CHAPTER – I

INTRODUCTION

1.1 Background of the Study

During a bank examination, whether an on-site or an off-site examination, the Bank Supervision Department examiners gather proprietary information, such as details on problem loans, with which to evaluate a bank's financial condition and to monitor its compliance with banking laws and regulatory policies. A key product of such an examination is a supervisory rating of the bank's overall condition, commonly referred to as a CAMELS rating. This rating system has been developed within the banking industry to provide a convenient summary of bank conditions at the time of an exam. Under this, bank is required to enhance capital adequacy, strengthen asset quality, improve management, increase earnings and reduce sensitivity to various financial risks. The almost simultaneous nature of these developments makes it difficult to disentangle the positive impact of reform measures.

The whole banking scenario has changed in the very recent past. Further BASEL II Norms were introduced to internationally standardize processes and make the banking industry more adaptive to the sensitive market risks. The fact that banks work under the most volatile conditions and the banking industry as such in the booming phase makes it an interesting subject of study. Amongst these reforms and restructuring the CAMELS Framework has its own contribution to the way modern banking is looked up on now. The attempt here is to see how various ratios have been used and interpreted to reveal a banks performance and how this particular model encompasses a wide range of parameters making it a widely used and accepted model in today's scenario.

CAMELS framework is one commonly used framework for analyzing the health of individual institutions, which looks at six major aspects of the financial institutions; capital adequacy, assets quality, management soundness,

earnings, liquidity, and sensitivity to the market risk. These have shown that certain macroeconomic trends have often preceded banking crisis. Assessments of financial soundness therefore need to incorporate the broad picture particularly an economy's vulnerability to capital flow reversals and currency crisis.

Rather than evaluating a bank solely on its performance to date or focusing on areas of minimal risk, it is imperative to evaluate both banks performance and management's ability to identify, measure, monitor, and control risk. Nepal Rastra Bank (NRB) directed this CAMELS concept wide circular Bia. Bya. Pa. Pa. 66/057 dated 26-04-2001 by implementing minimum capital requirement standard in Nepal and by implementing Basel II also. Thus, the purpose of this study is to compare the financial status and performance of two banks, namely Nepal Arab Bank Limited and Himalayan Bank Limited, within the framework of CAMELS rating system.

1.1.1 Profile of the Selected Banks

a) Nepal Arab Bank Limited

The arrival of NABIL Bank in Nepal on the 12th of July 1984 through a joint venture with Dubai Bank Ltd. under a Technical Service Agreement (TSA), marks a new dawn in the Nepalese banking industry. The bank commenced with a team of about 50 staff members and Rs. 28 million as capital. From the very inception in 1984 as the first joint venture bank to commence operations in Nepal, NABIL has been a leader in terms of bringing the very best international standard banking practices, products and services to the nation.

Today the bank's mission is to be the Bank of 1st Choice to all stakeholders. For the customers, the bank craves to be the first choice in meeting all financial requirements, for shareholders the bank wants to be the investment of choice, for Regulators to be an example of a model bank, and wants to be an outstanding corporate citizen in all the Communities and finally to be the first choice as an employer with whom to build a career.

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Today NABIL Bank is a leader in the financial sector in Nepal with a network that has 26 points of representation spread across the nation; complimented by a network of ATMs and now NABIL Net and NABIL Tele the ease of access of accounts and information for our customers has never been more convenient. NABIL is a full service bank providing an entire range of products and services, starting with deposit accounts in local and foreign currency, Visa and MasterCard denominated in rupees and dollars, Visa Electron debit cards, Personal Lending products for Auto, Home and Personal loans, Trade Finance products, Treasury services and Corporate Financing. NABIL aims to be able to meet entire gamut of financial requirements that is why the banks prides itself in being 'Your Bank at Your Service'.

b) Himalayan Bank Limited

The bank was incorporated in 1992 by a few distinguished business personalities of Nepal in partnership with Employees Provident Fund and Habib Bank Limited, one of the largest commercial Banks of Pakistan. Banking operation was commenced from January 1993. Himalayan Bank is the first commercial bank of Nepal whose maximum shares are held by the Nepalese private sector. Besides commercial banking services, the Bank also offers industrial and merchant banking services.

Himalayan Bank has a total network of 17 branches across the Country and a counter in the premises of the Royal Palace. There are six branches in Kathmandu Valley at the following locations: Thamel, New Road, Maharajgunj, Pulchowk (Patan), Suryavinayak (moved from Nagarkot) and Card Center in Pulchowk. In addition, the bank also has ten branches outside Kathmandu Valley in Banepa, Tandi, Bharatpur, Birgunj, Hetauda, Bhairahawa, Biratnagar, Pokhara, Dharan and Butwal. The Bank is aggressively opening new branches at different parts of the Kingdom to serve its customers better.

Himalayan Bank is always committed to providing a quality service, with a personal touch, to its valued customers. All customers are regarded as valued clients and treated with utmost courtesy. The Bank, wherever possible, offers tailored facilities to its clients, to meet unique needs and requirements of different clients. To further extend the reliable and efficient services to its valued customers, Himalayan Bank has adopted the latest banking technology and runs the world class banking software Globus on IBM platform. The Bank can now boast of its state-of-the-art IT infrastructure with an identical Disaster Recovery System, offsite. This has not only helped the Bank to constantly improve its service level but has also prepared the Bank for future adaptation to new technology. The Bank already offers unique services such as Himal Remit, SMS Banking, Pre-paid Credit Cards and Internet Banking to customers and will be introducing more services like these in the near future.

1.2 Statement of the 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 and loss accounts. 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 profitability position of a firm is generally known through financial statements but a major question emerges whether these are adequate to reflect the overall performance of company. Hence, there is a need to assess the

overall condition and strengths of the financial institutions. For the purpose, several assessment tools are developed by experts and financial institutions all over the world. One of them is CAMELS. The elementary problem of this research is to scrutinize the financial condition of the banks in the framework of CAMELS and is an attempt to come back with the following research questions.

- How the banks manage its Capital Adequacy? Is it in line with the regulated minimum capital requirements?
- What is the level of Assets composition and Risk Weighted Assets of the banks and what is the banks quality of loans and loan provision mix?
- How banks are managing their expenses with respect to revenues? What control and monitoring mechanism are maintained by the banks?
- What is the level of earnings and is there stability of earnings?
- Is the banks 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 banks earnings?

1.3 Objectives of the Study

In line with the statement of problem, the main objective of this study is to make a comparative analysis of financial status and performance evaluation of HBL and NABIL in the framework of CAMELS. The other specific objectives are:

- To analyze Capital Adequacy and Liquidity Position of the banks, compare with regulatory minimum capital requirements.
- To analyze the quality of assets and evaluate risk weighted assets of the banks with loan loss provisions and the non-performing loan.
- To see the position of utilization of equity and the assets of the banks.
- To evaluate the level of earnings and its stability during the period.
- To evaluate the market sensitivity to the interest rate.

1.4 Significance of the study

The study mainly examines the two banks financial performance in the framework of CAMELS. Thus, the study will be more significant to the shareholders to know how well their equity has been managed. Further, the study will be also crucial to the deposit holders to have knowledge on the liquidity position of the banks and be ensured about the returning of their deposits. Finally, the study will be beneficial to the potential investors as well by analyzing the market risk of the banks.

It would also be helpful for the senior management involved in day to day operations. Bankers and examiners, alike can use this report to further their understanding of banks financial conditions. It would also be helpful for the rating agencies to rate the commercial banks in Nepal. As CAMELS has little been researched in the context of Nepal, the scholars will find it a literature for their future research works.

1.5 Limitations of the Study

The major limitations of the study are as follows;

a. The study is limited to two banks and thus may not truly reflect the whole population.

b. The study concentrates mainly on the CAMELS approach and thus totally ignores the other financial aspects.

c. The data collected depends on the annual reports of the banks. Thus the reliability of the data totally lies on the validity of the annual reports.

d. The study covers only five year periods, i.e. from the fiscal year 2004/05 to 2008/09.

e. It has not been possible to get a personal interview with the top management employees of all banks under study.

1.6 Organization of the Study

The study has been organized mainly in five chapters;

The **first chapter** deals with background of the study, profile of the selected banks, statement of problem, objective of the study, significance of the study and limitations of the study.

This **second chapter** is the brief review of literature related to this study. It includes a discussion on the conceptual framework and review of the major studies. It gives an overview of the related literature done in the past related to this study.

The **third chapter** deals with the research methodology which has been followed to achieve the purposes of the study. It consists of research design, the period covered, population and sample, nature and sources of data, tools to be used.

The **fourth chapter** deals with presentation and analysis of data. It gives a clear picture of how the collected data has been presented on the study and how it has been analyzed.

And at last, the **fifth chapter** shows the summary of whole study, conclusion drawn and recommendations given. This ends the study paper.

Besides these chapters, **Bibliography** and **Appendix** are included in this research paper.

CHAPTER – II
REVIEW OF LITERATURE

2.1 Theoretical Review

2.1.1 CAMELS Framework

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. This rating system is used by the three federal banking supervisors (the Federal Reserve, the FDIC, and the OCC) and other financial supervisory agencies to provide a convenient summary of bank conditions at the time of an exam. *(Lopez; 1999: 33)*

The acronym "CAMEL" refers to the five components of a bank's condition that are assessed: Capital adequacy, Asset quality, Management, Earnings, and Liquidity. A sixth component, a bank's Sensitivity to market risk, was added in 1997; hence the acronym was changed to CAMELS. 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. Banks with ratings of 1 or 2 are considered to present few, if any, supervisory concerns, while banks with ratings of 3, 4, or 5 present moderate to extreme degrees of supervisory concern. *(Scott; 2006: 17)*

Supervisory framework, consistent with international norms, covers risk-monitoring factors for evaluating the performance of banks. This framework involves the analyses of six groups of indicators reflecting the health of financial institutions. The indicators are as follows:

a) Capital Adequacy

b) Assets Quality

c) Management

d) Earnings Quality

e) Liquidity

f) Sensitivity to Market Risk. *(Rosenstein; 2003: 76)*

2.1.2 Capital Adequacy

Capital base of financial institutions facilitates depositors in forming their risk perception about the institutions. Also, it is the key parameter for financial managers to maintain adequate levels of capitalization. Moreover, besides absorbing unanticipated shocks, it signals that the institution will continue to honor its obligations. The most widely used indicator of capital adequacy is capital to risk-weighted assets ratio (CRWA). *(Swindle; 1995: 41)* According to Bank Supervision Regulation Committee (The Basel Committee) of Bank for International Settlements, a minimum 8 percent CRWA is required.

Capital adequacy ultimately determines how well financial institutions can cope with shocks to their balance sheets. Thus, it is useful to track capital adequacy ratios that take into account the most important financial risks, foreign exchange, credit, and interest rate risks, by assigning risk weightings to the institution's assets. *(Ambrose & Seward; 1997: 32)*

A Capital Adequacy Ratio is a measure of a bank's capital. It is expressed as a percentage of a bank's risk weighted credit exposures and also known as Capital to Risk Weighted Assets Ratio (CRAR). Capital adequacy is measured by the ratio of capital to risk-weighted assets (CRAR). A sound capital base strengthens confidence of depositors. This ratio is used to protect depositors and promote the stability and efficiency of financial systems around the world.

2.1.2.1 BASEL II Accord

Basel II is the second of the Basel Accords, which are recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision. The purpose of Basel II, which was initially published in June 2004, is to create an international standard that banking regulators can use when creating regulations about how much capital banks need to put aside to guard against the types of financial and operational risks banks face. Advocates of Basel II believe that such an international standard can help protect the

international financial system from the types of problems that might arise should a major bank or a series of banks collapse. In practice, Basel II attempts to accomplish this by setting up rigorous risk and capital management requirements designed to ensure that a bank holds capital reserves appropriate to the risk the bank exposes itself to through its lending and investment practices. Generally speaking, these rules mean that the greater risk to which the bank is exposed, the greater the amount of capital the bank needs to hold to safeguard its solvency and overall economic stability. *(Basel; 2000: 22)*

Bank capital framework sponsored by the world's central banks designed to promote uniformity, make regulatory capital more risk sensitive, and promote enhanced risk management among large, internationally active banking organizations. The International Capital Accord, as it is called, is fully effective from January 2008 for banks active in international markets. The revised accord (Basel II) completely overhauls the 1988 Basel Accord and is based on three mutually supporting concepts, or "pillars", of capital adequacy.

The Accord in operation

Basel II uses a "three pillars" concept – (1) minimum capital requirements (addressing risk), (2) supervisory review and (3) market discipline – to promote greater stability in the financial system. The Basel I accord dealt with only parts of each of these pillars. For example: with respect to the first Basel II pillar, only one risk, credit risk, was dealt with in a simple manner while market risk was an afterthought; operational risk was not dealt with at all.

The Three Pillars of Basel II

The three pillars of Basel II are embraces the following;

The First Pillar

The first pillar deals with maintenance of regulatory capital calculated for three major components of risk that a bank faces: credit risk, operational risk and market risk. Other risks are not considered fully quantifiable at this stage. The credit risk component can be calculated in three different ways of varying degree of sophistication, namely standardized approach, Foundation IRB and Advanced IRB, where IRB stands for "Internal Rating-Based Approach". For operational risk, there are three different approaches - basic indicator approach or BIA, standardized approach or TSA, and advanced measurement approach or AMA. For market risk the preferred approach is VaR (value at risk).

As the Basel II recommendations are phased in by the banking industry it will move from standardized requirements to more refined and specific requirements that have been developed for each risk category by each individual bank. The upside for banks that do develop their own bespoke risk measurement systems is that they will be rewarded with potentially lower risk capital requirements. In future there will be closer links between the concepts of economic profit and regulatory capital.

