio of NABIL for the study period is in continuous decreasing trend. The ratio ranges from 7.11% in FY 2004/05 to 3.29% in FY 2008/09 with an average of 4.73%. The coefficient of variation between them is 30.11%, which indicates that the ratios are variable and not consistent with the decreasing trend. Where in the case of HBL the loan loss provisioning ratio for the study period is in increasing trend. The ratio ranges from 3.82% in FY 2005/06 to 7.77% in FY 2007/08 with an average of 6.45%. The coefficeint of Variation between them is 28.04%, which indicates that the ratios are variable and not consistent with the increasing trend.

Chart 4.5: Trend of Loan Loss Provision Ratio
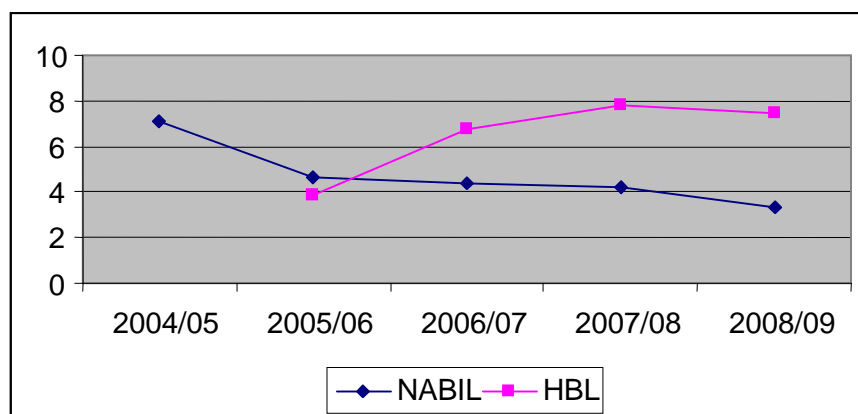
Chart 4.5 shows the observed value of loan loss provisioning ratio of NABIL is in decreasing trend, The ratio is continusously decreasing till FY 2008/09. which indicates the trend of the loan loss ratio is decreasing over the study period. On the other hand loan loss provisioning of HBL is increasing trend upto year

2007/08 thereafter it is observed declining in year 2008/09. It indicates the trend of the loan loss ratio is in increasing 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 balace 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 Operating Expense to Total Operating 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. A high level of expenditures in un-productive activities may reflect an inefficient management. A high or increasing ratio of expenses to total revenues may give indication of ineffcient operation. This can be, but necessarily due to management deficiencies. In any case. it is likely to negatively affect profitability (IMF, 2004).

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 Operating Expenses to Total Operating Revenues Ratio

NABIL

FY (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Total Operating Expenses (TOE) (in million)	1,049.00	1,185.36	745.71	697.42	668.70
Total Operating Revenues (TOI) (in million)	1,573.06	1,639.12	1,340.50	1,333.65	1,438.44
TOE /TOI Ratio (%)	66.69	72.32	55.63	52.29	46.49

HBL

FY (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Total Operating Expenses (TOE) (in million)	1,043.32	1,298.19	1,154.77	1,242.18	1,256.56
Total Operating Revenues (TOI) (in million)	1,242.70	1,575.23	1,389.79	1,454.30	1,519.62
TOE /TOI Ratio (%)	83.96	82.41	83.09	85.41	82.69

Source: Annual reports.

As shown in Table 4.7, the total operating expenses (TOE) to total revenue ratio (TOI) of NABIL has increased in 2005/06 from 66.69% to 72.32% which is the maximum of all the review period. The ratio however has continuously decreased thereafter to reach 46.49% in 2008/09 which is the minimum ratio of the observed years. The mean ratio of the review period was 58.68%. It can be concluded that the ratios are in decreasing trend. Whereas, TOE to TOI ratio of HBL is in slightly decreased in first two year from 83.96% in FY 2004/05 to 82.41% in FY 2005/06 then incresed upto 85.41% in FY 2007/08 which is maximum during the study period. The mean ratio of the review period was 83.60 which indicates the ratio are stable and consistent.

Chart 4.6 Trend Analysis of Total Operating Expenses/ Total Operating Revenue Ratio
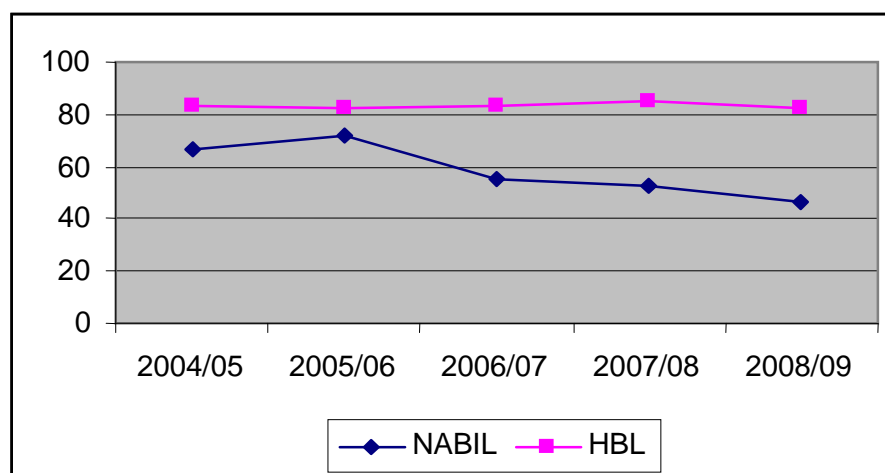
Chart 4.6 exhibits the observed TOE to TOI ratio of NABIL and HBL within the study period of last five years. As shown in the chart, the observed ratio fluctuated upwards only once 2005/06 else it is in continuous decreasing trend to reach at the all time minimum of 46.49% in FY 2008/09. In case of HBL the slope of the curve is in slightly increasing trend till FY 2007/08 thereafter it is declining in FY 2008/09. Hence, he negative slope of both bank 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 (IMF, 2005).

Table 4.8: Earnings per Employee

NABIL

	2004-05	2005-06	2006-07	2007-08	2008-09
Net Profit (Rs.)	291,376,140	271,638,612	416,235,811	455,311,222	518,635,749
Number of Employees	388	382	326	372	426
Earning per Employee (Rs.)	750,969.00	711,096.00	1,276,797.00	1,223,955.00	1,21,7,455.00

HBL

	2004-05	2005-06	2006-07	2007-08	2008-09
Net Profit (Rs.)	199,380,000	277,039,000	235,023,000	212,132,000	263,052,000
Number of Employees	311	359	357	385	455
Earning per Employee (Rs.)	641,158.00	771,588.00	658,263.00	550,909.00	578,242.00

Source: Annual reports.

Table 4.8 shows the Earnings per Employee in rupees during the study period. The ratio at first decreased in 2005/06 and threafter abruptly increased in 2006/07. Following 2 years shows continuous decrease. The mean earning per employee of the study period was Rs.1,036,054.00, However, in the case of HBL Earning per Employee at first increased in 2005/06 then continously decreases upto Rs. 550,909.00 in FY 2007/08, which is minimum figuer in all the year.During the review period the maximum Earning per Epmloyee is 771,588.00 in FY 2005/06. The mean earning per employee of the study period was Rs. 640,032.00

Chart 4.7: Earning per Employee Trend
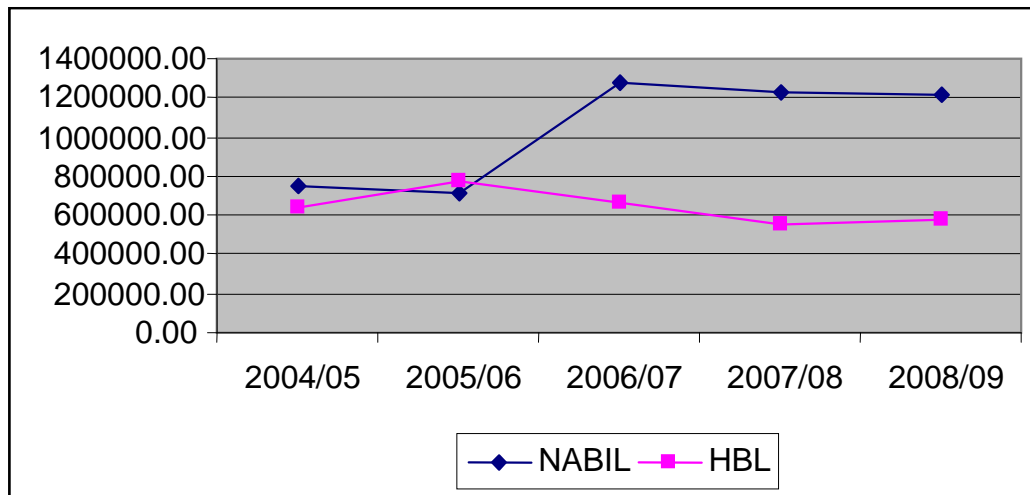
Chart 4.7shows the observed Earning per Employee the banks. The slope of the curve of NABIL is positive, which indicates the Earning per Employee is increasing over the study period. However the later periods it has shown decrement though in low level. This indicates that, in the later half of the review 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 HBL is negative, which indicates the earning per employee is declining over the study period, however the decline is not sharp, this indeicates that low or decresing earning peremployee can reflect inefficeincies as a result of overstaffing, with similar repercussions in terms of profitability.

4.1.4   Earning Quality Analysis

Earning represents the first line of defense against capital depletion resulting from shrinkage in asset value. Earnings performance also allows the bank to remain competitive by providing the resources. The main objectives of bank is to earn profit and their level of profitability is measured by Profitability ratios. Profitability ratios measures the efficiency of banks, higher profit ratios indicate higher efficiency and vice-versa.

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 (Meir Kohn, 1999). 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 (Weston & Copeland, 1991). 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 (World Bank, 1996).

Table 4.9: Return on Equity

NABIL

Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Net Profit After Taxes (in million)	291.38	271.64	416.24	455.31	518.64
Shareholders' Equity (in million)	1,062.85	1,146.43	1,314.19	1,481.68	1,657.64
Return on Equity (%)	27.41	23.69	31.67	30.73	31.29

HBL

Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Net Profit After Taxes (in million)	194.40	277.00	235.00	212.10	263.10
Shareholders' Equity (in million)	870.60	1,198.40	1,501.50	1,906.00	2,292.10
Return on Equity (%)	22.90	23.11	15.65	11.13	11.48

Source: Annual reports.

As shown in Table 4.9, the ROE of NABIL of 23.69% is the minimum in 2005/06 and maximum in 2006/07. The ratio fluctuated between 27.41% in the initial period of 2004/05 and 31.29% of the final period of 2008/09. The mean ratio of the bank is 28.96% and the coefficient of variation of them is 11.72% 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 ROE ratio is sound. In the other hand, ROE of HBL is maximum with 22.90% in the FY 2004/05 and minimum of 11.13% in FY 2007/08, the ratio slighly incresed to 11.48%. The mean ratio of the bank is 16.85% and the coefficient of variation of them is 30.41%. The average mean ratio is above the 15% benchmark so this shows that the bank's bette but it is in decresing tendency.

Chart 4.8: Return on Equity Trend
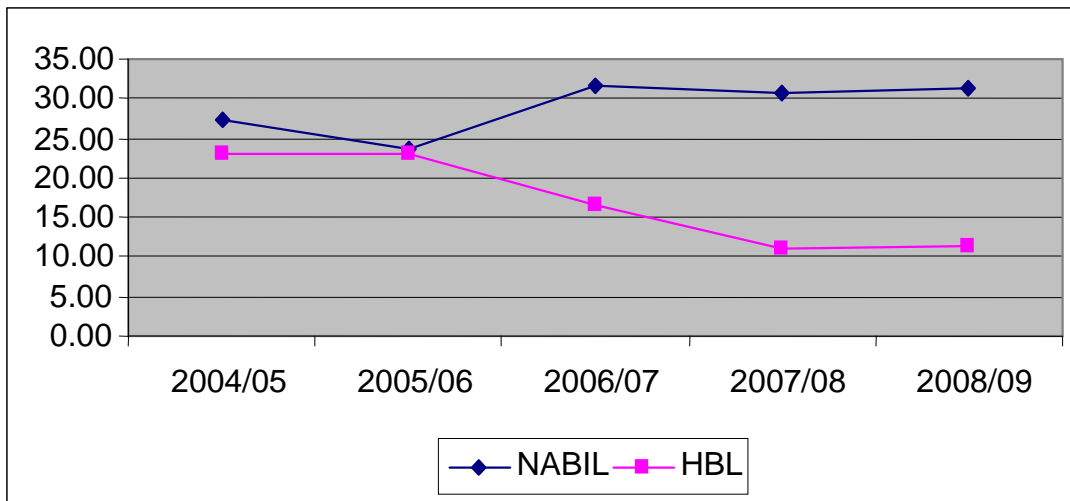
As shown in Chart 4.8, the ratio of NABIL has slightly decreased in 2005/06 and abruptly rose in 2006/07. It slightly decreased in the following year and increased again in 2008/09. The observed values of the ratio are fluctuating over study period. The slope of the curve is positive which indicates 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. Comperatively, the ratio of HBL is in decreasing trend, the slope of curve is negative, which indicates the steady downward movement or decresing trend in ratio of the bank during the period of 5 years. But the ratio is found minimum 11.13% over the study period, which is not suffient in the Nepalese Commercial Banks. The decreasing trend of ratios implies that earning quality of bank is also declining.