Credit Risk can be calculated by using one of three approaches
   a. Standardized Approach
   b. Foundation IRB (Internal Ratings Based) Approach
   c. Advanced IRB Approach

The standardized approach sets out specific risk weights for certain types of credit risk. The standard risk weight categories are used under Basel I and are 0% for short term government bonds, 20% for exposures to OECD Banks, 50% for residential mortgages and 100% weighting on commercial loans. A new 150% rating comes in for borrowers with poor credit ratings. The minimum capital requirement (the percentage of risk weighted assets to be held as capital) remains at 8%. For those Banks that decide to adopt the standardized ratings approach they will be forced to rely on the ratings generated by external agencies. Certain Banks are developing the IRB approach as a result.

The Second Pillar

The second pillar deals with the regulatory response to the first pillar, giving regulators much improved 'tools' over those available to them under Basel I. It also provides a framework for dealing with all the other risks a bank may face, such as systemic risk, pension risk, concentration risk, strategic risk, reputation risk, liquidity risk and legal risk, which the accord combines under the title of residual risk. It gives banks a power to review their risk management system.

The Third Pillar

The third pillar greatly increases the disclosures that the bank must make. This is designed to allow the market to have a better picture of the overall risk position of the bank and to allow the counterparties of the bank to price and deal appropriately.

The new Basel Accord has its foundation on three mutually reinforcing pillars that allow banks and bank supervisors to evaluate properly the various risks that banks face and realign regulatory capital more closely with underlying risks. The first pillar is compatible with the credit risk, market risk and operational risk. The regulatory capital will be focused on these three risks. The second pillar gives the bank responsibility to exercise the best ways to manage the risk specific to that bank. Concurrently, it also casts responsibility on the supervisors to review and validate banks' risk measurement models. The third pillar on market discipline is used to leverage the influence that other market players can bring. This is aimed at improving the transparency in banks and improves reporting.

2.1.2.2 NRB Directives Relating to Capital Adequacy

Capital Adequacy Ratio: The sum of core capital and supplementary capital is called total capital fund. Capital adequacy ratio is calculated on the basis of core capital, supplementary capital and risk weighted assets. The provision of minimum capital fund to be maintained by the commercial banks as per directed by NRB since fiscal year 2061/62 is as follows:

Table 2.1

Capital Fund to be Maintained

FY	Capital fund in % on the basis of Total risk weighted assets	
	Core capital	Total capital fund
2061/62	6.00	12.00
2066/67	6.00	10.00

(Source: Unified directives 2061/62 & 2066/67)

2.1.3 Asset Quality

Asset quality determines the robustness of financial institutions against loss of value in the assets. The deteriorating value of assets, being prime source of banking problems, directly pour into other areas, as losses are eventually written-off against capital, which ultimately jeopardizes the earning capacity of the institution. With this backdrop, the asset quality is gauged in relation to the level and severity of non-performing assets, adequacy of provisions, recoveries, distribution of assets etc. Popular indicators include non-performing loans to advances, loan default to total advances, and recoveries to loan default ratios. *(Cargill; 1989: 341)*

The solvency of financial institutions typically is at risk when their assets become impaired, so it is important to monitor indicators of the quality of their assets in terms of overexposure to specific risks, trends in nonperforming loans, and the health and profitability of bank borrowers, especially the corporate sector. *(Pettway; 1980: 137)*

One of the indicators for asset quality is the ratio of non-performing loans to total loans (GNPA). The gross non-performing loans to gross advances ratio is more indicative of the quality of credit decisions made by bankers. Higher GNPA is indicative of poor credit decision-making.

2.1.3.1 NRB Directives Relating to Loan Classification and Loan Loss Provision

A) **Classifications of Loan and Advances:** Effective from FY 2058/59 (2001/02) banks shall classify outstanding principal amount of loan and advances on the basis of aging. As per the directives issued by NRB, all loans and advances shall be classified into the following four categories:

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

b. **Sub-Standard Loan: -** All loans and advances that are past due for a period of 3 months to 6 months shall be included in this category.

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

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

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

Classification of Loan	Loan Loss Provision
Pass loan	1%
Sub-standard loan	25%
Doubtful loan	50%
Loss Loan	100%

2.1.4 Management Soundness

Management of financial institution is generally evaluated in terms of capital adequacy, asset quality, earnings and profitability, liquidity and risk sensitivity ratings. In addition, performance evaluation includes compliance with set norms, ability to plan and react to changing circumstances, technical competence, leadership and administrative ability. In effect, management rating is just an amalgam of performance in the above-mentioned areas.

Sound management is one of the most important factors behind financial institutions' performance. Indicators of quality of management, however, are primarily applicable to individual institutions, and cannot be easily aggregated across the sector. Furthermore, given the qualitative nature of management, it is difficult to judge its soundness just by looking at financial accounts of the banks.

Nevertheless, total expenditure to total income and operating expense to total expense helps in gauging the management quality of the banking institutions. Sound management is key to bank performance but is difficult to measure. It is primarily a qualitative factor applicable to individual institutions. Several indicators, however, can jointly serve as an indicator of management soundness. The ratio of non-interest expenditures to total assets can be one of the measures to assess the working of the management. This variable, which includes a variety of expenses, such as payroll, workers compensation and training investment, reflects the management policy stance. *(Berger, Davies & Flannery; 2000: 122-124)*

2.1.5 Earnings Quality

Earning, the prime source of increase in capital base, is examined with regards to interest rate policies and adequacy of provisioning. In addition, it also helps to support present and future operations of the institutions. The single best indicator used to gauge earning is the Return on Assets (ROA), which is net

income after taxes to total asset ratio. *(Curry, Keefe, Coburn & Montgomery; 1999: 12-13)*

Strong earnings and profitability profile of banks reflects the ability to support present and future operations. More specifically, this determines the capacity to absorb losses, finance its expansion, pay dividends to its shareholders, and build up an adequate level of capital. Being front line of defense against erosion of capital base from losses, the need for high earnings and profitability can hardly be overemphasized. Although different indicators are used to serve the purpose, the best and most widely used indicator is Return on Assets (ROA). However, for in-depth analysis, another indicator Net Interest Margins (NIM) is also used. Chronically unprofitable financial institutions risk insolvency. Compared with most other indicators, trends in profitability can be more difficult to interpret, for instance, unusually high profitability can reflect excessive risk taking. *(Curry, Keefe, Coburn & Montgomery; 1999: 14)*

2.1.6 Liquidity

An adequate liquidity position refers to a situation, where institution can obtain sufficient funds, either by increasing liabilities or by converting its assets quickly at a reasonable cost. It is, therefore, generally assessed in terms of overall assets and liability management, as mismatching gives rise to liquidity risk. Efficient fund management refers to a situation where a spread between rate sensitive assets (RSA) and rate sensitive liabilities (RSL) is maintained. The most commonly used tool to evaluate interest rate exposure is the Gap between RSA and RSL, while liquidity is gauged by liquid to total asset ratio. *(Hall, King, Meyer & Vaughan; 1999: 87)*

The term liquidity is used in various ways, all relating to availability of, access to, or convertibility into cash.

a. An institution is said to have liquidity if it can easily meet its needs for cash either because it has cash on hand or can otherwise raise or borrow cash.

b. A market is said to be liquid if the instruments it trades can easily be bought or sold in quantity with little impact on market prices.

c. An asset is said to be liquid if the market for that asset is liquid.

The common theme in all three contexts is cash. A corporation is liquid if it has ready access to cash. A market is liquid if participants can easily convert positions into cash or conversely. An asset is liquid if it can easily be converted to cash. Examples of assets that tend to be liquid include foreign exchange; stocks traded in the Stock Exchange or recently issued Treasury bonds. Assets that are often illiquid include limited partnerships, thinly traded bonds or real estate. *(Wyman; 2009: 23)*

Cash maintained by the banks and balances with central bank, to total asset ratio (LQD) is an indicator of bank's liquidity. In general, banks with a larger volume of liquid assets are perceived safe, since these assets would allow banks to meet unexpected withdrawals. Further, credit deposit ratio is a tool used to study the liquidity position of the bank. It is calculated by dividing the cash held in different forms by total deposit. A high ratio shows that there is more amounts of liquid cash with the bank to met its clients cash withdrawals.

2.1.6.1 NRB Directives Relating to Liquidity

Till 2002/03 commercial banks were required to maintain compulsory reserve at 7 percent of their current and saving deposits and 4.5 percent balance of their fixed deposits with the NRB as well as vault compulsory ratio at 2 percent of total domestic deposits. In the light of the undergoing management reforms in the RBB and the NBL as well as the increasing efficiency of the commercial banks to manage their financial resources themselves, the provision of maintaining 2 percent balance in commercial banks' vault as a part compulsory

reserve has been withdrawn. Effective from FY 2003/04, commercial banks were required to maintain 6 percent of their total domestic deposit liabilities at the NRB as compulsory reserve. A single, uniform compulsory ratio has been introduced so as to bring about uniformity and simplicity in the previously differentiated compulsory rates with respect to the different domestic deposit liabilities. *(Monetary Policy; 2003/04: 12)*

In contrast, the CRR had been reduced from 6.0 percent to 5.0 percent for FY 2004/05. *(Monetary Policy; 2004/05: 11)* Likewise, the cash reserve ratio (CRR) had been raised to 5.5 percent from the 5 percent of the total domestic deposits effective from October 17, 2008. *(Monetary Policy; 2008/09: 4)* However, the cash reserve ratio (CRR) has been kept unchanged at 5.5 percent for the fiscal year 2009/10. *(Monetary Policy; 2009/10: 5)*

2.1.7 Sensitivity to Market Risk

It refers to the risk that changes in market conditions could adversely impact 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 will be the focus of this module. The diversified nature of bank operations makes them vulnerable to various kinds of financial risks. Sensitivity analysis reflects institution's exposure to interest rate risk, foreign exchange volatility and equity price risks (these risks are summed in market risk). Risk sensitivity is mostly evaluated in terms of management's ability to monitor and control market risk.

Banks are increasingly involved in diversified operations, all of which are subject to market risk, particularly in the setting of interest rates and the carrying out of foreign exchange transactions. In countries that allow banks to make trades in stock markets or commodity exchanges, there is also a need to monitor indicators of equity and commodity price risk. *(Hirtle & Lopez; 1999: 38)*

Market risk is managed with a short-term focus. Long-term losses are avoided by avoiding losses from one day to the next. On a tactical level, traders and portfolio managers employ a variety of risk metrics to assess their exposures. These allow them to identify and reduce any exposures they might consider excessive. On a more strategic level, organizations manage market risk by applying risk limits to traders' or portfolio managers' activities. Increasingly, value-at-risk is being used to define and monitor these limits. Some organizations also apply stress testing to their portfolios. *(Barr, Killgo, Siems & Zimmel; 2002: 22)*

2.2 Review of Journals and Articles

Hsiao & Yerkes (2002), in their article, "*A Study of Financial Insolvency and an Association between State of Solvency and Three Rating models for Life Insurers in Taiwan",* have stated that based on the CAMEL-S model, 45 samples were estimated to have a risk of insolvency which CAMEL-S scores were grade four or five. In addition, there are just three samples, which belong to "no action levels" based on the RBC model of greater than 200%. This outcome confirms the premise that the CAMEL-S ratings are relatively lower than the RBC action level.

Testing for association between the CAMEL-S and the RBC model, both models have "different tunes rendered with equal skill" for the early warning rating system. The result of consistent rankings reflected the complement position to each other.

Finally, there is a disparity of assumptions between the CAMEL-S and the RBC model. The CAMEL-S model disclosed the overall financial situation, the CAMEL-S rating reflect a bank's overall financial conditions and can offer the summary measures of the private supervisory information. However, the RBC model standards show only the minimum capital requirement.

Peek, Rosengren & Tootell (2003), in their article, *"Using Bank Supervisory Data to Improve Macroeconomic Forecasts",* have stated that information about banks' CAMEL ratings improves on commercial macroeconomic

forecasts, applies consistently to individual forecasts as well as pooled forecasts. The robustness of the result indicates that confidential bank supervisory information, of which CAMEL ratings are a subset, should be utilized by a central bank to improve on macroeconomic forecasts. This also implies that important synergies may exist between the information gathered in bank exams and the central bank's responsibility for conducting monetary policy. Loss of bank supervisory responsibilities may reduce the ability of the central bank to understand the nuances in supervisory data, making the data potentially less useful in quantitatively or qualitatively adjusting forecasts of the economy.

Thus, removing bank supervisory responsibilities from a central bank, as has been done in some other countries, including England, potentially can have costs to other central bank responsibilities such as the conduct of monetary policy. While this study examines only one possible cost to the central bank of having no supervisory authority, the possible loss to macroeconomic forecasts used for monetary policy, many other areas of central bank responsibility might also be affected.

Pavlovi and Charap (2003), in their article, *"Development of the Commercial Banking System in Afghanistan: Risks and Rewards",* have stated that banks with weak CAMEL ratings were more willing to lend to domestic borrowers than banks with strong CAMEL ratings: there is a correlation of 0.55 and 0.54 for the solar years 1998 and 2002 respectively, significant at the 5 percent level. Senior bank management corroborated verbally the statistical evidence that poorly rated banks lend to domestic clients, whereas highly rated banks do not lend. Banks that invest extensively domestically engage in extra-judicial, non-traditional contract enforcement mechanisms.

Banks with weak composite CAMEL ratings appear to have lower profit than banks with stronger composite CAMEL ratings: there is a correlation of -0.57 significant at the 5 percent level for solar year 2002.

Ramirez, Curry and Fissel (2005), in their article, *"Does Bank Supervision have Side Effects? Evidence from CAMEL ratings",* have stated that CAMEL downgrades do matter, and their impact on loan growth tends to get larger as the overall health of the banking sector deteriorates. In terms of the magnitude, if the average composite CAMEL rating for the banking sector is at least 2, a ten percent decline in the rating (roughly equivalent to a one standard deviation shock) can slow down the rate of loan growth by approximately 15 percent.

While evaluating the impact of each of the different CAMEL components (Capital, Assets, Management, Earnings, and Liquidity), and the relative impact differs from each other and over the two time periods. In particular, the management component has the largest impact on loan growth during the first period, but virtually no effect during the second period. By contrast, while in the first period the capital and assets component had a statistically significant but limited impact on loan growth, it had a much stronger effect during the second period.

Curry, Elmer and Fissel (2007), in their article, *"Regulator Use of Market Data to Improve the Identification of Bank Financial Health",* have stated that stock price, return, and other market-related variables can be used to improve the predictive content of Call Report financial ratios for the purpose of anticipating CAMEL rating changes. A sample of 122 banks and thrifts that were downgraded to the CAMEL 3 level and 148 banks and thrifts downgraded to the 4 or 5 levels were analyzed over the 1998 to 2006 period. Extensive univariate analysis confirms that relatively simple measures of stock prices and returns exhibit downward trends as much as two years prior to banks and thrifts experiencing ratings downgrades to CAMEL ratings of 3, 4, or 5. The longer-term nature of these trends suggests that the univariate trends are not commonly found in stock returns of healthy institutions.

Most importantly, adding relatively simple measures of excess returns, stock prices, and an institution's dividend record, offers improvement to the CAMEL ratings predictive content of Call Report data, and otherwise appears to have a limited independent role in anticipating financial distress. The predictive content of the models are most robust for institutions experiencing the greatest financial distress; those being downgraded to the 4 or 5 levels. Other market-related variables, such as return volatility, trading volume, and the book to market equity ratio appear to have limited predictive value.

Cole & Gunther (2008), in their article, *"Predicting Bank Failures: A Comparison of On and Off-Site Monitoring Systems",* have stated that the information content of the CAMEL ratings derived from on-site bank examinations can decay fairly rapidly. For the two periods, second quarter 2003 through first quarter 2005 and second quarter 2005 through first quarter 2007, the ability of CAMEL ratings to identify bank failures matches or exceeds that of off-site econometric model only when the ratings are based on exams conducted no more than one or two quarters prior to the forecast period.

Even though these results highlight the usefulness of even relatively simple off-site monitoring systems as a complement to on-site exams, the findings of this study should not be construed as detracting from the critical dependence of a successful banking supervision program on the examination process. The examination process and the CAMEL ratings it generates have numerous important uses, many of which are quite distinct from the relatively narrow task of identifying bank failures. Moreover, off-site monitoring systems, such as the one used here, depend on the integrity of accounting data, which is enhanced through periodic exams.

2.3 Review of Thesis

Bhandari (2005), has conducted a study on, *"Financial Performance Analysis of Himalayan Bank Limited in the Framework of CAMEL."* The basic objective of the study was to analyze the financial performance of Himalayan Bank Limited through CAMEL framework. He has used secondary data for the period of six years from 1998/99 to 2003/04.

The major findings of the study were;
   a. The study revealed the adequate capital of the bank.
   b. The non-performing loan though in decreasing trend is still a matter of concern. The bank is still with better return on equity (ROE) however it is in decreasing trend.
   c. The decreasing trend of net interest margin shows management slack monitoring over the bank's earning assets.
   d. 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.

Thakuri (2006), has conducted a study on *"Comparative Analysis of Financial Status and Performance Evaluation of Himalayan Bank Limited and NABIL Bank Limited in the Framework of CAMEL Rating System."* The research study was focused on assessing the financial performance of Nepal Arab Bank Limited (NABIL) and Himalayan Bank Limited (HBL) comparatively in the framework of CAMELS, by using descriptive and analytical research design, prescribed by UFIRS and in accordance to BASEL accord. The banks' audited annual reports of condition for the period 2000/01 to 2004/05 were the secondary source of information and treated as authentic.

The major findings of the study were;
   a. The capital adequacy ratios are above the NRB standard in case of NABIL but HBL was not able to maintain the adequate level.

b. 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 whereas the loan loss provision of HBL is in increasing trend but it is below industrial average.

c. The total expenses to revenue ratio are in decreasing trend and the earnings per employee are in increasing trend which indicates effective management of NABIL. But in case of HBL, both are in decreasing trend, which implies overstaffing in the bank.

d. The earning quality ratios like return on equity, return on assets, net interest margin, earning per share of both the banks are generally above the benchmark prescribed by World Bank and in increasing trend which show that the quality of earning is increasing.

e. Overall the liquidity of NABIL is in good position whereas the liquidity position of HBL in overall is also good but the bank is not strictly following the NRB directives i.e. the amount to be maintained in vault and NRB balance is not sufficient.

Chand (2006), has conducted a study on *"Financial Performance Analysis of NABIL Bank Limited in the Framework of CAMELS."* The main objective of the study was to analyze the financial condition of NABIL. This study has covered only five fiscal years 2000/01 through 2004/05. The research was based on secondary information data. Some financial and statistical tools and descriptive techniques are applied to evaluate the financial performance of NABIL.

The major findings of the study were;
a. The capital adequacy of the bank was generally above the NRB standards in all the years.

b. The non performing loan to loan ratios were all below the industrial average and the international standard. The loan loss provision of the bank is decreasing constantly in each year.

c. The management proxy ratios, total expenses to total income ratio and earning per employees were favorable to the bank.

d. The earning quality ratios were generally above the benchmark prescribed by World Bank.

e. The overall liquidity position of the bank was in good condition.

Sharma (2007), has conducted a study on, *"Financial Performance Analysis of Nepal SBI Bank Ltd. in the Framework of CAMEL."* The basic objective of the study was to analyze the financial performance of Nepal SBI Bank Ltd. (NSBL) in the CAMEL framework. The study was based on secondary data covering the period of six years from 2000/01 to 2005/06 A.D.

The major findings of the study were;
a. NSBL was well capitalized and complying with the directives of NRB.

b. The bank has maintained satisfactory level of past due loan on total loan except in 2001.

c. Earning per employees of the bank was found quite high.

d. Net Interest Margin of the bank was found satisfactory.

e. Furthermore, the liquidity position of the bank was found sound.

Kutal (2007), has conducted as study on, *"CAMEL Study on Joint Venture Banks with Special Reference to SCBL, NABIL and HBL."* The main objective of this study was to find out the comparative details and evaluation of performance of Standard Chartered Bank Nepal Limited (SCBL), Nepal Arab Bank Limited (NABIL) and Himalayan Bank Limited (HBL).

The major findings of the study were;

a. All bank's capital adequacy is in decreasing trend. SCB has higher stakes on earning but seems more conservative in lending to avoid NPL hassles.

b. The employee's job satisfaction reflects efficiency in servicing, which was found very well in average for each bank. Despite of aggressive credit policy, non-performing loan of HBL is increasing which is very risky sign. HBL has highest loan amount than SCBL and NABIL but lowest percentage loan loss provision. HBL should put either extra effort to decrease NPL or increase LLP further.

c. SCB and NABIL despite of meeting CRR statutory requirement on weekly basis also should maintain minimum 5% CRR on balance sheet date. HBL cash and bank balance is highest despite of high volume of lending which means there's still lot of fund lying idle. NABIL's investment chunk in government securities has gone down substantially which clearly indicates more risky lending preferences.

Malla (2008), has conducted a study on, *"Financial Performance Analysis of Annapurna Finance Company Limited in the Framework of CAMEL."* The main objective of the study was to analyze the financial performance of Annapurna Finance Company Limited (AFCL) in the framework of CAMEL from the F.Y. 2002/03 to the F.Y. 2006/07. The study was based on secondary data covering the period of five years. She used various financial and statistical tools to get the meaningful result and to meet the research objective.

The major findings of the study were;

    a. The capital fund of AFCL is sound and sufficient to meet the financial operation as per the NRB standard.

    b. The non-performing loan ratios are below the international standard and in fluctuating trend. The loan loss ratios are also fluctuating but in increasing trend during the study period.

    c. The management proxy ratio total expense to total income ratios are also in fluctuating trend due to changes in taxation rate and increase in provision for possible losses. Another management proxy ratio earning per employee is in increasing trend.

    d. The earning quality ratios are generally in fluctuating and decreasing trend except the net interest margin which is in increasing trend.

    e. The overall liquidity position of AFCL is in good condition.

2.4 Research Gap

Thus various studies have been conducted in the past on financial analysis of commercial banks in other countries, the research paper done in the context of Nepal mainly emphasized on the five components of CAMELS, i.e. Capital Adequacy, Assets Quality, Management, Earnings Quality and Liquidity, and thus have omitted the sixth components, i.e. sensitivity to market risk. Thus to fulfill such gap, this study has been attempted to embrace all the six components and to make the comparative analysis between NABIL and HBL on the ground of CAMELS. Further, the study encompasses primary data analysis as well, along with the secondary data analysis, which has not been done in previous studies and thus is germane to this specific topic.

CHAPTER – III
RESEARCH METHODOLOGY

3.1 Research Design

The main objective of research design in this study is to make analysis of the CAMELS rating approach in the commercial banks of Nepal. The study will follow analytical and descriptive research design. And it analyzes the component of CAMELS in the selected banks. The design for this research is made by collection of information from different sources by using various financial statistical tools.

3.2 Population and Sample

There are altogether 26 commercial banks operating in Nepal. However, the study of all the banks in the framework of CAMELS rating is almost impossible within this study. Thus out of the total population of 26, only two banks, namely Nepal Arab Bank Limited (NABIL) and Himalayan Bank Limited (HBL), have been chosen for the study.

3.3 Nature and Sources of Data

The research is based both on primary and secondary data. For primary data, the responses obtained through the questionnaire to the employee of the banks are the main source. Whereas, the annual reports of the sampled banks are the major sources for secondary data. Besides these, the Unified Directives of NRB and the annual report of NRB also serve equally as the major source for secondary data. Further, the basic conceptual information was collected through BASEL, and NRB publications and work papers.

3.4 Data collection Procedure

The required information is collected by conducting visits to each banks, consulting library, surfing the internet and related text books. The annual reports of each bank for the study period are obtained from the official websites

of each bank. NRB regulatory directives, statistics of commercial banks of Nepal and other related publications is also obtained from the official websites. Existing literature on the subject matter is collected from various research papers placed in central library. Likewise the review of working papers conducted by various international scholars on the related matters is done through internet surfing to various websites.

3.4.1 Financial ratio analysis tools

Financial ratio analysis tools will be used to determine the performance of the banks in the framework of CAMELS components. These ratios will be categorized in accordance of the CAMELS components. Following category of key ratios will be used to analyze the relevant components in terms of CAMELS.

A) Capital adequacy

a) Total Capital Adequacy Ratio

It takes into account the most important financial risks-foreign exchange, credit and interest rate risks, by assigning risks weightings to the institutions assets. Risk weighted assets (RWA), Tire 1 capital, Tire 2 capital, will be used to calculate the total capital adequacy ratios.

$$CAR = \frac{\text{Tier 1 Capital} + \text{Tier 2 Capital}}{\text{RWA}}$$

b) Tier I Capital Adequacy Ratio

Tier I ratio, core capital adequacy ratio, shows the relationship between the total core capital or internal sources and total risk adjusted assets. It is calculated by sing the following model

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

c) Tier II Capital Adequacy Ratio: This shows the absolute contribution of supplementary capital in capital adequacy. It is used to analyze the supplementary capital adequacy of the banks and determined by using the following model.

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

B) Assets Quality

a) Non-Performing to total Loan Ratio

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

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

b) Loan Loss Provision to Total Loans and Advances

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

$$\text{LLP to Loans and Advances} = \frac{\text{Loan Loss Provision} \times 100}{\text{Total Loans and Advances}}$$

C) Management Component Analysis

a) Total Operating Expenses to Total Revenue Ratio

It measures the proportion of total operating expenses in total operating revenues. A high or increasing ratio of expenses to total revenue can indicate that the bank may not be operating efficiently. This can be, but is not necessarily due to management deficiencies

$$\text{Total Operating Expenses to Total Operating Revenue} = \frac{\text{Operating Expenses}}{\text{Operatig Revenue}}$$

b) Earning per Employee

Earning per employees is the numerical relationship between the net profit after tax to total numbers of employee. Low or decreasing earning per employee can reflect inefficiencies as a result of overstaffing, with similar repercussions in terms of profitability.

$$\text{Earning Per Employee} = \frac{NPAT}{\text{Total No. of Employees}}$$

D) Earning Quality Analysis

a) Return on Shareholders' Equity (ROSE)

Return on shareholders' equity reflects how well the firm has used the recourse of the owner's. The earning of satisfactory return is the most desirable objective of business as common or ordinary shareholders are entitled to the residual profits. It is calculated by dividing profit after tax by net worth.

$$\text{Return on Sharholders' Equity} = \frac{NPAT}{\text{Shareholders' Equity}}$$

b) Return on Total Assets

Return on total assets explains the contribution of assets to generating net profit. This ratio indicates efficiency towards of assets mobilization. In other words return on total assets ratio is an overall profitability rate, which measures earning power and overall operation efficiency of a firm. This ratio helps the management in identifying the factors that have a bearing on overall performance of the firm.

$$\text{Return on Total Assets} = \frac{NPAT}{\text{Total Assets}}$$

c) Net Interest Margin

Net interest margin is the expression of numerical relationship between the net interest income and total interest income of the bank. It measures efficiently the bank is managing the interest expenses with respect to the interest income earned.