4.1.4.2   Return On Assets (ROA)

ROA determines the net income produced per dollar of assets. It is a measure of profitabiliy linked to the asset size of the bank (Saunders and Cornett, 2004). 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 (Rose, 1999). ROA is a popular tool to measure how well its asset 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 (World Bank, 1996).

Table 4.10: Return on Asset

NABIL

Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Net Profit After Taxes (million)	291.38	271.64	416.24	455.31	518.64
Total Assets (million)*	18,175.59	17,528.57	16,437.17	16,633.04	17,064.02
Return on Assets (%)	1.60	1.55	2.53	2.74	3.04

HBL

Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Net Profit After Taxes (million)	194.40	277.00	235.00	212.10	263.10
Total Assets (million)*	15,863.70	19,500.60	21,315.80	24,197.90	25,729.80
Return on Assets (%)	1.26	1.42	1.11	0.88	1.02

*Total Assets are net of Interest Suspense & Branch Adjustment balances included under other liabilities of the balance sheet(NRB Audit Report,2008)
Source: Annual reports.

As shown in Table 4.10, the return on asset ratio of NABIL was minimum in 2005/06 with 1.55% and maximum in 2008/09 with 3.04%. The ratio decreased in 2005/06 and thereafter ratio is in increasing trend continusously to reach at 3.04% in the concluding FY. The mean ratio of the bank is 2.29% and the coefficient of variation of them is 29.93% which is variable and not consistent. The bank's mean ratio is two folds above the 1% benchmark and concluding FY is three folds above the benchmark. The bank's ROA is in continuous increasing trend which shows the quality of assets and their efficiency to generate return is increasing. Similerly, the ROA of HBL is minimum of 0.88% in FY 2007/08 and maximum of 1.42% in FY 2005/06. The bank's mean ratio is 1.14% and the coefficient of variation of them 20.43%, which is variable and less consistent. On the basis of mean ratio of the bank is above the benchmark 1% and higher so this indicates that the bank's ratio is better but decreasing 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 (Saunders and Cornett, 2004).
Generally, the net interest margin ratio should be 3% to 4% and higher is better in banking industry (World Bank, 1996). 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 (Saunders and Cornett, 2004).

Table 4.11: Net Interest Margin

NABIL

Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Net Interest Income (in million)	688.34	658.11	500.52	718.67	825.20
Earning Assets (in million)	16,551.30	15,668.78	14,457.33	14,994.67	15,721.83
Net Interest Margin (%)	4.16	4.20	4.85	4.81	5.25

HBL

Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Net Interest Income (in million)	488.90	591.90	570.90	647.10	754.40
Earning Assets (in million)	9,441.00	13,098.00	18,714.20	21,020.00	22,212.00
Net Interest Margin (%)	5.18	4.52	3.05	3.08	3.40

Source: Annual reports.

In the past five years, the NIM ratio of NABIL was distributed over 4.16% of 2004/05 and 5.25% of 2008/09. The minimum ratio was observed in 2004/05 with 4.16% and the maximum ratio was found in the concluding year 2008/09 with 5.25%. The ratio continusouly increased in the first three years of the review period and slightly decreased in 2007/08. Thereafter it again increased to the all time maximum in 2008/09. Despite fluctuated only once the NIM ratio is in increasing trend. The mean ratio for the study period was found 4.65% and the coefficient of variation is found 10.01%. On the basis of the coefficient of variation, it can be concluded that the ratios are slightly variable. Throughout the review period the NIM ratio was found slightly above the generally accepted benchmark. Comperatively, NIM ratio of HBL was distributed as a maximum ratio 5.18% in the initial FY 2004/05 and minimum ratio 3.05% in FY 2006/07. The ratio continously decreases upto 3.05% in FY 2006/07 then slightly increses to 3.40% in FY 2008/09. The mean ratio for the period is 3.85% and the coefficient of variation is found 24.27%. On the basis of the coefficient of variation, it can be concluded that the ratios are variable and on the basis of mean ratio the ban is above to benchmark 3% to 4%, so the bank's ratio is higher but it is in declining tendency.

Chart 4.9: NIM Trend and Level of Earning Assets
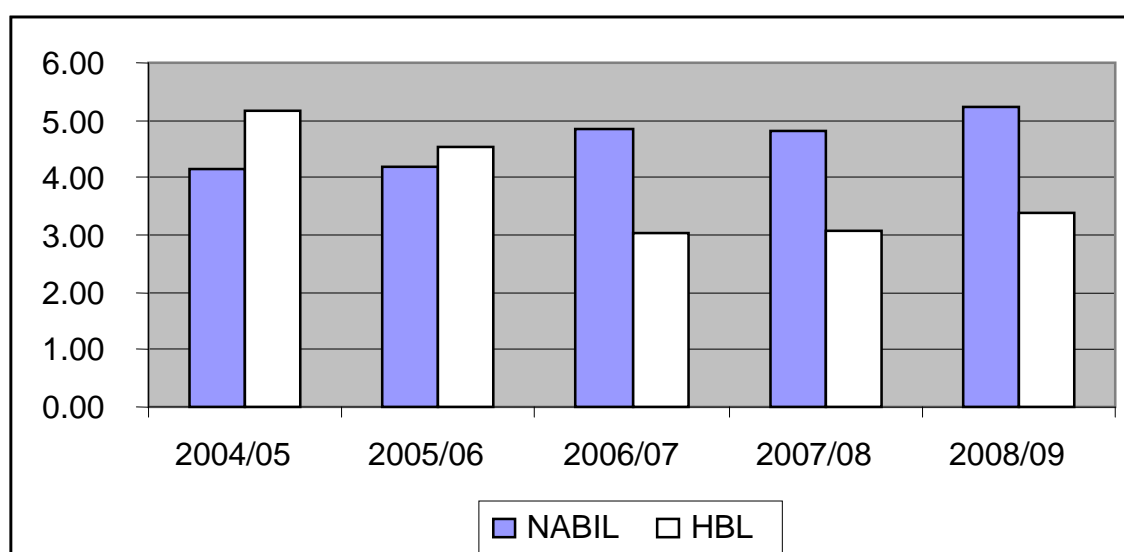
Chart 4.9 shows the trend of NIM of the banks from 2004/05 to 2008/09. The slope of the trend line of NABIL is positive which shows increasing trend of NIM ratio during the study period.. This indicates bank's capacity to maintain higher interest margin than the benchmark in the later half of the review period, despite increase in earning assets. Comperatively, the trend of HBL is negative which shows decreasing trend of NIM ratio during the study period but the bank was able to maintained higher interest margin than the benchmark.

4.1.4.3   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

NABIL

Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Net Profit (in million)	291.38	271.64	416.24	455.31	518.64
No. of Shares (in Million)	4.92	4.92	4.92	4.92	4.92
Earning Per Share	59.26	55.25	84.66	92.61	105.49

HBL

Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Net Profit (in million)	199.40	277.00	235.00	212.10	263.10
No. of Shares (in Million)	2.40	3.00	3.90	4.29	5.3625
Earning Per Share	83.08	92.33	60.26	49.44	49.06

Source: Annual Report

Table 4.12 reveals that EPS of NABIL fluctuated only in the first year of the review period thereafter it increased continuously till the final year of the review period. EPS was minimum in 2005/06 with Rs.55.25/share and maximum in 2008/09 with Rs.105.49/share. The average EPS of the repriod period was Rs.79.45/share and coefficient of variation of the bank is 27.23% which shows more volatility during the study period. Whereas, in the case of HBL EPS of the bank has fluctuated over the study period. The EPS of the bank has ranged between Rs. 49.06 in FY 2008/09 to Rs. 92.33 in FY 2005/06, which is decreasing trend during the study period. The mean average of EPS is Rs. 66.83 and coeffient variation is 38.36% which shows less sonsistent and more volatile during the study period.

Chart 4.10: Earning Per Share
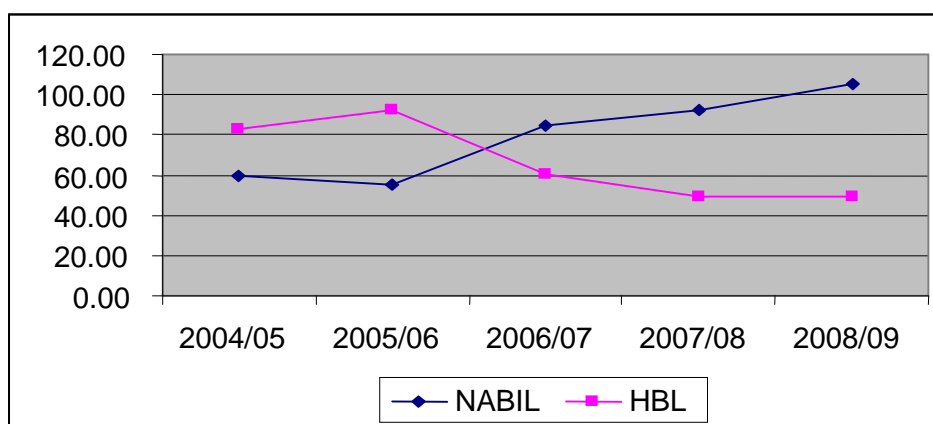
Chart 4.10 shows the EPS of NABIL fluctuated down in 2005/06 from Rs.59.26/share to the all time minimum of Rs.55.25/share. Thereafter it increased continuously in the following years. The maximum EPS was reached in 2008/09 with Rs.105.49/share. The increasing trend of EPS is also supported by positive slope of the trend line. However, the trend line of HBL is negative, which indicates that the trend of earning per share is declining over the study period and the declining also sharp.

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. This turns the FIs' liquidity problem into a solvency problem and cause it to fail (Saunders and Cornett, 2004).

4.1.5.1   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. It measures overall liquidity position. 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

NABIL

Fiscal Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Liquid Assets (in million Rs.)	4,068.42	5,805.46	5,882.07	5,970.25	4,224.49
Total Deposits (in million Rs.)	15,839.01	15,506.43	13,447.66	14,119.03	14,586.61
Liquid Assets/Total Deposits (%)	25.69	37.44	43.74	42.29	28.96
*Industrial Average (%)	32.50	32.40	29.00	20.20	19.80
Variance from Industrial avg (%)	-6.81	+5.04	+14.74	+22.09	+9.16

HBL

Fiscal Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Liquid Assets (in million Rs.)	5,446.50	7,192.60	8,658.80	8,281.70	8,613.50
Total Deposits (in million Rs.)	14,082.50	17,613.60	18,595.20	21,002.80	22,760.90
Liquid Assets/Total Deposits (%)	36.68	40.84	41.19	39.43	37.84
*Industrial Average (%)	32.50	32.40	29.00	20.20	19.80
Variance from Industrial avg (%)	+6.18	+8.44	+12.19	+19.23	+18.04

Source: Annual Report, * Banking and Financial Statistics, NRB, No.43, July, 2008.pp: 4-10

Table 4.13 shows that the liquid assets to total deposit ratio of NABIL during the period FY 2004/05 to FY 2008/09. The ratios are in increasing trend for the first three years. Thereafter it continuously decreased for the next two years. The liquid assets to deposit ratio was minimum in 2004/05 with 25.69% when the deposit were the highest with Rs.15,839.01 million. The ratio was maximum in 2006/07 with 43.74%. The extreme levels of the ratio are inversely proportional to the deposit level, in absolute terms. The ratio negatively variated with the industrial average in 2004/05. Thereafter, for the next three years till 2007/08, it variated positively with the industrial average. In 2008/09, the variance with the industrial average decreased to +9.16%. Overall, the bank held liquid assets percentage above the industrial average except in the initial period of 2004/05. Similerly, liquid funds to total deposit ratio of HBL during the period of FY 2004/05 to 2008/09 is in fluctuating trend. In absolute term, both total liquid fund and total deposit are in increaing trend during the study period. The highest

ratio was 41.19% in FY 2006/07 and the lowest ratio was 38.80% in FY 2004/05. The ratios were greater than the industrial average ratios in all absorved years i.e. differnce in positive in all periods. This implies that liquidity position of the bank is upto industrial average.