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

d) Earning Per Share

The profitability of the common shareholders' investment can also be measured in term of earning per share. The earning per share is calculated by dividing the profit after tax by total number of common share outstanding.

$$Earning\ Per\ Share = \frac{NPAT}{No.of\ Common\ Shares}$$

E) Liquidity Component Analysis

a) Liquid Assets to Total Deposit Ratio

The ratio of liquid assets to total deposit measures the level of liquid assets available with the bank to meet the short term obligations. It measures the overall liquidity position.

$$Liquid\ Assets\ to\ Total\ deposit\ Ratio = \frac{Liquid\ Assets}{Total\ Deposit}$$

b) Cash Reserve Ratio

It is the minimum amount of reserves a bank must hold in the form of account balance with NRB and cash held in vault. This ratio ensures minimum level of the banks first line of defense in meeting depositor's obligations.

$$Cash\ Reserve\ Ratio = \frac{NRB\ Balance}{Total\ Deposit}$$

c) Cash in Vault to Total Deposit ratio

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

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

F) Sensitivity To Market

a) Interest rate sensitivity

Interest rate sensitivity is estimated by GAP analysis. If ΔRi is the average interest rate change affecting assets and liabilities that can be replaced within ith maturity bucket, the effect on the banks net interest income (NII) in the ith maturity bucket is calculated by:

$$\Delta NIIi = \left(\sum_{I=1\,Day}^{I=1th\ maturity\ bucket} RSAi - \sum_{I=1\,Day}^{I=1th\ maturity\ bucket} RSLi \right) \times \Delta Ri$$

$$= GAPi \times Ri$$

Where,

$\Delta NIIi$ = Change in interest income in the ith maturity bucket

GAPi = Rupee size of gap between book value of rate sensitivity assets RSA and rate sensitivity liabilities RSL in maturity bucket i.

Similarly cumulative GAP (CGAP) of interest is the one year re-pricing gap estimated as :

$\Delta NIIi = CGAPi \times Ri$

Where,

$$CGAPi = \left(\sum_{I=1\,Day}^{I=90\,Days} RSAi - \sum_{I=1\,Day}^{I=90\,Days} RSLi \right) + \left(\sum_{I=91\,Day}^{I=180\,Days} RSAi - \sum_{I=91\,Day}^{I=180\,Days} RSLi \right) + \left(\sum_{I=181\,Day}^{I=270\,Days} RSAi - \sum_{I=181\,Day}^{I=270\,Days} RSLi \right)$$

$$+ \left(\sum_{I=271\,Days}^{I=365\,Days} RSAi - \sum_{I=271\,Days}^{I=365\,Days} RSLi \right)$$

Interest rate sensitivity can be computed by expressing cumulative GAP as a percentage of total risk sensitive assets (A) as:

Interest rate sensitivity ratio = CGAP * 100/A

3.4.2 Statistical Tools

A) Arithmetic Mean

Arithmetic Mean of a given set of observations is the sum of he observation divided by the number of observations. In such as case all the items are equally important. Simple Arithmetic Mean is used in this study as per necessary for analysis

We have,

$$\text{Mean } (\overline{X}) = \frac{\phi x}{n}$$

Where   x = sum of all values of the observations

n = Number of observation

x = Value of variables

B) Standard Deviation

The standard deviation usually denoted by the letters (∃). Karl Pearson suggested it as a widely used measure of dispersion and defined as the given observations from their arithmetic mean of a set of value. It is also known as root mean square deviation. Standard deviation, in this study has been used to measure the degree of fluctuation of interest rate and that of other variables as per the necessity of the analysis.

We have,

$$\text{Standard Deviation} = \sqrt{\frac{\phi\,(x\ Z\ \overline{x})}{n}}$$

C) Coefficient of Variation (C.V.)

The relative measure of dispersion based on standard deviation is called coefficient of standard deviation and 100 time coefficient of standard deviation is called coefficient of variation. It is denote by C.V. Thus,

$$\text{C.V.} = \frac{\dagger}{\overline{x}}\,x100\%$$

Where ∃ = Standard Deviation

$\overline{X}$ = Mean Value of Variables

The distribution having less C.V. is said to be less variable or more consistent. A distribution having greater C.V. is said to be more variable or less consistent.

CHAPTER – IV

DATA PRESENTATION AND ANALYSIS

4.1 Secondary Data Analysis

Under this part of the study, the sixth components of CAMELS have been examined and thus the performance of NABIL and HBL within the framework of CAMELS has been measured.

4.1.1 Capital Adequacy

Capital adequacy component analysis of the banks is based on the regulations and standard prescribed by NRB in maintaining minimum risk based core and total capital standard, and maximum risk based supplementary capital standard.

4.1.1.1 Core Capital Adequacy Ratio

As per the Unified directives of NRB, the bank has to keep minimum 6% of the risk weighted assets as core capital (Tier 1). The core capital adequacy ratio maintained by NABIL and HBL within the five year periods are presented in the below Table.

Table 4.1

Core Capital Adequacy Ratio

| FY	NRB's Min. Req. %	NABIL		HBL	
		CCAR %	Variance %	CCAR %	Variance %
2004/05	6	11.35	5.35	8.33	2.33
2005/06	6	10.18	4.18	8.65	2.65
2006/07	6	10.40	4.40	9.61	3.61
2007/08	6	8.75	2.75	9.36	3.36
2008/09	6	8.74	2.74	8.81	2.81
Mean		**9.88**		**8.95**	
S.D.		**1.13**		**0.52**	
C.V.%		**11.42**		**5.85**	

(Source: Appendix – II)

The above table indicated that in all the fiscal years taken for study, the core capital adequacy ratio of NABIL exceeded the NRB's minimum standard. The ratio kept by NABIL in the fiscal year 2004/05 was 11.35%, and from then the ratio was 10.18%, 10.40%, 8.75%, and 8.74% in the fiscal year 2005/06, 2006/07, 2007/08 and 2008/09 respectively, against the NRB standard of 6%. The variance of the ratio of NABIL depicted that, except in the fiscal year 2006/07, the bank tended to keep the ratio just above the NRB's standard, as a result of which the variance was in decreasing trend. However, in average, the CCAR maintained by NABIL was 9.88% and the coefficient of variation in such ratio was 11.42%.

Similarly, the CCAR maintained by HBL also met the benchmark set by NRB for core capital adequacy, since the ratio of HBL was higher than the minimum requirement. The CCAR maintained by HBL for the first three years was in increasing trend. HBL kept 8.33%, 8.65%, 9.61%, 9.36% and 8.81% CCAR against the 6% CCAR set by NRB in the fiscal year 2004/05, 2005/06, 2006/07, 2007/08 and 2008/09 respectively. In average, HBL maintained 8.95% CCAR in the five fiscal years period and the coefficient of variation in such ratio was 5.85%, indicating quite uniformity.

Comparing the two banks on the basis of average CCAR, it can be concluded that the capital foundation of NABIL was more adequate than that of HBL in protecting its depositors and creditors and in commensuration the risk associating activities, since the average CCAR of NABIL (9.88%) was higher than that of HBL (8.95%). However, looking each individual year, the core capital of NABIL was strong than that of HBL till 2006/07 only. In general, both the banks have maintained Tier 1 capital adequately above the NRB standard, which indicated the adequate application of internal sources, i.e. shareholders' equity.

Figure 4.1

Core Capital Adequacy Ratio
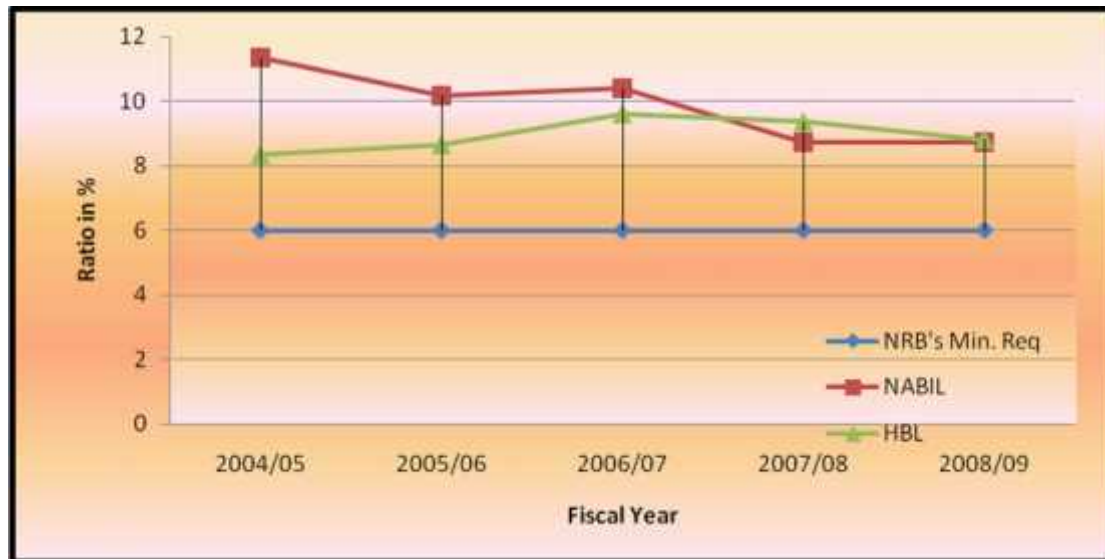
4.1.1.2 Supplementary Capital Adequacy Ratio

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

Table 4.2

Supplementary Capital Adequacy Ratio (Unit in %)

| FY	NABIL			HBL		
	Max. Req.	SCAR	Variance	Max. Req.	SCAR	Variance
2004/05	11.35	1.09	10.26	8.33	2.68	5.65
2005/06	10.18	1.52	8.66	8.65	2.62	6.03
2006/07	10.40	1.64	8.76	9.61	1.51	8.10
2007/08	8.75	2.35	6.40	9.36	3.06	6.30
2008/09	8.74	1.96	6.78	8.81	2.21	6.60
Mean		**1.71**			**2.42**	
S.D.		**0.47**			**0.59**	
C.V.%		**27.67**			**24.39**	

(Source: Appendix – II)

The above table presented the supplementary capital ratio of the banks. The table showed that supplementary capital adequacy ratio maintained by NABIL was maximum, 2.35%, in the fiscal year 2007/08 and minimum, 1.09%, in the fiscal year 2004/05. The ratio increased in the first four years, i.e. from 1.09% in the fiscal year to 2.35% in the fiscal year 2007/08. This increment indicated that the supplementary capital increased over the period and the risk weighted assets decreased during the periods. In average, the supplementary capital adequacy ratio of NABIL was 1.71%. Whatever, in all the fiscal years taken for study, the supplementary capital ratios of NABIL was well below the maximum level directed by NRB, and thus the variance ranged from 10.26% in the fiscal year 2004/05 to 6.40% in the fiscal year 2007/08.

However, the supplementary capital adequacy ratio of HBL decreased for the first three years, i.e. 2.68% in the fiscal year 2004/05 to 1.51% in the fiscal year 2006/07, indicating decrease in supplementary capital and increase in risk weighted assets, and increased to 3.06% in the fiscal year 2007/08 and again decreased to 2.21% in the fiscal year 2008/09. In average, the average supplementary capital adequacy ratio was 2.42% and the coefficient of variation in the ratio was 24.39%. Alike NABIL, HBL was also success to maintain the supplementary capital adequacy ratio well below the NRB's norm, and thus the variance ranged from 5.65% in the fiscal year 2004/05 to 8.10% in the fiscal year 2006/07.

Comparing two banks, it can be concluded that the capital base of NABIL was stronger than that of HBL in meeting the risk, since the supplementary capital adequacy ratio of NABIL was lower than that of HBL.

Figure 4.2

Supplementary Capital Adequacy Ratio
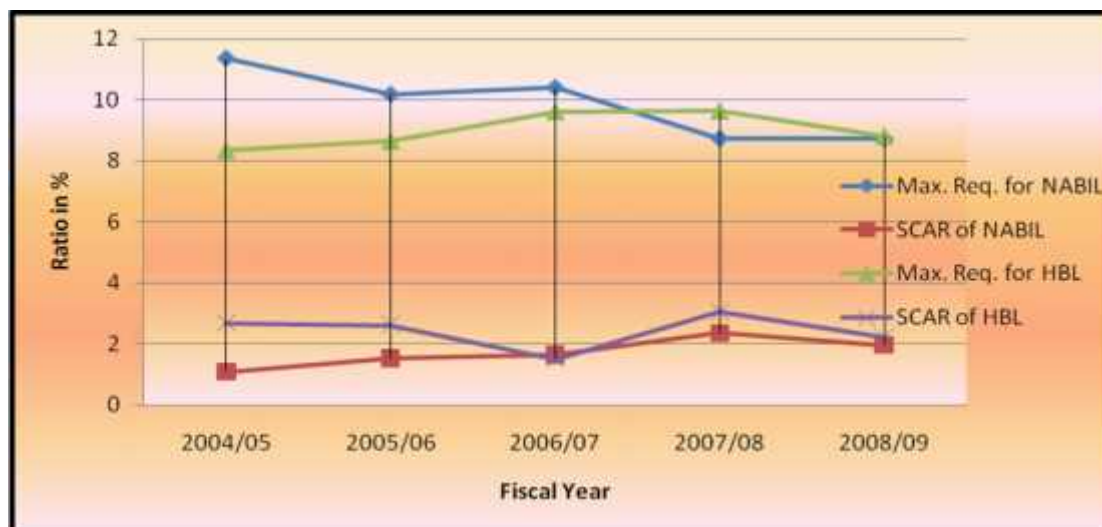
4.1.1.3 Capital Adequacy Ratio

Capital adequacy ratio above NRB standard, i.e. minimum 12%, indicates adequacy of capital and signifies higher security to depositors, higher internal source and higher ability to cushion operational and unanticipated losses. The CAR maintained by NABIL and HBL within the five year periods are presented in the table below.