Chart 4.11: Trend of Liquid Asset to Total Deposits
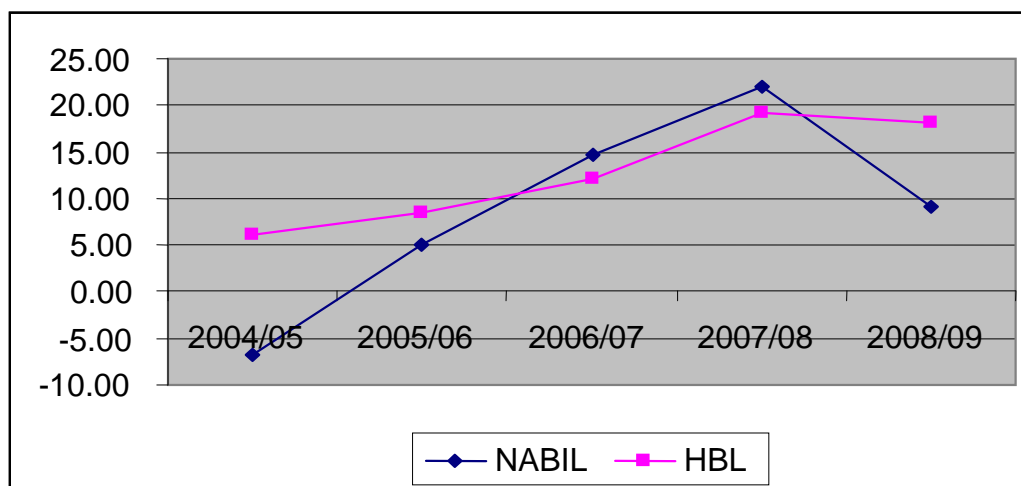
Chart 4.11 exhibits the liquid fund to total deposits ratio of NABIL in comparision to the industrial average ratio within the study period of last five years. In the chart, the total liquid fund to total deposit curve of the bank is above the industry average curve in all observed fiscal years except in 2004/05. This fact implies that the overall liquidity position of the bank is better than industrial average ratio. However the liquidity is in decreasing trend as the bank has switched to investing on more profitable assets. Similerly, the liquid funds to total deposit ratio of HBL is in above the industry average curve in all observed years. This fact implies that the overall liquidity position of the bank is better than industrial average ratio but more liquidity impacts profitability negatively..

4.1.5.2   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 Depsot 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 (NRB Directive Manual, 2008). The following table shows the NRB Balance to Total Deposit ratio with compare to industrial average ratio by NABIL.

Table 4.14: NRB Balance to Total Deposit Ratio

NABIL

Fiscal Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
NRB Balance (in million Rs.)	512.07	506.67	892.75	606.69	389.71
Total Deposit less Margin & FCY Dep.(million)	14,082.50	17,613.60	18,595.20	21,002.80	22,760.90
NRB Balance/ Total Deposit (%)	4.65	6.10	3.74	5.38	7.13
Industrial Average (%)*	11.40	12.50	13.40	8.90	9.70
Diff. From industrial average (%)	-6.87	-8.09	-4.14	-3.08	-6.15

HBL

Fiscal Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
NRB Balance (in million Rs.)	655.30	1,073.20	695.40	1,130.00	1,623.90
Total Deposit less Margin & FCY Dep.(million)	11,306.48	11,489.78	9,642.07	10,415.51	10,963.69
NRB Balance/ Total Deposit (%)	4.53	4.41	9.26	5.82	3.55
Industrial Average (%)*	11.40	12.50	13.40	8.90	9.70
Diff. From industrial average (%)	-6.75	-6.40	-9.66	-3.52	-2.57

Source: Annual Report, *Banking and Financial Statistics, NRB, No.43, July, 2008.pp: 4-10.

Table 4.14 shows that NABIL has maintained reserve with NRB below the industry average. NRB balance was fluctuating increasingly upto 2006/07 and is in decreasing thereafter till the final year. As regard to the deposit volume, it is also fluctuating in deceasing trend upto 2006/07 and thereafter increased till the concluding year. The NRB balance to deposit ratio showed maximum in 2006/07 with 9.26% when the deposit volume was minimum. Despite the highest deposit volume was observed in 2005/06, the lowest ratio was seen only in 2008/09. The ratios were less than industrial average ratio in all observed years i.e. difference is negative. This implies that deposit of NABIL with NRB is less than that of average. Similerly, HBL also has not maintained adequete liquidity by noit maintaining balance with NRB. NRB balance to total deposit ratio of the bank is fluctuating during the abserved years. Balance with NRB has increased at lower rate than deposit, which resulted in the decreasing trend in the ratio in 2004/05 and 2007/08. The ratio has been increasing in the year 2005/06, 2007/08 and 2008/09. The ratio were less thant the industrial average ratio in all abserved years i.e. difference is negative. This implies that deposit of HBL with NRB is less than average. This indicates that the bank has less exposure towards balance with NRB. However it does not necessarily mean the Cash Reserve Ratio at NRB is not maintained. The above calculation is based on year end volumes of deposit and NRB balance where as NRB calculates CRR on weekly average balances. Hence this is a limitation of the study.

Chart 4.16 shows the NRB balance to total deposit ratio compare with the industrial average ratio within the study period of last five years. As shown in the Chart, the NRB balance to total deposit curve of NABIL is below the industrial average curve in all years during the study period. This fact implies that the balance with NRB of the bank is less than the average balance. The gap of the ratio with the industry average was narrowest in 2006/07 and widest in 2005/06. The gap is in increasing trend in the later years which implies the ratio is getting below the industry average. Same as, NRB balance to total deposit curve of HBL is below the industrial average curve in all the years during the study period. Which indicates the balance with NRB of the bank must be maintained is less than the average balance. This shows that the bank has not maintained the balance with NRB as per the directives over the study period.

Chart 4.12: NRB Balance/Deposit ratio vs Industrial Average
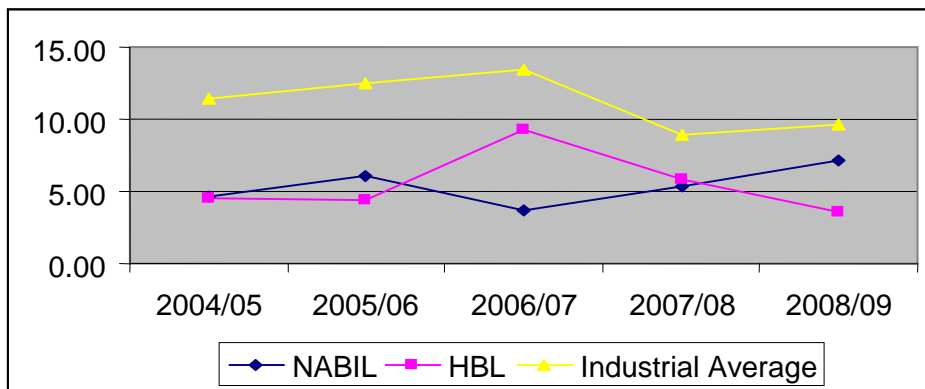
4.1.5.3 Cash at Vault to Total Deposit Ratio

This ratio shows the percentage of total deposits held as cash in hand at vault. This ratio 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 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 (NRB Directive Manual, 2008).

Table 4.15: Vault to Total Deposit Ratio

NABIL

Fiscal Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Cash in Vault (in million Rs.)	208.48	318.16	187.78	286.89	146.35
Total Deposit less Margin & FCY Dep.(in million)	11,306.48	11,489.78	9,642.07	10,415.51	10,963.69
Cash at Vault / Total Deposits (%)	1.84	2.77	1.95	2.75	1.33
*Industrial Average (%)	2.80	2.80	3.20	2.90	1.80
Diff. From industrial average (%)	-0.96	-0.03	-1.25	-0.15	-0.47

HBL

Fiscal Year (as at mid July)	2004/05	2005/06	2006/07	2007/08	2008/09
Cash in Vault (in million Rs.)	134.00	149.90	462.80	382.70	274.00
Total Deposit less Margin & FCY Dep.(in million)	14,082.50	17,613.60	18,595.20	21,002.80	22,760.90
Cash at Vault / Total Deposits (%)	0.95	0.85	2.49	1.82	1.20
*Industrial Average (%)	2.80	2.80	3.20	2.90	1.80
Diff. From industrial average (%)	-1.85	-1.95	-0.71	-1.08	-0.60

Source: Annual Report, *Banking and Financial Statistics, NRB, No.43, July, 2008.pp: 4-10.

Table 4.15 shows that volume of Cash at Vault of NABIL is fluctuating in alternatingly against the alternate deposit fluctuations except in2008/09. The Cash at Vault ratio likewise fluctuated alternatingly during the review period over 1.84% of 2004/05 and 1.33% of 2008/09. The ratio was maximum in 2005/06 with 2.75% in line with the highest deposit volume during the year. The ratio was mimimum in the concluding year 2008/09 with 1.33%. The ratio is less than the industry average in all observed years. Whereas, the cash in vault to total deposit ratio of HBL is in fluctuating trend. The highest ratio is 2.49% in FY 2006/07 and the lowest ratio is 0.85% in FY 2005/06. The ratio has decreased till the FY 2005/06 and then increased in 2006/07 and then again decreased in final 2 years. Vaults have increased at lower rate than deposit has. So, increase in vault relatively lower rate has decreasing trend in the ratio for these years. But in year

2005/06, vault has decreased, so the ratio has came down in minimum.Ratio is less than the industrial average in all the years.

Chart 4.13 Cash at vault/ Total Deposit Ratio Vs Industrial Average
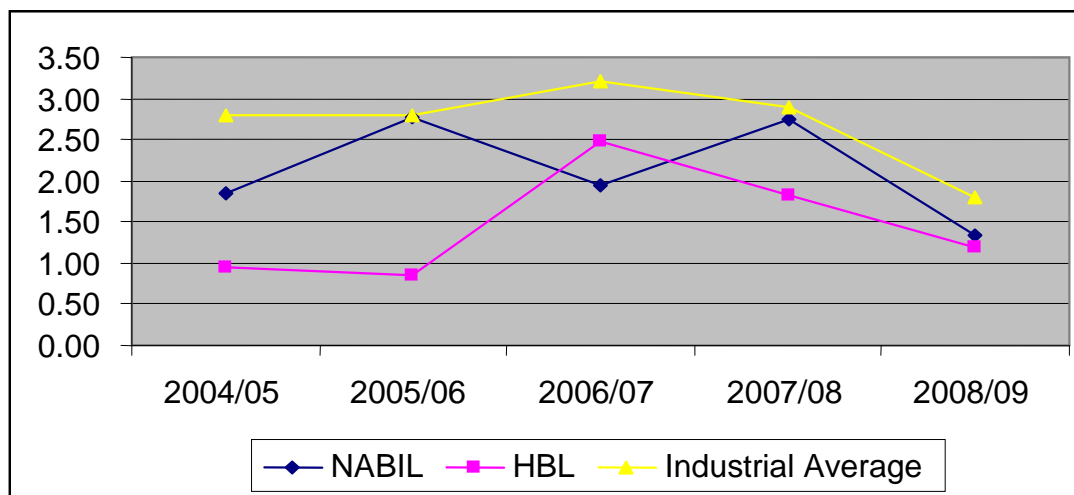
As shown in the chart 4.13, both bank has maintained the cash at vault below the indusrtial average. NABIL bank has maintainted close to industrial average for 2 financial year in FY 2005/06 and 2007/08, but HBL has not maintained adequete cash at vault. In all the years, the the vault to toatal deposit curve is below the industrial average and also below the NRB standard of 2%. It indicates that the bank is running with inadequete vault as liquidity during the study period.

4.1.6   Sensitivity to Market Risk

Sensitivity to Market Risk refers to the risk that changes in market conditions could adversely affect earnings and/or capital. Market Risk encompasses exposures associated with changes in interest rates, foreign exchange rates, commodity prices, equity prices, etc. While all of these items are important, the primary risk in most banks is interest rate risk (IRR), which is the focus of this study.

When a bank has more liabilities re-pricing in a rising rate environment than assets re-pricing, the net interest margin (NIM) shrinks. Conversely, if the bank is asset sensitive in a rising interest rate environment, NIM will improve because the bank has more assets re-pricing at higher rates. There are many ways to monitor exposure to IRR. Measurement systems vary in complexity from very simple methods such as a gap model, to very sophisticated models such as a simulation or duration analysis. This study is worked with gap model, which simply measures the net quantity of assets or liabilities re-pricing within a givens 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 adopt Gap Analysis adopted for minimization of liquidity risks shall also be applied in respect of minimization of IRR. Banks shall classify the time interval of the assets

and liabilities on the basis of maturity period of 0-90 days, 91-180 days, 181-270 days, 271-365 days, over 1 year. The effect on the profitability is measured by multiplying the change in interest rate, ΔR_i in the ith maturity bucket annualized with Cumulative Gap (NRB Directive Manual 2008).

If the interest rates rise on RSAs and RSLs, the positive CGAP (RSA>RSL) would project the increase in the expected annual NII. However, if interest rate fall when CGAP is positive, NII will fall. As rates, fall interest revenue falls by more than interest expense. Thus, NII falls by approximately by (CGAP) X (-ΔR). In general when CGAP is positive the change in NII is positively related to the change in interest rates. Thus, banks would want to keep CGAP positive when interest rates expected to rise.

Conversely, when the CGAP or the Gap Ratio is negative (RSA<RSL), if interest rates rise by equal amounts for RSAs and RSLs, NII will fall. Similarly, if interest rates fall equally for RSAs and RLAs, NII will increase when CGAP is negative. As rates, fall interest expense decreases by more than the revenues. In general, when CGAP is negative, the change in NII is negatively related to the change in interest rates. Thus, banks are expected to keep CGAP negative when interest rates are expected to fall.

Expressing the re-pricing gap as a percentage of assets, gives: (1) the direction of the interest rate exposure (+ or – CGAP) (2) the scale of the CGAP against the assets size of the bank.

Gap analysis of RSAs and RSLs of NABIL and HBL for the period FY 2005/06 to 2008/09 is made as shown in Table 4.17 (a,b,c,d) based on the different maturity time bucket.