Table 4.3

Capital Adequacy Ratio (Unit in %)

| FY	NRB Min. Req.	NABIL		HBL	
		CAR	Variance	CAR	Variance
2004/05	12	12.44	0.44	11.01	-0.99
2005/06	12	12.31	0.31	11.26	-0.74
2006/07	12	12.04	0.04	11.13	-0.87
2007/08	12	11.10	-0.90	12.70	0.70
2008/09	12	10.70	-1.30	11.02	-0.98
Mean		**11.72**		**11.42**	
S.D.		**0.77**		**0.72**	
C.V.%		**6.60**		**6.31**	

(Source: Appendix – II)

The above table measured the capital adequacy ratio of the selected banks. As per the BASEL II, the minimum capital adequacy ratio is 8%, however NRB has fixed 12% from the fiscal year 2004/05. The table showed that the CAR of NABIL exceeded the minimum requirement of NRB for the first three years, i.e. by 0.44% in the fiscal year 2004/05, by 0.31% in the fiscal year 2005/06 and 0.04% in the fiscal year 2006/07, and remained deficit in the remaining two years, i.e. by 0.90% in the fiscal year 2007/08 and by 1.30% in the fiscal year 2008/09. This seemed that the CAR maintained by NABIL during the five year periods decreased in each year and thus ranged from 12.44% in the fiscal year 2004/05 to 10.70% in the fiscal year 200/09. In average, NABIL maintained 11.72% CAR ratio, lower than the NRB's standard, within the five year periods and the coefficient of variation in the ratio was 6.60%, indicating quite consistency in the ratio.

However, the CAR ratio maintained by HBL was in fluctuating trend. The CAR ratio of HBL was 11.01% in the fiscal year 2004/05, and increased to 11.26% in the fiscal year 2005/06, then decreased to 11.13% in the fiscal year 2006/07, again increased to 12.70% in the fiscal year 2007/08, and finally decreased to 11.02% in the fiscal year 2008/09. In comparison with the NRB standard, the CAR ratio indicated that HBL failed to meet the NRB's minimum standard in four fiscal years and the ratio was slightly high in the remaining years. In average, HBL kept 11.42% as CAR and the coefficient of variation in the ratio was 6.31%, indicating consistency in the ratio.

Although both the banks were failed to comply with the NRB's norms in most of the years, NABIL's capital base was slightly stronger than that of HBL in meeting the risk and securing the depositors and creditors.

Figure 4.3

Capital Adequacy Ratio
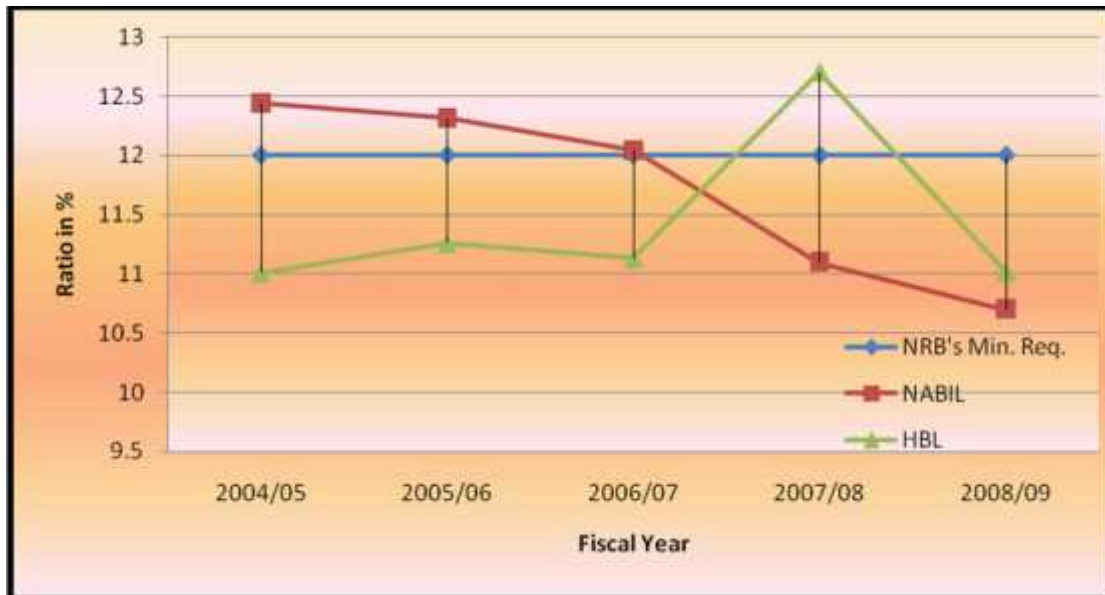
4.1.2 Assets Quality Analysis

The second component of the CAMELS measures the risky and the quality of the assets the bank is carrying on. Under the assets quality analysis, the non performing loan to total loan, and loan loss provision to total loan have been analyzed to trace the risk on assets.

4.1.2.1 Non Performing Loan to Total Loan

The non performing loan to total loan measures the risk on the total loan and thus represents the quality of the assets the bank is carrying on. Higher the ratio indicates higher risk on the assets and vice-versa. The ratio of NABIL and HBL for the five year periods are presented in the table below.

Table 4.4

Non Performing Loan to Total Loan

(Rs. In Millions, Ratio in %)

FY	Industry	NABIL			HBL		
	Avg.	NPL	LA	Ratio	NPL	LA	Ratio
2004/05	22.80	144.51	10946.74	1.32	1001.40	13451.17	7.44
2005/06	18.94	182.62	13278.78	1.38	1040.80	15761.98	6.60
2006/07	14.22	178.29	15903.02	1.12	641.61	17793.72	3.61
2007/08	9.65	161.09	21759.46	0.74	477.23	20179.61	2.36
2008/09	6.08	224.82	27999.01	0.80	551.31	25519.52	2.16
Mean	**14.34**			**1.07**			**4.44**
S.D.	**6.76**			**0.29**			**2.44**
C.V.%	**47.17**			**27.13**			**55.11**

(Source: Appendix – II & III)

The table showed the proportion of non performing loan on total loan and advances of the banks. The table depicted that along with the increment of loan and advances, the non performing loan of NABIL was also in increasing trend. However, it can be assumed that the pace of growth of NPL of NABIL did not catch the same speed of loan and advances, as a result the ratio of non-performing loan to total loan and advances was in fluctuating trend. The ratio was 1.32% in the fiscal year 2004/05, 1.38% in the fiscal year 2005/06, 1.12% in the fiscal year 2006/07, 0.741% in the fiscal year 2007/08 and 0.80% in the fiscal year 2008/09. In average, the ratio was 1.07% and the coefficient of variation in such ratio was 27.13%. Further in each year and in average, the non performing loan to total loan of NABIL was lower than that of industry average.

Alike the ratio of NABIL, the ratio of non performing loan to total loan and advances of HBL was also in decreasing trend. However, the loan and advances granted was in increasing trend in the entire periods, and the non performing loan amount was in decreasing trend, except in the fiscal year

2008/09. The ratio of non performing loan to total loan and advances of HBL was 7.44% in the fiscal year 2004/05, 6.60% in the fiscal year 2005/06, 3.61% in the fiscal year 2006/07, 2.36% in the fiscal year 2007/08 and 2.16% in the fiscal year 2008/09. In average, the non performing loan represented 4.44% of the loan and advances granted. Further, the coefficient of variation of 55.11% indicated wide inconsistency in the ratio and the non performing loan to total loan of HBL was lower than that of industry average.

Comparing two banks, it can be concluded that the loan and advances of NABIL was less risky than that of HBL, since the representation on non-performing loan in total loan and advances of NABIL was lower than that of HBL, which ultimately indicated better recovery policy in NABIL than in HBL.

Figure 4.4

Non Performing Loan to Total Loan
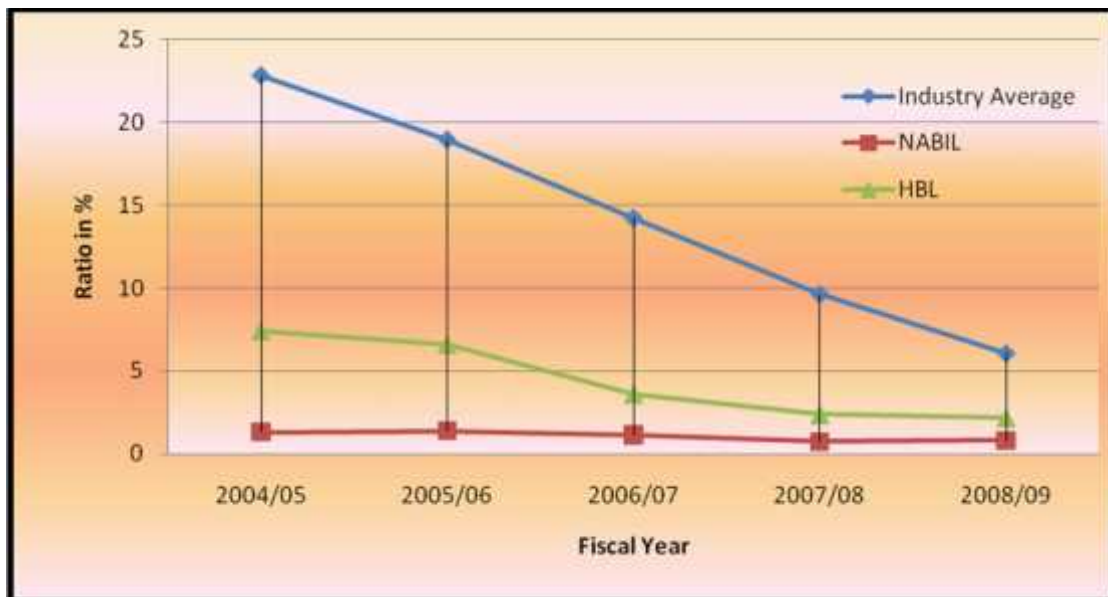
4.1.2.2 Loan Loss Provision to Total Loan

As per the direction of NRB, each bank has to keep 1% of the pass loan, 25% of the sub-standard loan, 50% of the doubtful loan and 100% of the loss loan as provision. The loan loss provision to total loan and advances measures the

aggregate provision kept by the bank. The loan loss to total loans and advances of NABIL and HBL for the five consecutive years is presented in below Table.

Table 4.5

Loan Loss Provision to Total Loan

(Rs. In Millions, Ratio in %)

FY	NABIL			HBL		
	LLP	LA	Ratio	LLP	LA	Ratio
2004/05	360.57	10946.74	3.29	1026.65	13451.17	7.63
2005/06	356.24	13278.78	2.68	1119.42	15761.98	7.10
2006/07	357.24	15903.02	2.25	795.72	17793.72	4.47
2007/08	394.41	21759.46	1.81	682.09	20179.61	3.38
2008/09	409.08	27999.01	1.46	726.36	25519.52	2.85
Mean			**2.30**			**5.09**
S.D.			**0.72**			**2.17**
C.V.%			**31.35**			**42.68**

(Source: Appendix – II & III)

The table showed the ratio of loan loss provision kept on total loan. The table depicted that the loan loss provision of NABIL followed decreasing trend in each year compared to the previous year. This might be due to good loan management policy adopted by the bank. The ratio is 3.29% in the fiscal year 2004/05, which decreased to 2.68% in the fiscal year 2005/06, decreased to 2.25% in the fiscal year 2006/07, again decreased to 1.81% in the fiscal year 2007/08 and finally reached to 1.46% in the fiscal year 2008/09. The decreasing trend of loan loss provision indicated that the amount of pass loan and restructured loan was comparatively higher than sub-standard, doubtful and loss loan in NABIL. In average, SCBNL kept 2.30% of its total loan as loan loss provision.

Similarly, the ratio of loan loss provision to total loan in HBL had also followed decreasing trend in the five consecutive fiscal years. The ratio was 7.63% in the fiscal year 2004/05, which followed decreasing trend and was

7.10% in the fiscal year 2005/06, 4.47% in the fiscal year 2006/07, 3.38% in the fiscal year 2007/08 and 2.85% in the fiscal year 2008/09. In average, HBL maintained 5.09% of the total loan as loan loss provision. And the coefficient of variation of 42.68% indicated inconsistency in the ratio.

Comparing the banks on the basis of loan loss provision to total loan disbursement, it can be concluded that NABIL had better coverage of pass loans and restructured loan on total loan as the average ratio of loan loss provision of NABIL (2.30%) is lower in comparison to that of HBL (5.09%). However, HBL remained success to make a wide reduction in the ratio.

Figure 4.5

Loan Loss Provision to Total Loan
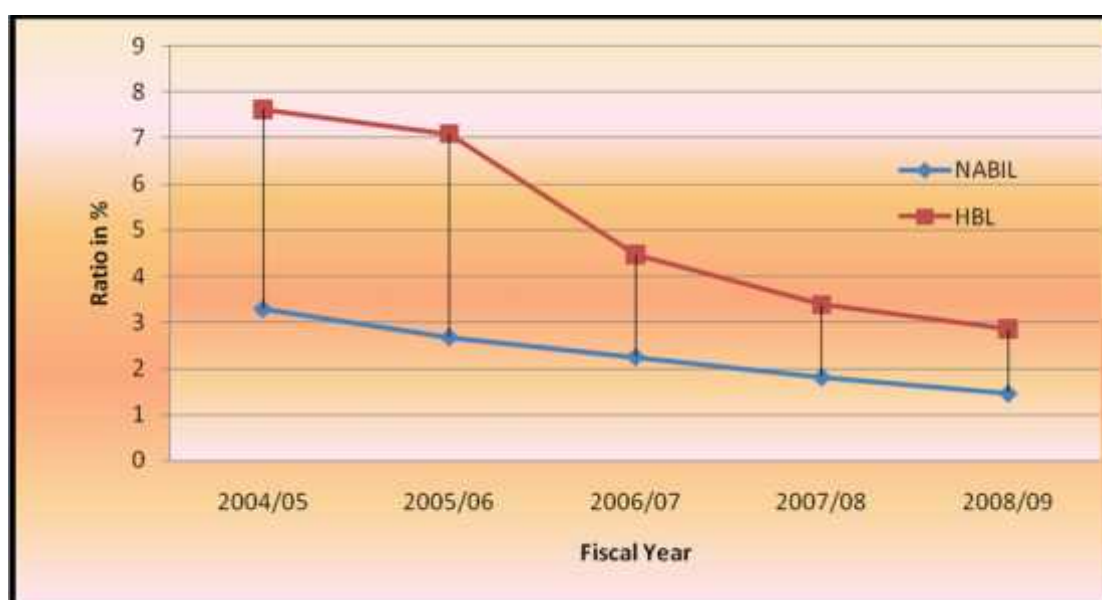
4.1.3 Management Quality Analysis

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 other factors can be quantified fairly easily from current financial statements, management quality being subjective is difficult to quantify. There is one measure that is relevant to management is the ratio of total expenses to

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total revenue. 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 Expenses to Total Operating Revenue Ratio

The ratio of total operating expenses to total operating revenue is used as a proxy measure of the management quality. A high level of expenditure in unproductive activities may reflect an inefficient management. A high ratio of expenses to total revenue may give indication of inefficient operation and vice-versa.

Table 4.6

Total Operating Expenses to Total Operating Revenue Ratio

(Rs. In Millions, Ratio in %)

FY	NABIL			HBL		
	Op. Exps.	Op. Inc.	Ratio	Op. Exps.	Op. Inc.	Ratio
2004/05	389.82	1194.90	32.62	455.97	1195.92	38.13
2005/06	402.48	1359.51	29.60	564.29	1393.53	40.49
2006/07	428.34	1480.16	28.94	613.79	1393.36	44.05
2007/08	483.65	1670.43	28.95	636.53	1597.50	39.85
2008/09	605.06	2220.98	27.24	759.30	1988.05	38.19
Mean			**29.47**			**40.14**
S.D.			**1.97**			**2.42**
C.V.%			**6.67**			**6.02**

(Source: Appendix – II & IV)

The above table scrutinized the soundness of the bank in managing operating expenses in terms of operating revenue. The table showed that both the operating expenses and operating income of NABIL followed increasing trend. The operating expenses ranged from Rs. 389.92 millions in the fiscal year 2004/05 to Rs. 605.06 millions in the fiscal year 2008/09 and the operating income ranged from Rs. 1194.90 millions in the fiscal year 2004/05 to Rs. 2220.98 millions in the fiscal year 2008/09. However, the ratio of operating expenses to operating income of NABIL was in decreasing trend, except in the

fiscal year 2007/08 when there was paltry increment in the ratio, which indicated that the pace of growth of operating expenses was lower than the pace of growth of operating income. The ratio of operating expenses to operating income was 32.62%, 29.60%, 28.94%, 28.95% and 27.24% in the fiscal year 2004/05, 2005/06, 2006/07, 2007/08 and 2008/09 respectively. In average, the ratio was 29.47% and the coefficient of variation in the ratio was 6.67%, which indicated the consistency in the ratio and thus reflected the good management in controlling cost.

Alike in NABIL, the operating expense in HBL was also in increasing trend and thus ranged from Rs. 44.97 millions in the fiscal year 2004/05 to Rs. 759.30 millions in the fiscal year 2008/09. However except in the fiscal year 2006/07, the operating income of HBL was also in increasing trend and thus ranged from Rs. 1195.92 millions in the fiscal year 2004/05 to Rs. 1988.05 millions in the fiscal year 2008/09. Whatever the trend of the operating expenses and operating income, the ratio of operating expenses to operating income of HBL increased for the first three years, i.e. from 38.13% in the fiscal year 2004/05 to 44.05% in the fiscal year 2006/07, and decreased for the last two years, i.e. from 39.85% in the fiscal year 2007/08 to 38.19% in the fiscal year 2008/09. This indicated that HBL was success to decrease operating cost in the last two years in terms of operating income. In average, the ratio was 40.14% and the coefficient of variation in the ratio was 6.02%, which indicated uniformity in the ratio.

Comparing two banks, it can be concluded that NABIL was more success than HBL in reducing operating expenses in comparison to operating income, since the operating expenses to operating income of NABIL was lower than that of HBL.

Figure 4.6

Total Operating Expenses to Total Operating Revenue Ratio
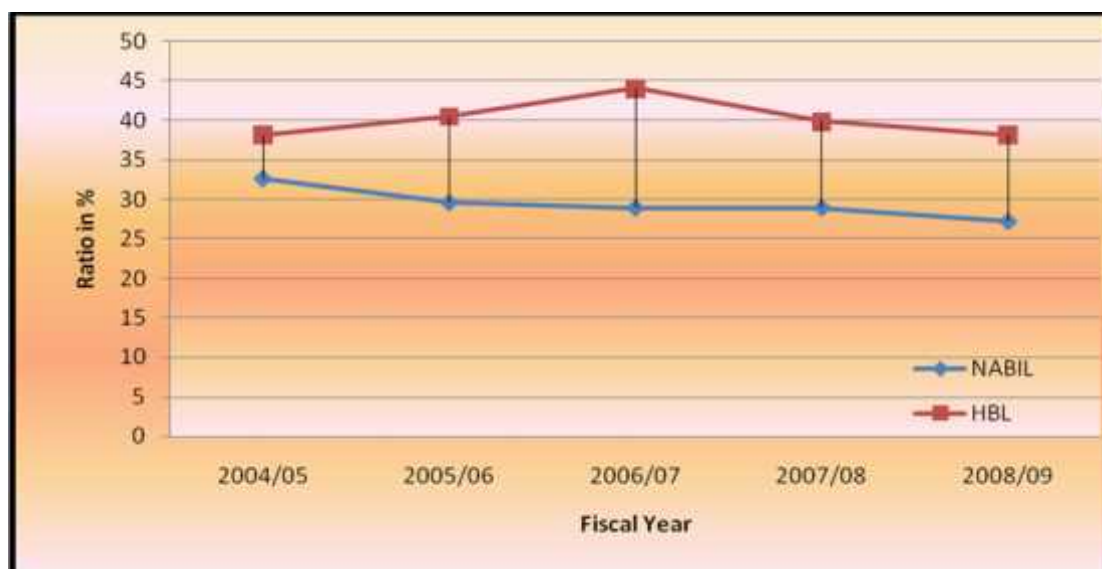
4.1.3.2 Earnings Per Employee

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

Table 4.7

Earnings Per Employee

(Rs. In Millions, Ratio in %)

FY	NABIL			HBL		
	NPAT	Emp. No.	Ratio	NPAT	Emp. No.	Ratio
2004/05	520.11	426	1.22	308.28	501	0.62
2005/06	635.26	441	1.44	457.46	561	0.82
2006/07	673.96	427	1.58	491.82	584	0.84
2007/08	746.47	416	1.79	635.87	591	1.08
2008/09	1031.05	505	2.04	752.83	591	1.27
Mean			**1.62**			**0.92**
S.D.			**0.32**			**0.25**
C.V.%			**19.61**			**27.53**

(Source: Appendix – II & IV)

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The above table measured the productivity of the employee in terms of profit. The table showed that the earning per employee of NABIL was in increasing trend. The earning per employee of NABIL was Rs. 1.22, Rs. 1.44, Rs. 1.58, Rs. 1.79 and Rs. 2.04 in the fiscal year 2004/05, 2005/06, 2006/07, 2007/08 and 2008/09 respectively. In average, the earning per employee of NABIL for the five year periods was Rs. 1.62 and the coefficient of variation was 19.61%.

Similarly, the earning per employee of HBL was also in increasing trend. The earning per employee of HBL was Rs. 0.62 in the fiscal year 2004/05, which increased to Rs. 0.82 in the fiscal year 2005/06, Rs. 0.84 in the fiscal year 2006/07, Rs. 1.08 in the fiscal year 2007/08 and Rs. 1.27 in the fiscal year 2008/09. The table showed that HBL made Rs. 0.92 net profit from per employee and the coefficient of variation was 27.53%.

Comparing two banks on the basis of earning per employee, it can be concluded that the employee of NABIL was more productive than that of HBL. Since the earning per employee of NABIL in each year and in average was greater than that of HBL, it can be inferred that NABIL was more success in managing human resource than HBL.

Figure 4.7

Earnings Per Employee
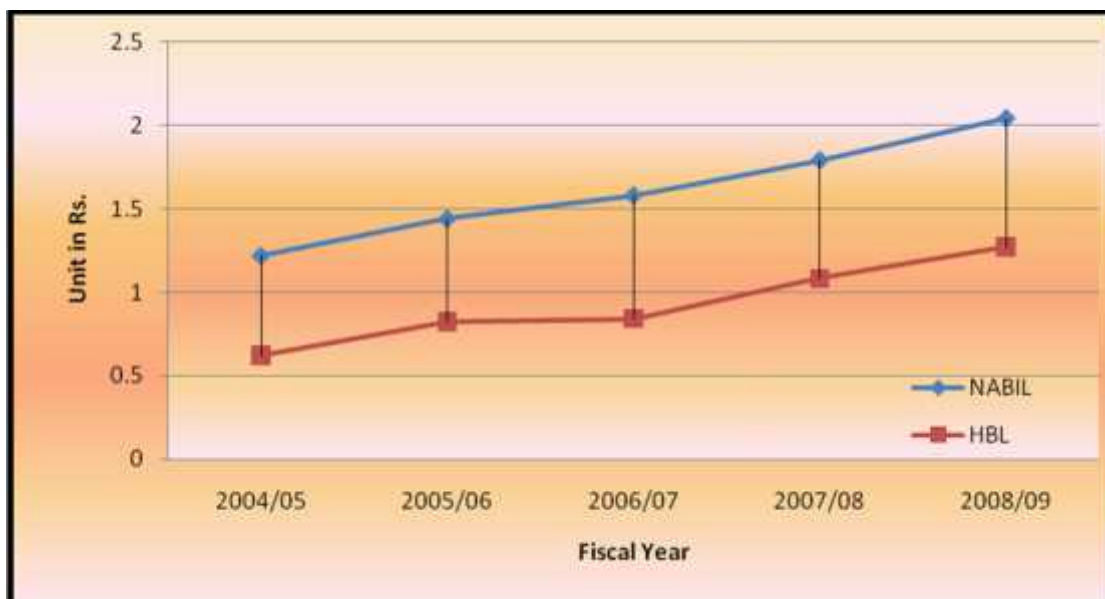
4.1.4 Earnings Quality Analysis

Earning performance allows the banks to remain competitive by providing the resources. The main objectives of banks are to earn profit and their level of profitability is measured by profitability ratios. Profitability ratios measures the efficiencies of the banks, higher profit ratio indicates higher efficiency and vice-versa.

4.1.4.1 Return on Shareholders' Equity

Return on shareholders' equity reflects how well the firm has used the resources of the owners. It is calculated by dividing net profit after tax by shareholders' equity. The ratio of net profit to owners' equity reflects the extent to which social responsibility toward owners has been accomplished. This ratio is thus a great interest to present as well as prospective shareholders and a great concern to management.

Table 4.8

Return on Shareholders' Equity

(Rs. In Millions, Ratio in %)

FY	NABIL			HBL		
	NPAT	SE	ROSE	NPAT	SE	ROSE
2004/05	520.11	1657.63	31.38	308.28	1541.75	20.00
2005/06	635.26	1874.99	33.88	457.46	1766.18	25.90
2006/07	673.96	2057.05	32.76	491.82	2146.50	22.91
2007/08	746.47	2437.20	30.63	635.87	2512.99	25.30
2008/09	1031.05	3130.24	32.94	752.83	3119.88	24.13
Mean			**32.32**			**23.65**
S.D.			**1.30**			**2.34**
C.V.%			**4.02**			**9.90**

(Source: Appendix – II, IV & V)

The above table showed the capacity of the sampled banks in generating profit through proper mobilization of the shareholders' equity. The table showed that the return on shareholders' equity of NABIL was in fluctuating trend. This

indicated that although the net profit after tax increased along with the shareholders' equity, the pace of growth of net profit was not consistent with the pace of growth of shareholders' equity. The return on shareholders' equity of NABIL bank ranged from 31.38% in the fiscal year 2004/05 to 32.94% in the fiscal year 2007/08. In average, the ROSE of NABIL within the five years period was 32.32%, which indicated that NABIL generated Rs. 32.32 net profit from Rs. 100 investment of shareholders' equity. Also, the coefficient of variation of 4.02% indicated uniformity in the ratio.

Alike the ROSE of NABIL, the ROSE of HBL was also in fluctuating trend. The ROSE of HBL was 20.00% in the fiscal year 2004/05, which rose to 25.90% in the fiscal year 2005/06, then decreased to 22.91% in the fiscal year 2006/07, again increased to 25.30% in the fiscal year 2007/08 and then finally decreased to 24.13% in the fiscal year 2008/09. In average, the ROSE of HBL was 23.65%, which indicated that HBL generated Rs. 23.65 from Rs. 100 investment of shareholders' equity. Also, it can be inferred from the coefficient of variation of 9.90% that the ratio remained highly uniform during the five year periods.