Table 4.16 GAP ANALYSIS OF NABIL BANK LTD.

a. 2005–06

	1-90	91-180	181-270	271-365	>365	Total
RSA (Millions)	8,556.30	1,187.30	1,055.20	1,008.10	5,223.20	17,030.10
RLAs (Millions)	1,719.40	1,452.50	38.10	366.70	11,982.60	15,559.30
GAP_i (RSA-RSL) (millions)	6,836.90	(265.20)	1,017.10	641.40	(6,759.40)	1,470.80
$CGAP_i$ (RSA-RSL) (millions)	6,836.90	6,571.70	7,588.80	8,230.20	1,470.80	1,470.80
RSA/RSL	4.98	0.82	27.70	2.75	0.44	1.09
$CGAP_i$ Ratio[CGAP/Total RSAs](%)	40.15%	38.59%	44.56%	48.33%	8.64%	8.64%
R(%)				1%	1%	
NII (millions) = CGAP x R				82.30	14.71	
%Change in NII				0.48%	0.09%	

b. 2006–07

	1-90	91-180	181-270	271-365	>365	Total
RSA (Millions)	6,329.00	1,180.70	1,694.70	1,412.00	5,320.10	15,936.50
RLAs (Millions)	2,225.40	1,126.70	52.90	357.30	10,646.70	14,409.00
GAP (RSA-RSL) (millions)	4,103.60	54.00	1,641.80	1,054.70	(5,326.60)	1,527.50
$CGAP_i$ (RSA-RSL) (millions)	4,103.60	4,157.60	5,799.40	6,854.10	1,527.50	1,527.50
RSA/RSL	2.84	1.05	32.04	3.95	0.50	1.11
$CGAP_i$ Ratio[CGAP/Total RSAs](%)	25.75%	26.09%	36.39%	43.01%	9.58%	9.58%
R(%)				1%	1%	
NII (millions) = CGAP x R				68.54	15.28	
%Change in NII				0.43%	0.10%	

c. 2007–08

	1-90	91-180	181-270	271-365	>365	Total
RSA (Millions)	5,335.80	1,700.80	1,551.40	2,741.00	5,775.40	17,104.40
RLAs (Millions)	3,205.40	1,529.60	345.20	307.30	11,716.90	17,104.40
GAP_i (RSA-RSL) (millions)	2,130.40	171.20	1,206.20	2,433.70	(5,941.50)	-
$CGAP_i$ (RSA-RSL) (millions)	2,130.40	2,301.60	3,507.80	5,941.50		-
RSA/RSL	1.66	1.11	4.49	8.92	0.49	1.00
$CGAP_i$ Ratio[CGAP/Total RSAs](%)	12.46%	13.46%	20.51%	34.74%	0.00%	0.00%
R(%)				1%	1%	
NII (millions)= CGAP x R				59.42	-	
%Change in NII				0.35%	0%	

d. 2008–09

	1-90	91-180	181-270	271-365	>365	Total
RSA (Millions)	4,690.40	1,441.50	661.20	2,026.10	8,730.00	17,549.20
RLAs (Millions)	2,794.20	780.00	325.30	346.90	13,302.70	17,549.10
GAP_i (RSA-RSL) (millions)	1,896.20	661.50	335.90	1,679.20	(4,572.70)	0.10
$CGAP_i$ (RSA-RSL) (millions) (a)	1,896.20	2,557.70	2,893.60	4,572.80	0.10	0.10
RSA/RSL	1.68	1.85	2.03	5.84	0.66	1.00
$CGAP_i$ Ratio[CGAP/Toal RSA](%)	10.81%	14.57%	16.49%	26.06%	0.00%	0.00%
R(%)				1%	1%	
NII (millions)=CGAP x R				45.73	0.00	
%Change in NII				0.26%	0%	

Table 4.17 GAP ANALYSIS OF HIMALAYAN BANK LTD.

a. 2005-06

	1-90	91-180	181-270	271-365	>365	Total
RSA (Millions)	7,852.40	1,250.30	9,87.20	1,173.40.	11,235.20	22,498.70
RLAs (Millions)	5,235.10	756.60	552.70	211.30	10,556.50	17,312.20
GAP_i (RSA-RSL) (millions)	2,617.30	493.70	434.30	962.10	678.70	5,186.50
$CGAP_i$ (RSA-RSL) (millions)	2,617.30	3,111.00	3,545.30	4,507.40	5,186.10	18,867.10
RSA/RSL	1.50	1.65	1.79	5.55	1.06	1.30
$CGAP_i$ Ratio[CGAP/Total RSAs](%)	11.63%	13.83%	15.31%	20.03%	23.05%	83.86%
R(%)				1%	1%	
NII (millions) = CGAP x R				45.07	51.86	
%Change in NII				0.20%	0.23%	

b. 2006-07

	1-90	91-180	181-270	271-365	>365	Total
RSA (Millions)	4,235.10	1,256.60	1,068.30	887.80	8,235.40	15,683.20
RLAs (Millions)	1,524.50	546.10	456.10	387.60	11,527.10	16,211.50
GAP (RSA-RSL) (millions)	2,710.60	710.50	612.20	500.20	(3,291.70)	1,241.80
$CGAP_i$ (RSA-RSL) (millions)	2,710.60	3,421.10	4,033.30	4,533.50	1,241.80	15,940.30
RSA/RSL	2.78	2.30	2.34	2.29	0.71	0.97
$CGAP_i$ Ratio[CGAP/Total RSAs](%)	17.28%	21.81%	25.72%	28.91%	7.92%	101.64%
R(%)				1%	1%	
NII (millions) = CGAP x R				45.34	12.42	
%Change in NII				0.29%%	0.08%	

c. 2007-08

	1-90	91-180	181-270	271-365	>365	Total
RSA (Millions)	5,224.20	1,800.40	1,945.30	2,324.10	4,875.20	16,169.20
RLAs (Millions)	2,945.90	1,413.60	978.80	648.50	8,746.20	14,733.00
GAP_i (RSA-RSL) (millions)	2,278.30	386.80	966.50	1,675.60	(3,871)	-
$CGAP_i$ (RSA-RSL) (millions)	2,278.20	2,665.10	3,631.60	5,307.20	-	-
RSA/RSL	1.77	1.27	1.99	3.58	0.56	1.10
$CGAP_i$ Ratio[CGAP/Total RSAs](%)	14.09%	16.48%	22.46%	32.82%	0.00%	0.00%
R(%)				1%	1%	
NII (millions)= CGAP x R				53.07	-	
%Change in NII				0.33%	0%	

d. 2008-09

	1-90	91-180	181-270	271-365	>365	Total
RSA (Millions)	4,786.60	1,666.10	978.20	1,926.10	10,542.20	19,899.20
RLAs (Millions)	2,945.20	1,045.60	542.30	768.20	11,286.90	16,588.20
GAP_i (RSA-RSL) (millions)	1,841.40	620.50	435.90	1,157.90	(744.70)	2,629.50
$CGAP_i$ (RSA-RSL) (millions) (a)	1,841.40	2,461.90	2,897.80	4,055.70	3,311.00	14,567.80
RSA/RSL	1.63	1.59	1.80	2.51	0.93	1.20
$CGAP_i$ Ratio[CGAP/Toal RSA](%)	9.25%	12.37%	14.56%	20.38%	0.00%	73.20%
R(%)				1%	1%	
NII (millions)=CGAP x R				40.56	33.11	
%Change in NII				0.20%	0%	

Here in case of NABIL, The period from 2001/02 to 2004/05 is taken for review of the sensitivity of market risk. From FY 2001/02 to 2004/05, net financial assets (RSA-RSL) repricing in the short term maturity bucket ranging from 0-90 day to 271-365 days was found positive except in 2001/02 when it was shortfall by Rs.265.20 million repriced in 0-90 day time bucket. In the long term maturity bucket (>365 days) the gap was negative in all the years by Rs.6,759.40, Rs.5,326.60, Rs.5,941.50 (all figure in Millions) respectively. The CGAP or the Interest rate Sensitivity ratio to the total earning assets over the short-term horizon i.e. up to one year was highest with 32.82% in 2003/04 and the lowest with 11.63% in FY 2001/02. The CGAP ratio to the earning assets over the long-term horizon was highest with 9.58% in 2002/03 and lowest with 0% in 2003/04 while it was slightly above Zero in 2004/05. It indicates the RSAs and RSLs repricing in short term maturity bucket are highly sensitive to interest rate even though it is in decreasing trend. Comparatively the RSAs and RSLs of the bank repricing in the long-term horizon is low sensitive to interest rate. As shown in the table above with the simulated interest change by 1%, it would make the NII of the bank sensitive by the quantitiy of CGAP held in the short term horizon. As seen from the trend of CGAP in the short run, it is in decreasing trend hence it can be concluded the bank in later years, is keeping the mismatch (RSA-RSL) lower in the short run. This would make the bank less asset sensitive in future. Since the CGAP in the concluding 2 years 2003/04 and 2004/05 in the long term horizon is ZERO, the RSAs and RSLs remain unaffected by the fall or rise of the interest rates. Hence the bank is low sensitive to interest rate in the long horizon.

In the case of HBL from FY 2001/02 to 2004/05 , net financial assets (RSA-RSL) repricing in the short term maturity bucket ranging from 0-90 days to 271-365 days was found positive. But in the long term maturity bucket (>365 days) the gap was negative in all the years except in FY 2001/02 which is positive by Rs. 678.70. The CGAP or the Interest rate Sensitivity ratio to the total earning assets over the short-term horizon i.e. up to one year was highest with 48.33% in 2001/02 and the lowest with 26.06%. The ratio is in continuous decreasing trend. The CGAP ratio to the earning assets over the long-term horizon was highest with 23.05% in 2001/02 and lowest with 0% in 2003/04 and 2004/05. It indicates the RSAs and RSLs repricing in short term maturity bucket are highly sensitive to interest rate even though it is in decreasing trend. Comparatively the RSAs and RSLs of the bank repricing in the long-term horizon is low sensitive to interest rate. As shown in the table above with the simulated interest change by 1%, it would make the NII of the bank sensitive by the quantitiy of CGAP held in the short term horizon. As seen from the trend of CGAP in the short run, it is in decreasing trend hence it can be concluded the bank in later years, is keeping the mismatch (RSA-RSL) lower in the short run. This would make the bank less asset sensitive in future. Since the CGAP in the concluding 2 years 2003/04 and 2004/05 in the long term horizon is ZERO, the RSAs and RSLs remain unaffected by the fall or rise of the interest rates. Hence the bank is low sensitive to interest rate in the long horizon.

4.2   MAJOR FINDINGS

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

4.2.1   The bank maintained maximum Tier I ratio capital adequacy ratio i.e. 12.12% in FY 2003/04 and the minimum ratio of 6.50% was found in in FY 2000/01. The Tier I ratio increased continuously till FY 2003/04 and decreased thereafter by 0.77% in FY 2004/05. The reason of this decrease was due to compartively high increase of RWA by 19.55% in FY 2004/05. In all the 5 years of the review period, the Tier I capital ratio was above the NRB standard with maximum positve variance of 6.62% in FY 2003/04 and minimum. positive variance of 2.00% in FY 2000/01. The bank was able maintain more than 6% above the NRB requierment in Tier I ratio during the period 2001/02 to 2003/04 however it has slightly decreased in 2004/05. In general, the bank has maintained Tier I capital adequately above the NRB standard during the study period. Similarly, Tier I ratio of HBL is distributed from the minimum of 4.44% in FY 2000/01 to maximum of 7.69% in FY 2004/05. The Core Capital (Tier I) of the bank in the increasing trend over the study period. The bank was able to maintain more than 6% NRB standard in last 3 FY, 2002/03 to 2004/05. Hence, the core capital adequecy ratio of HBL is adequete and sufficient.

4.2.2   The Tier II ratio of NABIL was maximum in FY 2000/01 with 3.96% and minimum in FY 2004/05 with 1.10%. The ratio is in continuous decreasing trend since 2000/01 till 2004/05. The continuous decrease owed due to decrease in supplementry capital and regular incresing in RWA during the period. Tier II capital of the bank in all years, is below the Tier I capital (6.50%, 10.53%, 11.45%, 12.12%, 11.35%). Likewise, Tier II ratio of HBL is distributed frmom minimum of 3.34% in FY 2001/02 to maximum of 5.01% in Fy 2002. The ratios of HBL were 3.59%, 3.34%, 5.01%, 3.85% and 2.96% in FY 2000/01 to 2004/05. Hence, the Supplementry capital ratio of both bank are within the boundry of NRB during the period.

4.2.3   Total Capital adequacy ratio of NABIL in the review period were 10.46%, 13.86%, 13.05%, 13.56%, 12.44%. The ratio of 13.86% was maximum in FY 2001/02 and ratio of 10.46% was minimum in FY 2000/01. The total capital adequacy ratio is fluctuating alternately from FY 2000/01 to FY 2004/05. In all the 5 years of the review period. In general, the bank was able to maintain CAR as per NRB standard during the study period. In the same way, Total capital adequecy ratio of HBL in the review period were 8.03%, 8.01%, 11.56%, 10.93% and 10.56% . The ratio of maximum of 11.56% in FY 2002/03 nad minimum of 8.01% in FY 2001/02. However, the total capital ratio of the bank is above the NRB standard in all the years except in FY 2004/05 i.e. insufficient of capital in that year.

4.2.4 Assets composition of Nabil 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 5.93%, 3.48%, 37.04%, 48.90%, 1.66% and 3.67% respectively. In the same way, the average composition of Cash & Bank Balance Money at Call, Investment, Loan & Advances, Fixed and Other Assets of HBL were 6.99%, 10.80%, 26.70%, 46.33%, 1.17% and 3.50% respectively during the study period.

4.2.5 The NPL ratios of NABIL were distributed 7.14%, 5.54%, 3.35% and 1.32% during the FY 2002/03 to 2004/05 which were found below the industrial average in all years. Likewise, the NPL ratios of HBL were 15.16%, 8.35%, 10.08%, & 8.88% for the same period of review. Despite the industrial benchmark not appropriately justifiable due to high proportion of NPL of two biggest government banks, the trend speaks of NPL ratio of NABIL well in control and below international standard of 5% in general. It also shows efficient credit management and recovery efforts but NPL ratio of HBL was not sufficient in banking industry, it is because the NPL ratio of HBL were above international standard of 5% although the ratios were below the industrial average.

4.2.6 The loan loss proivisioning ratio of NABIL for the study period is in continuous decreasing trend. The ratio ranges from 7.11% in FY 2000/01 to 3.29% in FY 2004/05 with an average of 4.73%. The decreasing trend of NPL to total loan ratio also requires lower provisioning hence Loan loss ratio also decreased accordingly. It also indicates bank's qulaity of loan assets is getting better. Differently, the loan loss provisioning ratio of HBL for the study period was in increasing trend. The ratios ranges from 3.82% in FY 2000/01 to 7.70% in FY 2003/04 with an average of 6.45%. Hence, the increasing trend of NPL of HBL also requires the higher provision for loan loss. Hence, Loan loss provisioning also incersed accordingly.

4.2.7 The observed TOE to TOI ratio of NABIL fluctuated only in 2001/02 which was the maximum of all the review period years else the trend is in decreasing trend. The ratio has reached 46.49% in 2004/05 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 aberved TOE to TOI ratio of HBL increased upto2003/04 and then decreseing in year 2004/05. The ratios distributed from a minimum of 82.41% in FY 2001/02 to maximum of 85.41% in FY 2003/04. Decreasing trend of ratio is favourable on measure management quality of HBL.

4.2.8 The Earnings per Employee in rupees during the study period, the ratio of NABIL at first decreased in 2001/02 and threafter abruptly increased in 2002/03. Following 2 years showed continuous decrease. The mean

earning per employee of the study period was Rs.1,036,054. The trend is positive, which indicates the Earning per Employee is increasing over the study period. However the later periods it has shown decrement though in low level. This indicates that, in the later half of the review period the increased number of staff have decreased the earnings per employee with similar repercussion in terms of profitability. Whereas, the earning per employee of HBL were fluctuating over the study period. The mean earning of the employee is Rs. 640,032.00, the trend of ratio is negative, which indicates the earning of the employee is declining over the study period. However, the declining is not so sharp. This indicates that low or decreasing earning per employee can reflect inefficiencies as a result of everstaffing, with similar repercussions in term of profitability.

4.2.9 The mean ROE of NABIL was 29.32%. 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 HBL is 16.85% which is above the 15% bench mark, it indicates the bank's ratio is better but it is in decreasing trendency.

4.2.10 The mean ROA ratio of NABIL is 2.28%. The upward movement of ROA since FY 2000/01 is also supported by the positive slope of the trend line. Whereas, the mean ROA ratio of HBL is 1.14%. The ratio of the bank is in decresing trend but mean ratio is above the benchmark 1%. Hence, both banks' mean ratio is above the 1% benchmark, which shows the quality of assets and their efficiency to generate return is better.

4.2.11 The net interest margin of NABIL, despite fluctuated only once, the NIM ratio is in increasing trend. The mean ratio for the study period was found 4.64%. 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 HBL is 3.85% which is above than that of generally accepted benchmark. Hence, the bank's ratio is higher but it is in decresing tendency.

4.2.12 EPS of NABIL bank fluctuated only in the first year of the review period thereafter it increased continuously till the final year of the review period. The increasing trend of EPS is also supported by positive slope of the trend line. In contrary, the EPS of HBL is fluctuated over the study period. The slope of the trend line is decresing, indicates more volatility of EPS during the study period.

4.2.13 The liquid assets to total deposit ratio of NABIL negatively variated with the industrial average in 2000/01. Thereafter, for the next four years till 2004/05, it variated positively with the industrial average. In 2004/05, the variance with the industrial average decreased to +9.16%. Overall, the

bank held liquid assets percentage above the industrial average except in the initial period of 2000/01. This fact implies that the overall liquidity position of the bank is better than industrial average ratio. However the liquidity is in decreasing trend as the bank has switched to investing on more profitable assets. On the other hand, the ratio of HBL is above the industrial average in all the years of studyperiod. Hence, the performance measured in terms of this ratio is better than that of industry average. This implies that the bank's liquidity position in overall better out but this impacts in profitability negatively.

4.2.14 NABIL has maintained cash reserve with NRB below the industry average. This implies the bank is not strictly following the directives of NRB in respect to balance must held in NRB. Likewise, HBL also has not maintained adequete cash reserve with NRB, which indictes the bank has not following the NRB directions in respect of balance must be maintained with NRB. But in case of both banks the lack of balance in NRB does not conclude inadequate Cash Reserve Ratio at NRB. Since the calculation is based on year end volumes of deposit and NRB balances and NRB calculates CRR on weekly average balances, ratio is observed low which is a limitation of the study. However the ratio is increasing getting below the industry average.

4.2.15 The vault to total deposit ratio of NABIL is less than the industry average in all observed years. The observed cash in vault ratio curve of NABIL compared with industrial average ratio was giving ripples like appearance which indicates fluctuation of ratio in alternate years. In the same way, the ratio maintained by HBL also below the industrial average in all the years during the study period. Which indicates the both banks are not following the directions of NRB in respect to the balance should be maintained at vault by the banks.

4.2.16 From FY 2001/02 to 2004/05, net financial assets (RSA-RSL) repricing in the short term maturity bucket ranging from 0-90 day to 271-365 days was found positive except in 2001/02. In the long term maturity bucket (>365 days) the gap was negative in all the years. The cumulative gap, CGAP of the RSAs and RSLs repricing in the short term maturity bucket (0-365 days) in all the years was found positive. The CGAP repricing in the long term maturity bucket was however found negative in all the years. The CGAP repricing over the one year maturity bucket was in continuous decreasing trend from 2001/02. The CGAP or the Interest rate Sensitivity ratio to the total earning assets over the short term horizon i.e. upto one year in continuous decreasing trend. The CGAP ratio repricing over the long term horizon has decreased to 0% in FY 2004/05. It indicates the RSAs/RSLs repricing in short term maturity bucket are highly sensitive to interest rate even though it is in decreasing trend. Comparatively the RSAs/RSLs of the bank repricing in the long term horizon are low

sensitive to interest rate. In a rising interest environment, as it has maintained CGAP>0 (positive), the bank would profit over the 1-Year time horizon. Conversely, the bank would make loss if the interest rates are falling. With the simulated interest change by 1%, the NII of NABIL are highly sensitive due high CGAP ratio held in short term horizon. The CGAP trend in the short run is in decreasing trend hence it can be concluded the bank in later years, is keeping the mismatch (RSA-RSL) lower in the short run. This would make the bank less asset sensitive in future. Since the CGAP in the concluding 2 years 2003/04 and 2004/05 in the long term horizon is ZERO, the RSAs and RSLs remain unaffected by the fall or rise of the interest rates. Hence the bank is low sensitive to interest rate in the long horizon.

In the same way, in case of HBL from FY 2001/02 to 2004/05 , net financial assets (RSA-RSL) repricing in the short term maturity bucket ranging from 0-90 days to 271-365 days was found positive. But in the long term maturity bucket (>365 days) the gap was negative in all the years except in FY 2001/02 which is positive by Rs. 678.70. The CGAP or the Interest rate Sensitivity ratio to the total earning assets over the short-term horizon i.e. up to one year was highest with 48.33% in 2001/02 and the lowest with 26.06%. The ratio is in continuous decreasing trend. The CGAP ratio to the earning assets over the long-term horizon was highest with 23.05% in 2001/02 and lowest with 0% in 2003/04 and 2004/05. It indicates the RSAs and RSLs repricing in short term maturity bucket are highly sensitive to interest rate even though it is in decreasing trend. Comparatively the RSAs and RSLs of the bank repricing in the long-term horizon is low sensitive to interest rate. As shown in the table above with the simulated interest change by 1%, it would make the NII of the bank sensitive by the quantitiy of CGAP held in the short term horizon. As seen from the trend of CGAP in the short run, it is in decreasing trend hence it can be concluded the bank in later years, is keeping the mismatch (RSA-RSL) lower in the short run. This would make the bank less asset sensitive in future. Since the CGAP in the concluding 2 years 2003/04 and 2004/05 in the long term horizon is ZERO, the RSAs and RSLs remain unaffected by the fall or rise of the interest rates. Hence the bank is low sensitive to interest rate in the long horizon.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMENDATIONS

5.1   SUMMARY

The research study is focused on assessing the financial performance of Nabil Bank Limited (NABIL) and Himalayan Bank Limited (HBL) comperatively in the framework CAMELS, by using descriptive and analytical research design, prescribed by UFIRS and in accordance to BASEL accord. The study scrutinises the financial performance of NABIL and HBL 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 intrest rate risk. The banks' audited annual reports of condition for the period 2000/01 to 2004/05 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 2000/01 to 2004/05. A.D. Various material were reviewed in order to build up the conceptual foundation 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 Bank Supervision, Concept of CAMELS rating system and component evaluation system, Basel Capital Accord, NRB guidelines. 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. For the study purpose, Nabil Bank Limited and Himalayan Bank Limited were chosen as a study units applying convenience sampling

technique out of 19 commercial banks. The required data and information were collected from secondary sources. In addition with this, primary data also are used in this research work which was collected by using unstructured interview with senior staff in the bank. Financial 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 NRB standard, industrial average and analyse the trend of ratios. The capital adequacy ratios of the banks are generally above than NRB standard in all the years which leads to conclude that the bank is running with adequate capital. The capital adequacy ratios above the NRB standard of the NABIL bank shows additional protection and security to stakeholders and financial soundness of the bank but in that case HBL was not able to maintained the adequete capital adequecy ahich might impact the preotection nad security of the stakeholders. The assets are mainly composed of Loans and advances, Investments. The non-performing loans to loan ratios are well below the industrial average and the international standard. The loan loss provision of NABIL is decreasing continuously in each year. The management proxy ratios are favourable to the bank. Whereas, the loan loss provision of HBL is in increasing trend but it is under industrial average. Where the total expenses to revenue ratio is in decreasing trend, the Earning per Employee is in increasing trend which indicates effective management on NABIL but in case of HBL, total expenses to revenue ratio and earning per employee both are is in decresing trend, which implies, overstaffing in the bank. The earning quality ratios like return on equity, return on assets, net interest margin, earning per share of both banks are generally above the benchmark prescribed by World Bank and in increasing trend this shows that the quality of earning is increasing. The Cash in Vault to Total Deposits ratio and NRB balance to Total Deposits ratio of NABIL bank are below the industrial average in all the years where as the Liquid Assets to Total Deposits ratios are above the industrial average during the study periods except in one instance. There is limitation in CRR ratio calculatation as it is based on year end volume only rather than weekly average and hence cannot be justifiable when compared with NRB norms. Overall the liquidity position of the bank in is good if we look at the composition investment in government securities. Whereas, the cash in vault to total deposit ratio and NRB balance to total deposit ratio of HBL are below the industrial agerage and NRB directives where the liquid funds to total deposit ratios are above the industrial average durign the study periods. This shows that the liquidity position of HBL 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 Cummulative Gap of risk sensitive assets and risk sensitive liabilities, repriced over the one year maturity bucket of both banks were in continuous decreasing trend where as the CGAP of the RSAs and RSLs repricing in the long term maturity bucket was found

negative in all the years, except in case of HBL in FY 2001/02 (CGAP ratio 678.70). The Interest rate Sensitivity ratio to the total earning assets over the short term horizon i.e. upto one year was in decreasing trend. The CGAP ratio to the earning assets over the long term horizon has been maintained at Zero in the last two years hence the interest rate change would have no affect on them. In a rising interest environment the bank would profit over the 1-Year time horizon as it has maintained CGAP>0 (positive). Conversely, the bank would make loss if the interest rates are falling.

5.2 CONCLUSIONS

Based on the findings, the performance of NABIL and HBL 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 and industry average as well. 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 2002/03 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 an1d 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 NABIL the decreaing 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. Whereas, the increasing trend of loan loss provisioning ratio of HBL indicates that ta quality of loans becoming degrading year by year i.e. it seems that amount of non-performing loans and possibilities of default in future is increasing.

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 is 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 NABIL depicts management capacity to control overhead expenses due to overstaffing with similar repercussions in terms of profitability. But the later 2 years it is in decreasing trend which is a matter of concern. Overall it can be concluded that the management decisions related to operation and investment have assisted in controlling control and recovery of bad debt. In the otherside, the decreasing trend of earning per employee of HBL depicts inefficiencies as a result of overstaffing, with similar repercussioins in terms of profitability. But the decreasing trend is not so sharp.