Comparing two banks on the basis of ROSE, it can be concluded that NABIL had the higher income earning capacity than HBL from effectively mobilizing the shareholder's equity, since the ROSE of NABIL was higher than that of HBL.

Figure 4.8

Return on Shareholders' Equity
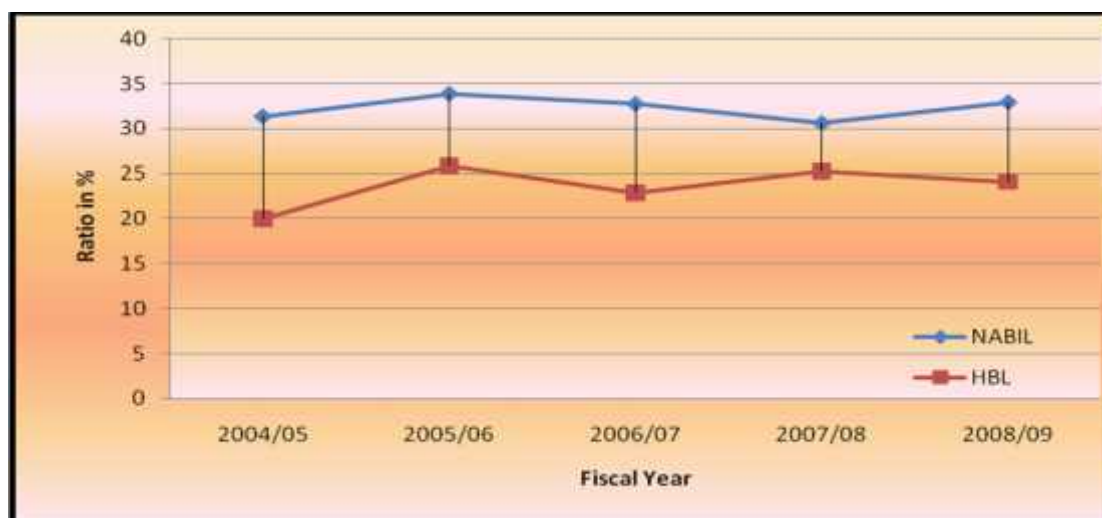
4.1.4.2 Return on Assets

Return on assets explains the contribution of assets to generating net profit. Return on total assets is calculated by dividing net profit after tax by total assets of the company. Higher return on total assets indicates the higher efficiency in the utilization of total assets and vice-versa.

Table 4.9

Return on Assets

(Rs. In Millions, Ratio in %)

| FY	NABIL			HBL		
	NPAT	TA	ROA	NPAT	TA	ROA
2004/05	520.11	17064.08	3.05	308.28	27418.16	1.12
2005/06	635.26	22329.97	2.84	457.46	29460.39	1.55
2006/07	673.96	27253.39	2.47	491.82	33519.14	1.47
2007/08	746.47	37132.76	2.01	635.87	36175.53	1.76
2008/09	1031.05	43867.39	2.35	752.83	39320.32	1.91
Mean			**2.55**			**1.56**
S.D.			**0.41**			**0.30**
C.V.%			**16.10**			**19.28**

(Source: Appendix –II, IV & V)

The above table delineated the capacity of the banks to convert the investment in total assets in profit. The table showed that although both the net profit after tax and total assets of NABIL bank was in increasing trend, the ROA of NABIL decreased for the first four years. The ROA of NABIL in the fiscal year 2004/05 was 3.05% , which decreased to 2.84% in the fiscal year 2005/06, 2.47% in the fiscal year 2006/07, 2.01% in the fiscal year 2007/08, and finally increased to 2.35% in the fiscal year 2008/09 compared to that in the fiscal year 2007/08. In average, the ROA of NABIL was 2.55%, which indicated that NABIL generated Rs. 2.55 net profit from Rs. 100 investment in total assets. And the coefficient of variation in the ratio was 16.10%.

However, the ROA of HBL was in increasing trend, except in the fiscal year 2006/07. The ratio was 1.12% in the fiscal year 2004/05, which increased to 1.55% in the fiscal year 2005/06, then decreased to 1.47% in the fiscal year 2006/07, and increased to 1.76% in the fiscal year 2007/08 and 1.91% in the fiscal year 2008/09. In average, the return on assets of HBL within the five year periods was 1.56%, which explicated that HBL generated Rs. 1.56 net profit from Rs. 100 investment in total assets. And the coefficient of variation was 19.28%.

Comparing two banks, it can be concluded that NABIL had the greater capacity than HBL in effectively mobilizing the total assets to generate net profit. However, the ROA of NABIL was almost in decreasing trend and that of HBL was in increasing trend. Thus, the investors of HBL can be optimistic in HBL capacity to generate higher profit in future.

Figure 4.9

Return on Assets
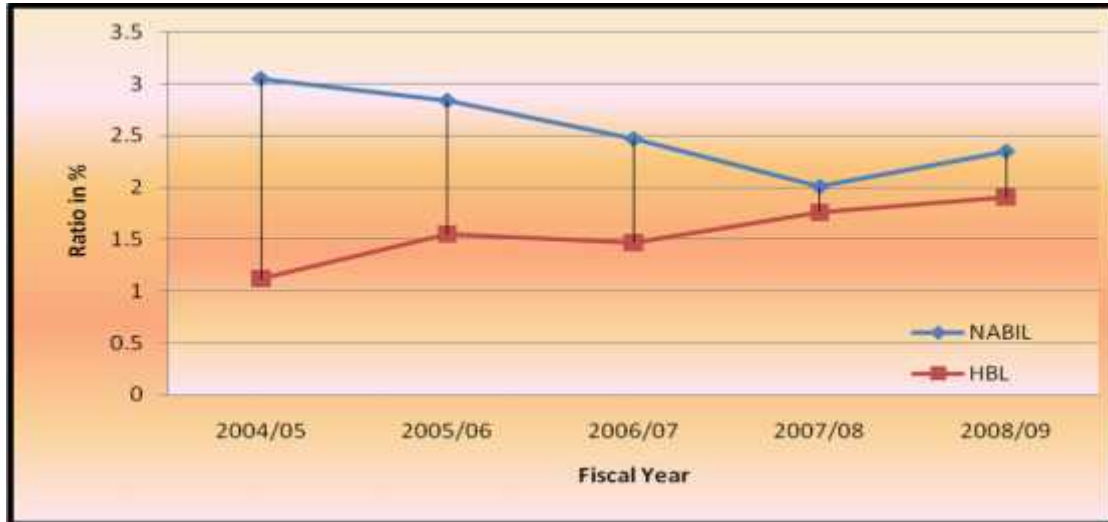
4.1.4.3 Net Interest Margin

This ratio measures the relationship between the net interest earned and the total interest income. The low ratio indicates high interest expenses and the high ratio indicates low interest expenses. Thus, the low ratio is desirable to reflect the profitability strength.

Table 4.10

Net Interest Margin

(Rs. In Millions, Ratio in %)

| FY	NABIL			HBL		
	Net Int.	Int. Inc.	NIM	Net Int.	Int. Inc.	NIM
2004/05	825.21	1068.75	77.21	884.51	1446.47	61.15
2005/06	952.84	1310.00	72.74	977.63	1626.47	60.11
2006/07	1032.05	1587.76	65.00	1008.17	1775.58	56.78
2007/08	1220.26	1978.70	61.67	1139.91	1963.65	58.05
2008/09	1645.21	2798.49	58.79	1407.42	2342.20	60.09
Mean			**67.08**			**59.24**
S.D.			**7.70**			**1.77**
C.V.%			**11.47**			**2.99**

(Source: Appendix – II & IV)

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The above table depicted the net interest margin of the banks. The table showed that both the net interest and the interest income of NABIL were in increasing trend. The net interest was highest, Rs. 1645.21 millions in the fiscal year 2008/09 and lowest in the fiscal year 2004/05. However the net interest margin of NABIL followed decreasing trend and thus was 77.21% in the fiscal year 2004/05, 72.74% in the fiscal year 2006/07, 65.00% in the fiscal year 2006/07, 61.67% in the fiscal year 2007/08 and 58.79% in the fiscal year 2008/09. The decreasing trend in net interest margin tacitly indicated the high increment in interest expenses. In average, the net interest margin of NABIL was 67.08% and the coefficient of variation in the ratio was 11.47%, which indicated quite uniformity in the ratio.

Alike in NABIL, the net interest and interest income in HBL were also in increasing trend. The net interest ranged from Rs. 884.51 millions in the fiscal year 2004/05 to Rs. 1407.42 millions in the fiscal year 2008/09, and the interest income ranged from Rs. 1446.47 millions in the fiscal year 2004/05 to Rs. 2342.20 millions in the fiscal year 2008/09. However, the net interest margin followed decreasing trend for the first three years, i.e. from 61.15% in the fiscal year 2004/05 to 56.78% in the fiscal year 2006/07, and followed increasing trend in the last two years, i.e. from 58.05% in the fiscal year 2007/08 to 60.09% in the fiscal year 2008/09. In average, the net interest margin of HBL was 59.94%, which indicated that the net interest represented 59.94% of the total interest income. Further, the coefficient of variation of 2.99% indicated uniformity in the ratio.

Comparing two banks, it can be concluded that NABIL was quite success than HBL in managing the interest expenses, since the net interest margin of NABIL was greater than that of HBL.

Figure 4.10

Net Interest Margin
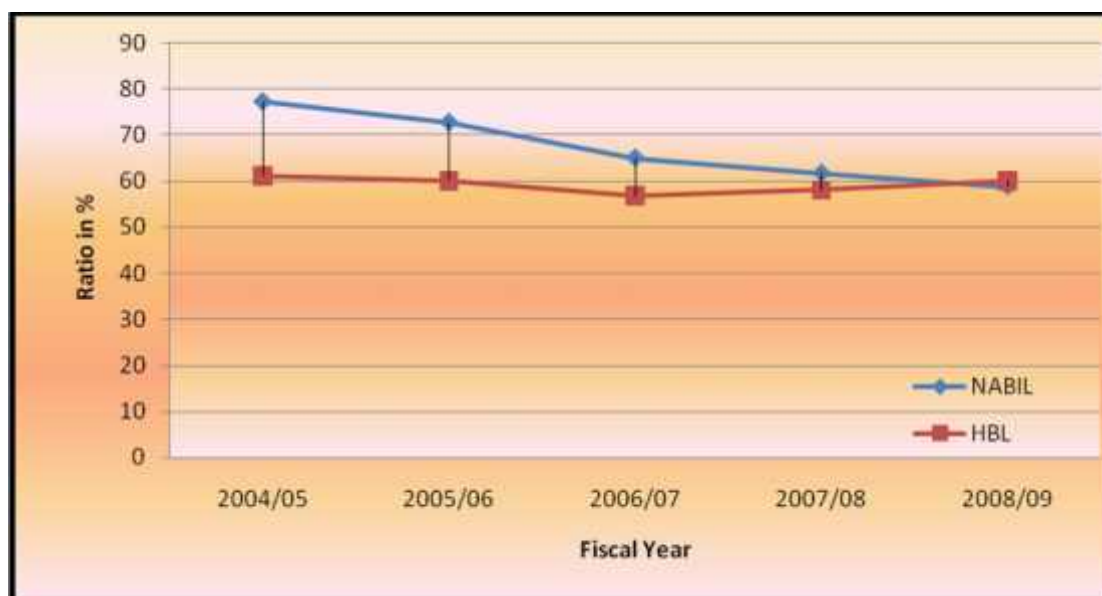
4.1.4.4 Earning per Share

The earning per share shows the profitability of the bank on per share basis. It shows the earning available to each shareholder out of the total earning. The earning per share is calculated by dividing the profit after tax by total number of common share outstanding.

Table 4.11

Earning Per Share

FY	NABIL			HBL		
	NPAT Rs.	Share No.	EPS	NPAT Rs.	Share No.	EPS
2004/05	520,114,085	4,916,544	105.49	320,068,435	6,435,000	47.91
2005/06	635,262,349	4,916,544	129.21	459,074,797	7,722,000	59.24
2006/07	673,959,698	4,916,544	137.08	491,822,905	8,108,100	60.66
2007/08	848,616,000	6,892,160	108.31	635,868,519	10,135,125	62.74
2008/09	1,135,557,990	9,657,470	106.76	752,834,735	12,162,150	61.90
Mean			**117.37**			**58.49**
S.D.			**14.70**			**6.06**
C.V.%			**12.53**			**10.36**

(Source: Appendix – II & IV)

The above table showed the trend of EPS of the selected sample banks. The EPS of NABIL increased for the first three years, i.e. Rs. 105.49, Rs. 129.21 and Rs. 137.08 in the fiscal years 2004/05, 2005/06 and 2006/07 respectively. And in the last two year, the EPS of NABIL decreased to Rs. 108.31 in the fiscal year 2007/08 and to Rs. 106.76 in the fiscal year 2008/09. However, in average NABIL earned Rs. 11737 per share and the C.V. on such EPS was 14.70%.

In contrast, the EPS of HBL followed increasing trend for the first four years. The EPS was Rs. 47.91, Rs. 59.24, Rs. 60.66, Rs. 62.74 and Rs. 61.90 in the fiscal year 2004/05, 2005/06, 2006/07, 2007/08 and 2008/09. In average, the EPS was Rs. 58.49 and the coefficient of variation was 10.36%.

Comparing two banks on the basis of EPS, it can be concluded that NABIL is the higher profit earning bank than HBL. However, the uniformity in earning per share of HBL was greater than that of NABIL. Thus, for the investors who attitude is just to gain profit, the EPS of NABIL can be fascinating.