5.2.4   The ROE ratio of NABIL 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 two folds 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 increasing trend. 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, the decreasing trend of ROE of HBL shows that the rate of return flowing to the bank's shareholders' is degrading year by year. Still the bank has better return on equity. Similarly, decreaing trend of Return on Assets concludes that the net income for each unit of asset of the bank is depreciating, still the bank has better better return on asset comparing with benchmark. Likewise, secreasing 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 bank;s earning assets and pursuit of the cheapest sources of funding, still the bank has better net interest margin comparing with benchmark and decreaisng trend of EPS of the bank depicts that the returns flowing to the bank's owner is declining which impacts the strength of the share in the market is also declining.

5.2.5   The liquid assets to total deposit ratio of NABIL is above the industrial average ratio except in the initial period. The investment in liquid assets is in decreasing trend and switched into more profitable but high risk assets. The NRB balance to total deposits ratio is below the industrial average during the study period. The NRB balance is however in decreasing trend. However it does not imply inadequate NRB CRR requirement. The cash in vault to total deposit ratio is below the industrial average ratio during the study period. The ratio is fluctuating and at two instances it was above

2% NRB requierment. However the calculations are based on year end balances whereas NRB takes average weekly balances for Cash at Vault calculation which is a limitation of the study. On the other hand, the liquid funds to total deposit ratio of HBL is above the industrial average ratio, which indicates the very high proportion of liquid funds than the proportion of investment in income generating asset and shows lack of specific policy of invest of additional ideal funds to high income generating assets in the form of investment. Likewise, the nrb balance to total deposit ratio of the bank is below industrial average during the study period which indicates that the bank is not maintain sufficient amount of balance must held in NRB and the cash in vault to total deposit ratio of the bank is also below the industrial average that depicts the bank is not maintaining the adequete balance at vault to satisfy the short-term obligation, that might create the financial crunch at the bank sometimes.

5.2.6 The sensitivity of net financial assets in a short term maturity bucket of the both banks are high and are therefore highly sensitive to interest change risk. Conversely the banks have able to match the risk sensitive assets to risk sensitive liabilites in long term maturity bucket and therefore interest rate changes has no affect on them.

5.3 RECOMMENDATIONS

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

The proportion of Tier II Capital in the Total Capital fund of NABIL bank is decreasing as compared to Tier I capital. This means the bank is increasing capital of permanent nature. The bank need to keep additional cushion reserve in the form of Interest spread and exchange fluctuation reserve. The variance of CAR from NRB standard is postive but in decreasing trend and may adversely affect if NRB benchmark fixed above. This requires the bank to increase its capital fund either through internal sources or decrease investment in risky assets in the coming days. Similarly, the proportion of Tier II capital in the total capital fund of HBL also in decreasing as compared to Tier I capital . This means the bank's capital adequecy ratio is not sufficient. So the recommendation is provided to maintain stable capital adequecy ratios in the bank and strictly follow the NRB directives is better.

Although the bank has been decreasing the proportion on non-performing loans to total loans and advances of NABIL 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 is a

matter of concern. The bank need to give attention in recovering the Doubtful and Loss Loans and lower the provision accordingly. In the same way, HBL is advised to give more attention to decrease the level as it can to meet the international standards although the bank has been decreasing the proportion of non-performing loans to total loans and advances during the study period. For this bank management has to give serious attention towards the recovery and timely follow-up of the disbursed loan and bank management is recommended to formulate an effective powerful loan recovery committee. Likewise, the loan loss provision to total loans and advances is increasing regularly during the study period, which shows there is high probability of loan default in future. So the bank is recommended to lower the proportion of loan loss provision by increasing the quality of assets by stregthning the credit appraisal and follow-up measures.

The total expenses to total revenue and the earning per employee on NABIL bank in the later years has both shown decreasing trend. The bank need to generate additional operating revenues in the coming years and to maintain the current level. The decreasing earning per employee ratio needs attention. However, the earning per employee is decreasing trend during the study period so the necessary corective actions should be implemented by HBL 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 NABIL bank are sound and the bank need to maintain this level. The bank need to increase the revenues and further control the operating expenses which would cushion in competitive environment. Whereas, the earning quality ratios i.e. return on equity, return on assets, net interest margin and earning per share are decreasing trend. Of course, profit id essential and a crucial part of any business, without it no form can survive and grow. To increase profit the bank should minimised 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 decresing trend of profit of the bank may loose the confidence of the shareholders and other stakeholders.

NABIL Bank Ltd. has liquid assets to deposit above the industry average. Hence it is recommended to explore new investments opportunities for proper utilization of the idle liquid assets. Likewise depsite limitation of calculating the NRB balance and Cash at vault to total deposit ratio, the bank ratios are below the industrial averages which need to be monitored and complied in accordance with the NRB requirements. As the liquidity position of HBL is fmound to be high, 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 vault to total deposits ratio and NRB balance to total deposits ratio are below the industrial average during the study periods so strictly following the NRD directions in respects to the balance should be maintained is better for regularoty mandatory.

Both banks' short term net financial assets are highly sensitive to interest rate risk. As the CGAP ratio to earning assets is high. Since positive CGAP positive is beneficial when interest rates expected to rise and conversely negative CGAP is beneficial when interest rates are expected to fall, the bank should minimize the mismatch of short term risk sensitive assets in order to minimize sensitivity to prevailing falling interest rates scenario.

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Appendix 1

List of Commercial Banks in Nepal

S.N.	Name of the Banks	Estd. Year (B.S.)
1	Nepal Bank Limited	1994
2	Rastriya Banijya Bank	2022
3	NABIL Bank Limited	2041
4	Nepal Investment Bank Limited	2042
5	Standard Chartered Bank Nepal Limited	2043
6	Himalavan Bank Limited	2049
7	Nepal SBI Bank Limited	2050
8	Nepal Bangladesh Bank Limited	2050
9	Everest Bank Limited	2051
10	Bank ofKathmandu Limited	2051
11	Nepal Credit and Commerce Bank Limited	2053
12	Lumbini Bank Limited	2055
13	NIC Bank Limited	2055
14	Machapuchre Bank Limited	2056
15	Kumari Bank Limited	2057
16	Laxmi Bank Limited	2058
17	Siddhartha Bank Limited	2058
18	Global Bank Limited	2063
19	Citizen Investment Bank Limited	2063

Source:http://www.nrb.org.np

APPENDIX 2

Shareholding Pattern of NABIL BANK LIMITED:

S.N.	Subscription		% Stake
1.	**Financial Institution**		**20%**
	a. NIDC	10%	
	b. RBS	9.67%	
	c. NEPSE	0.33%	
2.	**General Public**		**30%**
3.	**Foreign Investment**		**50%**
	a. NB International	50%	

Source: Based on Annual Reports 2061/62-2065/66

APPENDIX 3

NABIL BANK LIMITED
Comparative BALANCE SHEET (Amount in Actual)

A. ASSETS	FY 2061-62 2004-05	FY 2062-63 2005-06	FY 2063-64 2006-07	FY 2064-65 2007-08	FY 2065-66 2008-09
Cash	208,482,595	318,158,820	187,777,015	286,886,222	146,352,555
Local Currency	182,577,328	285,369,093	154,683,818	263,166,658	132,448,302
Foreign Currency	25,905,267	32,789,727	33,093,197	23,719,564	13,904,253
Cheques for Clearing					
Bank Balance	604,423,743	733,661,029	956,990,468	683,600,321	413,028,059
Nepal Rastra Bank	512,066,310	506,674,844	892,746,559	606,694,594	389,705,047
Other Local Banks	4,795,423	23,910,006	16,151,315	37,849,492	26,204,520
Foreign Banks	87,562,010	203,076,179	48,092,594	39,056,235	(2,881,508)
Money at Call or Short Notice (Placements)	522,550,000	31,368,000	670,204,297	918,733,400	868,428,307
Investment (At Cost)	7,704,308,930	8,199,514,813	6,031,175,547	5,835,948,498	4,267,233,178
HMG Securities	2,732,959,430	4,120,294,813	3,588,772,854	3,672,626,438	2,413,939,370
Treasury Bills	1,857,688,530	2,517,317,913	1,593,339,152	2,193,314,736	664,627,668
Development Bonds	840,270,900	1,567,976,900	1,960,433,702	1,479,311,702	1,749,311,702
National Savings Bond	35,000,000	35,000,000	35,000,000		
Company Shares	18,820,000	22,220,000	22,220,000	22,220,000	27,363,000
NHFDC Limited	2,125,000	2,125,000	2,125,000	2,125,000	2,125,000
Far Western Rural Development Bank	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Mid-Western Rural Development Bank	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
Eastern Rural Development Bank	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
NIDC Capital Markets Limited	100,000	300,000	300,000	300,000	300,000
Other Banks/Agencies	9,095,000	12,295,000	12,295,000	12,295,000	17,438,000
Debentures & Bonds					412,919,325
Shares in Susidiary Companies					
Other Investments	4,952,529,500	4,057,000,000	2,420,182,693	2,141,102,060	1,413,011,483
Mutual Fund	1,000,000	1,000,000	1,257,000	1,257,000	1,257,000
Local Banks	-	-	12,500,000	12,500,000	22,500,000
Foreign Banks	4,951,529,500	4,056,000,000	2,406,425,693	2,127,465,060	1,391,679,483
Bills Purchases & Discounted	331,157,426	302,358,410	301,689,083	236,232,975	120,903,614
Local	64,190,326	55,612,910	46,752,478	24,990,336	72,907,382
Foreign	266,967,100	246,745,500	254,936,605	211,242,639	47,996,232
Loans, Advances & Overdrafts	7,993,282,006	7,135,536,266	7,454,262,902	7,953,759,876	10,465,266,388
Local	7,964,250,621	7,050,665,802	7,378,029,069	7,582,466,725	10,261,188,129
Foreign	29,031,385	84,870,464	76,233,833	371,293,151	204,078,259
Fixed Assets	248,665,708	237,638,807	251,915,161	338,126,262	361,235,392
Other Assets	749,583,805	671,016,247	708,610,519	492,199,084	543,883,323
Non-Banking Assets					
Interbranch Assets					
Loan Loss Provision adjusted*	(591,802,930)	-	-	-	-
Total Assets	17,770,651,283	17,629,252,392	16,562,624,992	16,745,486,638	17,186,330,816

B. LIABILITIES & CAPITAL	FY 2061-62	FY 2062-63	FY 2063-64	FY 2064-65	FY 2065-66
Share Capital	491,654,400	491,654,400	491,654,400	491,654,400	491,654,400
Authorised Capital	500,000,000	500,000,000	500,000,000	500,000,000	500,000,000
Issued Capital	500,000,000	500,000,000	500,000,000	500,000,000	500,000,000
Paid-Up Capital	491,654,400	491,654,400	491,654,400	491,654,400	491,654,400
Reserve Funds	571,192,254	654,773,894	822,533,056	990,027,903	1,165,983,908
General Reserve	514,504,393	568,832,115	652,079,277	743,200,000	847,000,000
Share Premium	74,000	74,000	74,000	74,000	74,000
Capital Adjustment Reserve	-	49,165,440	103,247,424	162,800,000	228,300,000
Retained Earning	26,173,532	2,110,372	29,794,031	29,794,031	29,981,908
Contigent Reserve	2,750,000	3,750,000	4,750,000	5,750,000	6,750,000
Dividend Equalization Fund				11,931,872	13,500,000
Exchange Fluctuation Reserve	25,112,329	28,263,967	30,010,324	33,900,000	37,800,000
Special Reserve Fund	2,578,000	2,578,000	2,578,000	2,578,000	2,578,000
Other Reserve					
Borrowing from other Banks/Agencies	-	417,298,060	961,461,153	229,660,000	17,062,680
Local	-	417,298,060	961,461,153	229,660,000	17,062,680
Nepal Rastra Bank-Repurchase	-	179,949,060	606,337,342		
Nepal Rastra Bank-Refinance	-	137,349,000	5,123,811		
Others Borrowings	-	100,000,000	350,000,000	229,660,000	17,062,680
Foreign					
Deposits	15,839,007,783	15,506,428,215	13,447,661,064	14,119,032,115	14,586,608,707
Current	2,850,971,642	2,703,818,737	3,034,002,537	2,688,966,557	2,799,184,977
Savings	4,917,138,344	4,972,056,618	5,229,723,260	5,994,121,406	7,026,334,402
Call	3,948,337,953	4,944,960,238	2,540,701,246	2,801,405,837	2,341,328,577
Fixed	3,719,202,825	2,446,845,914	2,252,544,590	2,310,571,784	2,078,535,135
Others	107,166,499	74,459,258	9,374,010	19,284,000	44,249,385
Margin	296,190,520	364,287,450	381,315,421	304,682,531	296,976,231
Bills Payable	69,696,788	67,752,859	108,943,551	173,499,287	119,753,038
Other Liabilities	799,100,058	491,344,964	730,371,768	741,612,933	805,268,083
Total Liabilities	17,770,651,283	17,629,252,392	16,562,624,992	16,745,486,638	17,186,330,816

C. OFF BALANCE SHEET ITEMS	2004-05	2005-06	2006-07	2007-08	2008-09
Contingent Liabilites	4,911,497,142	4,992,552,999	5,492,351,238	5,297,735,422	,691,540,706
Letters of Credit	2,047,819,584	2,496,300,873	2,812,029,923	2,315,200,683	,304,142,658
< than 6 months	2,047,819,584	2,211,219,769	1,956,465,223	1,383,833,174	,386,588,460
> than 6 months	-	285,081,104	855,564,700	931,367,509	917,554,198
Letter of Guarantee Outstanding	1,119,419,748	1,261,213,416	1,717,900,964	1,713,216,660	,602,516,634
Bid Bond Guarantee	72,397,456	55,830,119	93,945,298	68,320,707	44,240,846
Performance Guarantee	978,750,154	1,150,599,388	1,487,776,832	1,504,252,743	,454,530,552
Advance Payment Guarantee	68,272,138	54,783,909	136,178,834	140,643,210	103,745,236
Financial Guarantee	-	6,788,412	51,398,919	-	-
Other Guarantee	-	-	7,322,100	101,803,500	-
G'tee against Counter G'tee of A+ Rated Banks	315,195,676	332,103,838	236,823,749	318,320,014	182,386,471
Forward Exchange Contract Outstanding	856,516,294	192,350,833	177,856,311	249,433,936	32,253,269
Bills under Collection	52,337,181	177,637,234	7,012,822	155,151,778	137,638,991
Contingent Tax Liability	130,295,679	88,878,888	100,349,468	13,368,550	21,841,871
Acceptance and Endorsements	389,912,980	437,279,505	381,580,742	431,240,301	400,701,385
Other Contingents	-	-	76,240	-	10,059,427

APPENDIX 4

NABIL BANK LIMITED
Comparative INCOME EXPENSE & APPROPRIATION STATEMENT (Amount in Actual)

A. INCOME	2004-05	2005-06	2006-07	2007-08	2008-09
Interest Income	1,266,703,645	1,120,184,120	1,017,872,280	1,001,616,901	1,068,746,769
Loans, Advances & Overdrafts	846,764,460	801,046,033	776,300,988	761,616,605	831,829,635
Loans & Advances	580,337,617	547,072,580	539,749,165	517,962,940	560,469,027
Overdrafts	266,426,843	253,973,453	236,551,823	243,653,665	271,360,608
Investments	107,843,270	175,579,132	174,861,230	198,941,190	173,985,895
Treasury Bills	49,653,080	107,137,856	61,802,717	78,792,956	62,620,921
Development Bonds	55,194,553	65,445,639	110,039,428	112,113,971	88,442,986
Natinal Savings Certificates	2,995,637	2,995,637	3,019,085	1,854,081	-
Other Investments	-	-	-	6,180,182	22,921,988
Agency Balances	17,109,316	3,445,689	2,317,666	1,827,629	1,884,371
Local Banks					
Foreign Banks	17,109,316	3,445,689	2,317,666	1,827,629	1,884,371
Money At Call & Short Notice	-	360,751	86,660	10,185,740	21,444,455
Local Banks	-	360,751	-	388,329	1,734,652
Foreign Banks	-	-	86,660	9,797,411	19,709,803
Others	294,986,599	139,752,515	64,305,736	29,045,737	39,602,413
Commission & Discount	97,144,244	114,336,964	144,405,701	138,574,407	128,883,480
Bills Purchase & Discount	6,007,927	4,152,559	5,844,782	7,238,595	6,134,477
Local	4,767,615	2,086,512	4,492,806	5,573,718	821,643
Foreign	1,240,312	2,066,047	1,351,976	1,664,877	5,312,834
Commission	79,004,688	93,876,958	132,877,604	129,778,847	119,868,028
Letter of Credit	35,977,061	41,942,463	55,708,621	45,835,835	38,547,665
Guarantee	17,089,919	20,037,299	25,022,036	23,533,764	22,309,605
Collection Fees	5,144,283	5,364,050	1,913,769	2,371,864	2,598,879
Remittance Fee	14,321,296	19,370,843	41,090,764	43,651,993	39,441,593
Credit Cards	6,472,129	7,162,303	9,142,414	14,385,391	16,970,286
Others	12,131,629	16,307,447	5,683,315	1,556,965	2,880,975
Exchange Gain	159,514,025	154,219,398	144,075,171	157,324,299	184,878,868
Revaluation Gain	11,681,237	12,606,556	6,985,426	15,300,154	15,280,960
Trading Gain	147,832,788	141,612,842	137,089,745	142,024,145	169,597,908
Non-Operating Income	1,909,191	(50,239)	86,946,330	92,780,639	72,241,283
Profit/Loss on Sale of Assets	1,644,191	(373,239)	7,223	347,465	(524,942)
Dividend	265,000	323,000	418,000	456,000	476,853
Others	-	-	86,521,107	91,977,174	72,289,372
Recovery from Book Write Off Accounts	-	-	86,521,107	91,977,174	72,289,372
Other Income	14,978,762	250,374,804	34,150,842	38,754,927	55,933,830
Rent on Safe Deposit Lockers	1,102,200	1,191,048	1,587,251	1,222,675	1,683,000
Issue & Renewal of Credit Cards	4,136,487	5,363,303	5,505,768	9,909,732	8,257,311
Issue & Renewal of ATM Cards	-	287,550	479,700	479,504	3,630,710
Telex	4,507,245	9,695,993	10,533,298	9,912,134	7,877,445
Services Charges	4,286,032	5,336,216	5,546,763	7,394,846	22,230,077
Provision Write Back	-	227,898,217	6,221,650	-	-
Others	946,798	602,477	4,276,412	9,836,036	12,255,287
Total	1,540,249,867	1,639,065,047	1,427,450,324	1,429,051,173	1,510,684,230

B. EXPENSE	2004-05	2005-06	2006-07	2007-08	2008-09
Interest Expenses	578,363,933	462,078,587	317,348,258	282,947,633	243,544,611
Deposits	564,792,747	456,769,718	307,495,747	265,472,891	227,902,747
Savings	177,021,996	136,936,306	112,585,041	116,702,485	103,927,978
Call	198,416,128	162,814,151	118,547,994	74,509,769	61,211,962
Fixed	189,354,623	157,019,261	76,362,712	74,260,637	62,762,807
Borrowings	13,571,186	5,308,869	9,852,511	17,474,742	15,641,864
Loan from NRB-Repurchase	3,984,635	2,322,668	2,892,751	3,261,882	5,904,986
Loan from NRB-Refinance	-	67,734	2,306,190	46,747	-
Other Borrowings	9,586,551	2,918,467	4,653,570	14,166,113	9,736,878
Personnel Expense	147,355,897	147,439,466	210,582,937	180,840,420	199,516,217
Salary	65,990,807	71,033,839	76,458,660	87,720,774	94,253,260
Allowances	28,035,512	34,277,930	31,044,066	42,362,928	46,933,272
Contribution to Provident Fund	6,423,043	6,676,410	6,265,928	7,165,617	7,903,593
Training	1,892,016	1,686,702	2,446,176	1,698,436	4,891,734
Uniform	1,064,005	436,979	1,284,382	1,236,540	2,253,395
Medical	100,995	47,171	46,261	47,065	114,614
Insurance	1,495,384	4,281,622	3,929,934	4,201,748	4,654,572
Gratuity	7,981,429	7,855,599	68,345,624	18,327,662	18,222,505
Others	34,372,706	21,143,214	20,761,906	18,079,650	20,289,272
Office Overhead Expense	122,795,028	134,316,960	166,200,160	153,374,998	190,299,470
House Rent	16,415,298	16,885,176	52,624,041	19,258,608	22,236,715
Electricity & Water	7,917,781	8,588,947	8,846,214	9,552,041	10,140,963
Repair & Maintenance	7,448,199	2,523,434	2,574,915	2,854,192	3,312,793
Insurance	7,030,101	4,773,765	4,458,718	4,433,515	5,442,553
Credit Guarantee Premium	3,512,414	1,791,996	1,344,348	1,067,477	886,342
Office Equipment Furniture & Repair	-	3,966,276	3,806,583	3,462,510	3,933,610
Stationery and Printing	10,170,438	8,736,202	8,935,123	10,118,388	9,774,743
Advertisements	1,461,363	1,021,699	497,212	3,119,757	6,146,013
Donations	36,500	190,751	121,012	113,549	98,976
Security Expenses	2,770,528	4,296,473	4,558,360	5,075,043	6,539,230
Board of Directors Expenses	1,220,531	2,649,165	3,876,887	2,781,690	4,260,791
Audit Expenses	240,000	379,238	714,456	504,499	525,957
Professional Expenses	17,114,133	3,444,206	3,989,192	5,300,290	9,362,754
Entertainment Expenses	2,291,013	1,284,669	1,476,569	1,851,138	2,875,189
Written Off Expenses	-	188,365			
Depreciation on Fixed Assets	26,269,844	39,751,107	35,041,403	46,268,659	58,709,602
Amortization of Deferred Expenses	4,658,708	5,397,450	5,957,958	3,063,645	3,069,865
Others	14,238,177	28,448,041	27,377,169	34,549,997	42,983,374
Exchange Loss					
Non-Operating Expenses					
Book Write Off of Bad Loans	-	441,525,176	51,573,896	81,821,486	31,132,974
Provision for Loan Loss	165,767,394			1,051,951	4,207,388
Provision for Staff Bonus	52,596,762	44,116,396	66,364,097	71,940,693	84,198,357
Provision for Income Tax & Special Fee	181,994,713	137,949,850	199,145,165	201,762,769	239,149,464
Net Profit Carried Down	291,376,140	271,638,612	416,235,811	455,311,222	518,635,749
Total	1,540,249,867	1,639,065,047	1,427,450,324	1,429,051,172	1,510,684,230
C. PROFIT APPROPRIATION	2004-05	2005-06	2006-07	2007-08	2008-09
Accumulated Profit upto Previous Year	108,446,050	26,173,532	2,110,372	29,794,031	29,794,031
This Year's Profit	291,376,140	271,638,612	416,235,811	455,311,222	518,635,749
Prior Year's Tax adjustments			-	31,758,985	1,478,336
Appropriation	373,648,658	295,701,772	388,552,152	487,070,207	519,926,208
General Reserve Fund	58,275,228	54,327,722	83,247,162	91,120,723	103,800,000
Contingent Reserve	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Dividend Equalization fund	-	-		11,931,872	1,568,128

	15,260,454	20,000,000			-
Employees' related Funds	15,260,454	20,000,000			-
Interim & Proposed Dividend	196,661,760	147,496,320	245,827,200	319,575,360	344,158,080
Issue of Bonus Share	98,858,400				
Exchange Equalization Reserve	2,920,309	3,151,639	1,746,357	3,889,676	3,900,000
Prior Year's Tax	672,507	20,560,651	2,649,449		
Capital Adjustment Reserve	-	49,165,440	54,081,984	59,552,576	65,500,000
Accumulated Profit	26,173,532	2,110,372	29,794,031	29,794,031	29,981,908

Source: Annual Reports

APPENDIX 5

NABIL BANK LIMITED

Risk Weighted Assets (Rs. in Millions)

Risk Weighted Assets of Nabil						
		2004/05	**2005/06**	**2006/07**	**2007/08**	**2008/09**
On Balance Sheet	**Total On Balance Assets**	17,775	17,993	16,920	17,104	17,549
	RWA	9,869	8,702	8,801	9,568	12,132
Off Balance Sheet	**Total Off Balance Assets**	4,911	4,993	5,485	5,298	4,692
	RWA	1672	1,861	2,345	2,304	2,062
Total	**Assets**	22,687	22,986	22,405	22,402	22,241
	RWA	11,541	10,564	11,146	11,872	14,193

Source: Annual Reports

APPENDIX 6

Share Holding Pattern ofHimalayan Bank Ltd.

Subscription	Percentage Holding
Promoter Share Holders	51%
Habib Bank Ltd., Pakistan	20%
Financial Institution (Employees Provident Fund)	14%
Nepalese Public Shareholder	15%
Total	100%

Source: Based on Annual Report, 2004/05 - 2008/09.

APPENDIX 7

HIMALAYAN BANK LTD. Comparative Profit and Loss Account

(in million *Rs.)*

Fiscal Year(for the mid July)	2004	2005	2006	2007	2008	2009
Expenses						
Interest Expenses	533.59	594.8	734.518	578.134	554.128	491.543
Staff Expenses	47.364	59.88	85.575	101.537	120.146	152.508
Office Operating Expenses	109.746	132.545	141.116	155.786	177.132	211.047
Provision for Doubtful Debts	64.57	103.249	134.32	166.506	202.873	186.226
Provision for Staff Bonus	27.941	34.855	48.336	38.783	40.003	46.731
Non-operating Expenses	—	3.672	-	--	—	10.988
Income Tax Provision	86.221	114.316	154.323	114.023	147.896	157.522
Net Profit	165.248	199.38	277.039	235.023	212.129	263.053
Total Expenses	1034.68	1242.7	1575.23	1389.79	1454.31	1519.62
Incomes						
Interest Income	862.054	1033.66	1326.38	1149	1201.23	1245.9
Commission & Discount	101.983	110.33	96.065	101.704	102.562	123.929
Foreign Exchange Gain	63.958	87.327	119.261	104.601	109.599	112.419
Non-Operating Income	1.061	1.695	2.303	2.451	10.76	3.299
Other Income	5.624	9.685	31.22	32.038	30.154	34.076
Total Income	1034.68	1242.7	1575.23	1389.79	1454.31	1519.62

Source: Annual Reports.

APPENDIX 8
HIMALAYAN BANK LTD. Comparative Balance Sheet

(in million Rs.)

Fiscal Year (as at mid July)	2004	2005	2006	2007	2008	2009
Capital and Liabilities						
Share Capital	192.0	240.0	300.0	390.0	429.0	536.3
Reserve Funds	503.1	630.6	898.4	1111.5	1476.9	1755.5
Borrowings	232.7	128.6	79.5	534.0	645.8	659.0
Deposit Accounts	9772.7	14043.1	17532.4	18619.4	21007.4	22010.3
Other Liabilities	543.6	821.5	690.4	660.9	638.9	768.5
Total Liabilities	11244.1	15863.8	19500.7	21315.8	24198.0	25729.6
Assets						
Cash & Bank Balance	802.2	901.9	1435.2	1264.7	1979.2	2001.1
Money at Call	4125.9	4682.8	4057.7	352.4	150.1	368.9
Investment	468.9	2216.4	4083.2	9157.1	10175.4	9292.1
Loan and Advances	5246.0	7224.7	9015.3	9557.1	10844.6	12919.6
Fixed Assets	171.3	193.1	201.7	318.8	229.9	299.6
Other Assets	429.8	644.9	707.6	665.7	818.8	848.3
Total Assets	11244.1	15863.8	19500.7	21315.8	24198.0	25729.6

Source: Annual Reports.

APPENDIX 9

List of On-Balance Sheet and Off-Balance Sheet Assets and Weights

Of Himalayan Bank Limited

S.N.	Particulars	Weights
A	On Balance Sheet Assets	
1	Cash Balance	0%
2	Gold (Tradable)	0%
3	Balance with Nepal Rastra Bank	0%
4	Investment in Govt. Securities	0%
5	Investment in NRB Bond	0%
6	Fully secured loan against own Fixed Deposit Receipt	0%
7	Fully secured loan against Govt. Securities	0%
8	Balance with Domestic Banks and Financial Institution	20%
9	Fully secured FOR loan against FDR of Other Bank	20%
10	Balance with Foreign Banks	20%
11	Money at Call	20%
12	Loan against Guarantee of Internationally Rated Bank	20%
13	Other Investments in Internationally Rated Banks	20%
14	Investment in Shares Debentures and Bonds	100%
15	Other Investments	100%
16	Loan Advances and Bills Purchased / Discounted	100%
17	Fixed Assets	100%
18	All Other assets	100%
B	Off Balance Sheet Items	
1	Bills Collection	0%
2	Forward Foreign Exchange Contract	10%
3	Letters of Credit with maturity of less than 6 months	20%
4	Guarantees provided against CG of A+ international banks	20%
5	Letters of credit with maturity more than 6 months	50%
6	Bid Bond	50%
7	Performance Bond .	50%
8	Advance Payment Guarantee	100%
9	Financial Guarantee	100%
10	Other Guarantee	100%
11	Irrevocable Loan Commitment	100%
12	Contingent Liability in respect of income tax	100%
13	All other contingent liabilities	100%
A+B	Total Risk Weighted Assets	

Source: Annual Report (Himalayan Bank Ltd.), 2004.

Ranking of Nepali Commercial Bank

With the financial results for the third quarter of the current fiscal year published by the banks, we present CAMEL rating of the 14 private sector banks of which the results are available. We selected CAMEL because it is very simple and accepted worldwide. Apart from analyzing the banks on each of these ratios based on CAMEL, we have also provided additional information like Total Income, Operating Profit, Interest Income, Deposit, Advance and Total Asset.

CAMEL Model

C for Capital Adequacy:

Capital Adequacy reflects the overall financial condition of the bank. It also reflects the bank's leverage. In this category, we have considered Capital Adequacy Ratio (CAR) and Debt-Equity Ratio to rank the commercial banks.

A for Asset Quality:

The prime objective behind measuring the Asset Quality is to ascertain the component of non-performing loan as percentages of total loan. In this category, we have considered the ratio of non-performing loan to total loan and the ratio of loan loss provision to non-performing loan to rank the banks.

M for Management:

Though it involves a subjective analysis for measuring the efficiency of the management, we have considered the ratio of total advance to total deposit and Return on Net Worth (RONW) to compare the commercial banks to avoid being subjective.

E for Earning Quality:

This parameter gains importance in the light of the argument that much of a bank's income is earned through the non-core activities like investments, treasury and so on. In this category, we have considered the percentage growth of Profit after Tax (PAT) and the ratio of Interest Income to Total Income to rank the banks.

L for Liquidity:

In this category, we have considered the ratio of Liquid Asset to Total Deposit (LA/TD) and Liquid Asset to Total Asset (LA/TA) to rank of the banks. LA/TD measures the ability of a bank to meet the demand from the demand deposit in a particular time. Further, LA/TA measures the liquidity available to the deposits of a bank.

	Capital Adequacy				
S. No	Bank	CAR (%)	Rank	D/E	Rank
1	NIC	12.30	5	11.70	7
2	NABIL	13.40	2	8.72	1
3	SCB	18.06	1	11.23	6
4	HBL	11.64	6	12.34	8
5	NIB	11.20	10	12.63	10
6	NSBI	12.94	4	13.07	11
7	EBL	11.33	7	15.10	12
8	BOK	13.39	3	12.49	9
9	LUMBINI	(7.73)	13	-	-
10	KBL	11.23	9	10.58	4
11	MBL	11.26	8	10.76	5
12	LAXMI	11.11	12	9.74	3
13	SBL	11.17	11	8.95	2
14	RBB	(42.14)	14	-	-

CAR = Capital Adequacy Ratio D/ E = Debt Equity Ratio

	Asset Quality				
S. No	Bank	NPL/TL	Rank	LLP/NPL	Rank
1	NIC	2.30	8	141.50	6
2	NABIL	1.80	5	139.00	7
3	SCB	1.89	6	144.94	4
4	HBL	4.68	11	113.13	8
5	NIB	1.90	7	144.50	5
6	NSBI	5.08	12	93.86	13
7	EBL	0.91	2	100.00	12
8	BOK	3.21	10	104.30	10
9	LUMBINI	20.94	13	101.89	11
10	KBL	2.56	9	82.78	14
11	MBL	1.26	4	187.92	2
12	LAXMI	0.49	1	307.85	1
13	SBL	0.99	3	154.36	3
14	RBB	31.81	14	106.44	9

NPL = Non Performing Loan
TL= Total Loan
LLP= Loan Loss Provision

	Management				
Sr. No	Bank	TA/TD	Rank	RONW	Rank
1	NIC	0.92	3	0.10	6
2	NABIL	0.87	5	0.20	3
3	SCB	0.42	13	0.22	2
4	HBL	0.64	11	0.16	5
5	NIB	0.78	7	0.20	3
6	NSBI	0.93	2	0.24	1
7	EBL	0.75	8	0.17	4
8	BOK	0.74	9	0.17	4
9	LUMBINI	0.88	4	-	
10	KBL	0.85	6	0.10	6
11	MBL	0.71	10	0.05	8
12	LAXMI	0.85	6	0.06	7
13	SBL	0.96	1	0.10	6
14	RBB	0.50	12	-	

TA = Total Advances TD= Total Deposit
RONW = Return on Net Worth

Earning Quality					
Sr. No	Bank	PAT Growth in %	Rank	II/TI	Rank
1	NIC	61.48	4	0.89	3
2	NABIL	36.22	6	0.78	9
3	SCB	1.71	13	0.72	10
4	HBL	32.01	7	0.81	8
5	NIB	27.76	8	0.81	8
6	NSBI	20.44	10	0.88	4
7	EBL	19.33	11	0.85	6
8	BOK	24.11	9	0.81	8
9	LUMBINI	136.36	1	0.84	7
10	KBL	56.80	5	0.91	1
11	MBL	(14.09)	14	0.86	5
12	LAXMI	117.03	2	0.90	2
13	SBL	66.92	3	0.91	1
14	RBB	8.51	12	0.85	6
II = Interest Income TI = Total income					

Liquidity					
Sr. No	Bank	LA/TD	Rank	LA/TA	Rank
1	NIC	0.11	6	0.10	7
2	NABIL	0.19	2	0.12	5
3	SCB	0.19	2	0.16	2
4	HBL	0.08	8	0.07	10
5	NIB	0.09	7	0.07	10
7	NSBI	0.11	6	0.08	9
8	EBL	0.13	5	0.11	6
9	BOK	0.14	4	0.12	5
10	LUMBINI	0.11	6	0.09	8
11	KBL	0.11	6	0.10	7
12	MBL	0.27	1	0.24	1
13	LAXMI	0.15	3	0.13	4
14	SBL	0.11	6	0.08	9
17	RBB	0.19	2	0.15	3
TA = Total Advances TD= Total Deposits RONW = Return on Net Worth					

		Additional Indicators					
Sr. No	**Bank**	**Operating Profit**	**TI**	**II**	**Deposit**	**Advance**	**TA**
1	NIC	143,283	599,085	534,937	9,393,047	8,631,830	11,163,209
2	NABIL	733,986	1,441,809	1,122,261	18,119,889	15,786,400	28,405,611
3	SCB	787,893	1,440,802	1,040,289	24,623,026	10,264,109	28,523,851
4	HBL	562,883	1,539,395	1,250,905	28,613,194	18,344,657	33,938,053
5	NIB	520,808	1,387,344	1,129,178	21,680,132	16,870,565	25,012,577
6	NSBI	196,657	650,182	570,813	10,486,778	9,758,593	15,443,088
7	EBL	311,880	949,394	805,324	17,221,094	12,946,089	20,455,190
8	BOK	268,297	731,817	591,864	12,028,302	8,943,999	14,264,081
9	LUMBINI	163,509	407,701	341,062	6,007,196	5,296,531	7,313,975
10	KBL	153,558	628,612	573,705	10,134,142	8,640,923	11,515,373
11	MBL	78,375	563,229	486,801	10,463,294	7,474,002	11,713,085
12	LAXMI	64,022	360,452	324,820	6,965,083	5,886,686	7,987,669
13	SBL	107,033	379,549	345,183	5,613,989	5,396,989	7,127,559
14	RBB	150,422	1,820,282	1,548,367	47,834,136	24,095,608	59,023,284
TI = Total income II = Interest Income TA= Total Asset							

List of Listed Companies
(Commercial Bank)

S.N.	Name of the Company	Listing Date	Address
1	Nabil Bank Ltd.	24/11/1985	POB 3729, Nabil House, Kamaladi, Ktm. E-mail : nabil@nabil.com.np
2	Nepal Investment Bank Ltd.	22/07/1986	POB 3412, Darbar Marg, Ktm.
3	Standard Chartered Bank (Nepal) Ltd.	04/07/1988	POB 3990, Naya Baneshwor, Ktm. E-mail : ANZ@Dixitu.com
4	Himalayan Bank Ltd.	05/07/1993	POB 20590, Tridevi Marg, Thamel, Ktm. E-mail : hbl@hbl. mos.com.np
5	Nepal SBI Bank Ltd.	17/01/1995	POB 6049, Hattisar, Kamalpokhari, Ktm. E-mail : nsblco@mos.com.np
6	Nepal Bangladesh Bank Ltd.	24/12/1995	POB 9062, Bijuli Bazar, New Baneshwor, Ktm. E-mail : nbbl@mos.com.np
7	Everest Bank Ltd.	07/04/1996	POB 13384, EBL House, Lazimpat, Ktm. E-mail : elb@mos.com.np
8	Bank of Kathmandu Ltd.	17/07/1997	POB 9044, Kamal Pokhari, Ktm. E-mail : info@bok.mos.com.np
9	Machhapuchhare Bank Ltd.	28/05/2003	Central Off. POB:41, Naya Bazar, Pokhara-9, Corp: off: POB:12427, Putalisadak, Ktm. Email: machbank@.mbl.com.np
10	Nepal Industrial & Commercial Bank Ltd.	13/06/2000	Central Off. POB 252 Main Road, Biratnagar Email: nicb@brt wlink.com.np City Off. New Road. POB 7367 Ktm Email: newroad@ nicbank.com.np
11	Laxmi Bank Ltd.	20/04/2004	POB. 61, Adrashanagar, Birgunj, Parsa. Email: info@laxmibankltd.com
12	Kumari Bank Ltd.	29/07/2004	POB 21128, Putalisadak, Kathmandu Email: info@kbl.com.np

1	Nabil Bank Ltd.	24/11/1985	POB 3729, Nabil House, Kamaladi, Ktm. E-mail : nabil@nabil.com.np
13	Lumbini Bank Ltd.	10/11/2004	Central Off, Narayanghat, Chitwan Corp: Off: Durbarmarg, Kathmandu Email: lumbiniktm@mos.com.np
14	Nepal Credit and Commerce Bank Ltd.	31/01/2005	Central Off, Bhairahawa, Siddharthanagar Corp: Off: POB 12559, Bagbazar, Kathmandu Email: corporate@nccbank.com.np

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