Figure 4.11

Earning Per Share
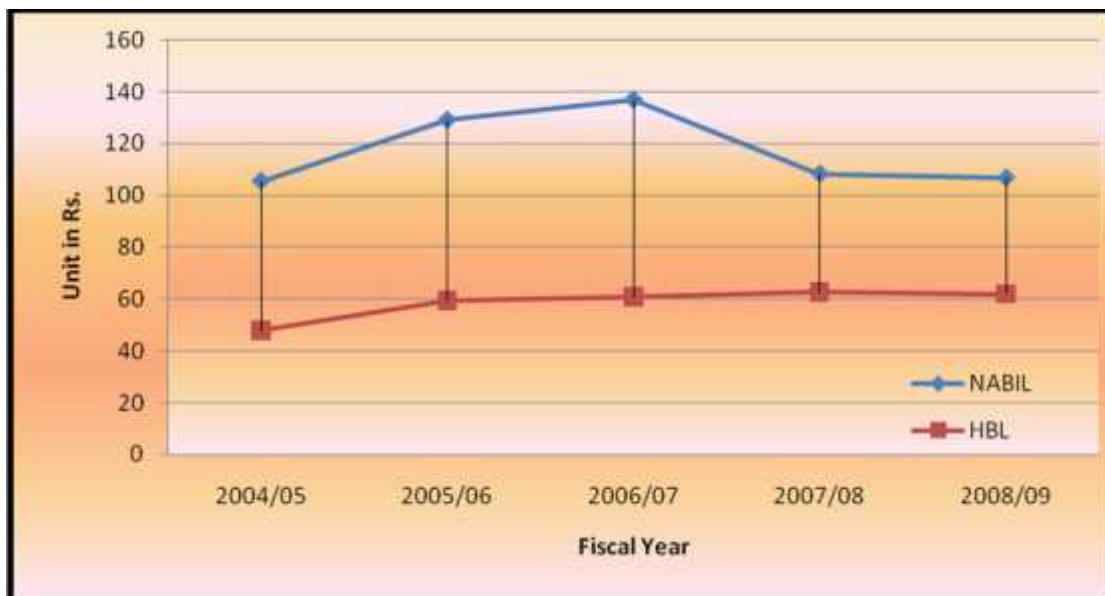
4.1.5 Liquidity Analysis

The level of liquidity influences the ability of a banking system to withstand shocks. Liquidity risk arises when an FIs liability holder like depositor demand immediate cash for the financial claim they hold with financial institutions. Thus, bank should have sound liquidity position to meet the daily requirement.

4.1.5.1 Liquid Assets to Total Deposit

The ratio of liquid assets to total deposit measures the level of liquid assets available with the bank to meet the short term obligations. It measures the overall liquidity position. The higher ratio shows the better liquidity position and the lower ratio shows the inefficient liquidity position of the bank.

Table 4.12

Liquid Assets to Total Deposit

(Rs. In Millions, Ratio in %)

FY	NABIL			HBL		
	Liquid Assets	Total Deposit	Ratio	Liquid Assets	Total Deposit	Ratio
2004/05	3846.24	14586.61	26.37	7925.28	24814.01	31.94
2005/06	4666.60	19347.40	24.12	7866.95	26490.85	29.70
2006/07	6771.71	23342.29	29.01	9922.24	30048.42	33.02
2007/08	9270.39	31915.05	29.05	9438.33	31842.79	29.64
2008/09	7631.50	37348.25	20.43	8431.62	34681.34	24.31
Mean			**25.80**			**29.72**
S.D.			**3.63**			**3.36**
C.V.%			**14.08**			**11.29**

(Source: Appendix – II & V)

The above table measured the liquidity of the banks. The table showed that both the liquid assets maintained and the total deposits collected of NABIL were in increasing trend, except in the fiscal year 2008/09 when the liquid assets decreased to Rs. 7631.20 millions. The liquid assets ranged from Rs. 3846.24 millions in the fiscal year 2004/05 to Rs. 9270.39 millions in the fiscal

year 2007/08 and the total deposits ranged from Rs. 14586.61 millions in the fiscal year 2004/05 to Rs. 37348.25 millions in the fiscal year 2008/09. However, the liquid asset to total deposit ratio was in fluctuating trend. The ratio was 26.37%, 24.12%, 29.01%, 29.05% and 20.43% in the fiscal year 2004/05, 2005/06, 2006/07, 2007/08 and 2008/09 respectively. In average, 25.80% of the total deposit was represented by the liquid assets of the bank and the coefficient of variation in the ratio was 14.08%, indicating quite consistency.

Unlike in NABIL, the liquid assets of HBL was in fluctuating trend and thus ranged from Rs. 7866.95 millions in the fiscal year 2005/06 to Rs. 9922.24 millions in the fiscal year 2006/07. However, the total deposit was in increasing trend and thus ranged from Rs. 24814.01 millions in the fiscal year 2004/05 to Rs. 34681.34 millions in the fiscal year 2008/09. Alike the trend of liquid assets, the ratio of liquid assets to total deposit was also in fluctuating trend, and thus was highest, 33.02%, in the fiscal year 2006/07 and lowest, 24.31%, in the fiscal year 2008/09. In average, 29.72% of the total deposit of HBL was represented by the liquid assets and the coefficient of variation in the ratio was 11.29%, indicating quite consistency.

Comparing two banks, it can be concluded that the liquidity position of HBL was more sound than that of NABIL, since the average liquid assets to total deposit of HBL was greater than that of NABIL.

Figure 4.12

Liquid Assets to Total Deposit
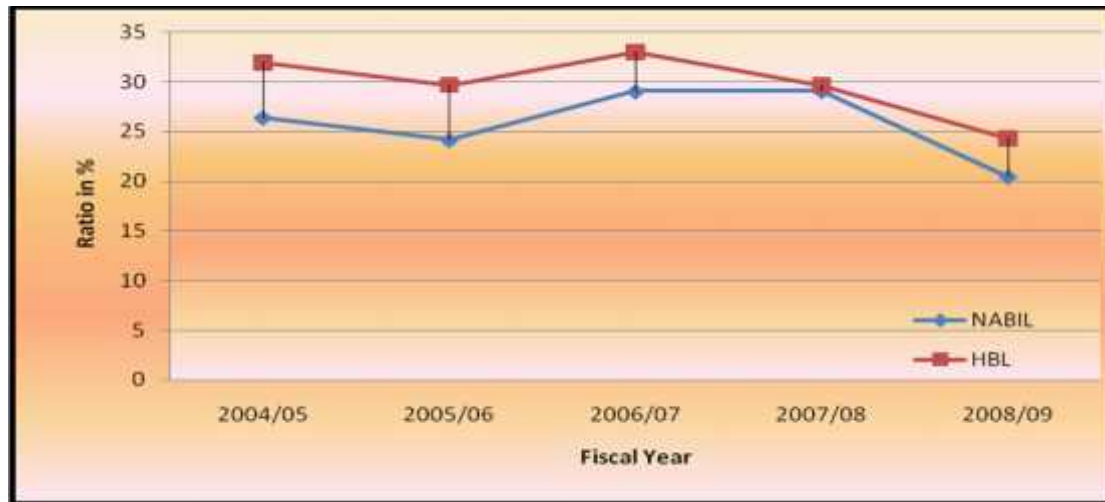
4.1.5.2 Cash Reserve Ratio

To ensure adequate liquidity in the commercial banks in order to meet the depositors demand, NRB has put the directives to maintain certain percent of total deposit in NRB by the commercial banks, which is known as cash reserve ratio. The CRR maintained by NABIL & HBL are presented in the below table.

Table 4.13

Cash Reserve Ratio

(Rs. In Millions, Ratio in %)

FY	NRB's	NABIL			HBL		
	Req.	NRB Bal.	TD	Ratio	NRB Bal.	TD	Ratio
2004/05	5	389.71	14586.61	2.67	1604.15	24814.01	6.46
2005/06	5	318.36	19347.40	1.65	1096.25	26490.85	4.14
2006/07	5	1113.42	23342.29	4.77	1272.54	30048.42	4.23
2007/08	5	1829.47	31915.05	5.73	935.84	31842.79	2.94
2008/09	5.5	2648.60	37348.25	7.09	2328.41	34681.34	6.71
Mean				**4.38**			**4.90**
S.D.				**2.22**			**1.63**
C.V.%				**50.68**			**33.24**

(Source: Appendix – II & V)

60

The above table showed the cash reserve ratio maintained by the sampled banks in compliance with the NRB's minimum requirement. The table delineated that except in the last two fiscal years, NABIL failed to meet the NRB's minimum requirement for cash reserve ratio. The cash reserve ratio maintained by NABIL for the fiscal year 2004/05 was 2.67%, 2005/06 was 1.65%, for 2006/07 was 4.77%, for 2007/08 was 5.73% and for 2008/09 was 7.09%. In average, the CRR of the bank for the five years periods was 4.38%, which was still lower than the previous provision of 5%, and the coefficient of variation in the ratio was 50.68%, indicating high inconsistency. Thus, this seemed that the bank had high liquidity risk in those periods.

Likewise, except in the fiscal year 2004/05 and 2008/09, HBL also failed to meet the NRB's provision regarding cash reserve ratio. The cash reserve ratio maintained by HBL in the fiscal year 2004/05 was 6.46%, 2005/06 was 4.14%, 2006/07 was 4.23%, 2007/08 was 2.94% and 2008/09 was 6.71%. In average, the cash reserve ratio of HBL for the five year periods was 4.90%, still lower than the previous requirement of 5%, and the coefficient of variation in the ratio was 33.24%.

Although both the banks failed to meet the NRB's provision in most of the years within the last five fiscal years, it can be concluded that HBL had slightly more sound liquidity than NABIL on the basis of cash reserve ratio.

Figure 4.13

Cash Reserve Ratio
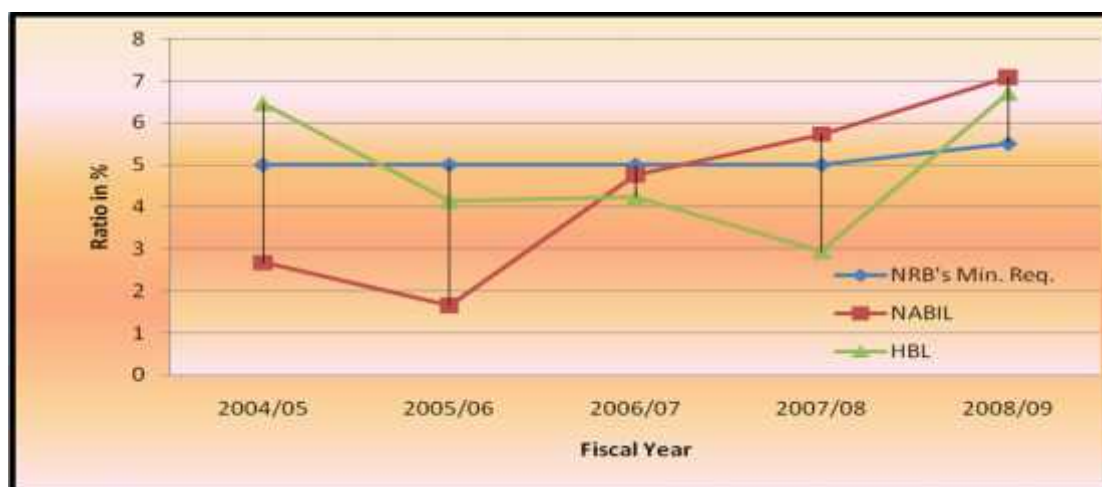
4.1.5.3 Cash at Vault to Total Deposit Ratio

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 deposits means current, savings and fixed deposits accounts as well as call account deposits and certificate of deposits.

Table 4.14

Cash at Vault to Total Deposit Ratio

(Rs. In Millions, Ratio in %)

FY	NABIL			HBL		
	CAV	TD	Ratio	CAV	TD	Ratio
2004/05	146.35	14586.61	1.00	286.53	24814.01	1.15
2005/06	237.82	19347.40	1.23	305.43	26490.85	1.15
2006/07	270.41	23342.29	1.16	177.24	30048.42	0.59
2007/08	511.43	31915.05	1.60	278.18	31842.79	0.87
2008/09	674.39	37348.25	1.81	473.76	34681.34	1.37
Mean			**1.36**			**1.03**
S.D.			**0.33**			**0.30**
C.V.%			**24.46**			**29.27**

(Source: Appendix – II & V)

The above table measured the liquidity position of the bank considering cash at vault and the total deposit collected. The table showed that both the cash at vault and the total deposit of NABIL were in increasing trend. Also, the ratio of cash at vault to total deposit ratio followed increasing trend, except in the fiscal year 2006/07. The ratio was 1.00% in the fiscal year 2004/05, 1.23% in the fiscal year 2005/06, 1.16% in the fiscal year 2006/07, 1.60% in the fiscal year 2007/08 and 1.81% in the fiscal year 2008/09. In average, the cash at vault covered 1.36% of the total deposit liability and the coefficient of variation was 24.46%.

Likewise, except in the fiscal year 2006/07 when the cash at vault decreased, both the cash at vault and total deposit of HBL were also in increasing trend. However, the ratio of cash at vault to total deposit of HBL followed fluctuating trend. The ratio was 1.15% in the fiscal year 2004/05, which remained consistent in the fiscal yer 2005/06, i.e, 1.15%, decreased to 0.59% in the fiscal year 2006/07, increased to 0.87% in the fiscal year 2007/08, and increased to 1.37% in the fiscal year 2008/09. In average, the ratio was 1.03% and the coefficient of variation in the ratio was 29.27%.

Comparing two banks, it can be concluded that NABIL had better liquidity position than HBL in the context of cash at vault and total deposit, since the ratio of cash at vault to total deposit of NABIL was higher than that of HBL.

Figure 4.14

Cash at Vault to Total Deposit Ratio
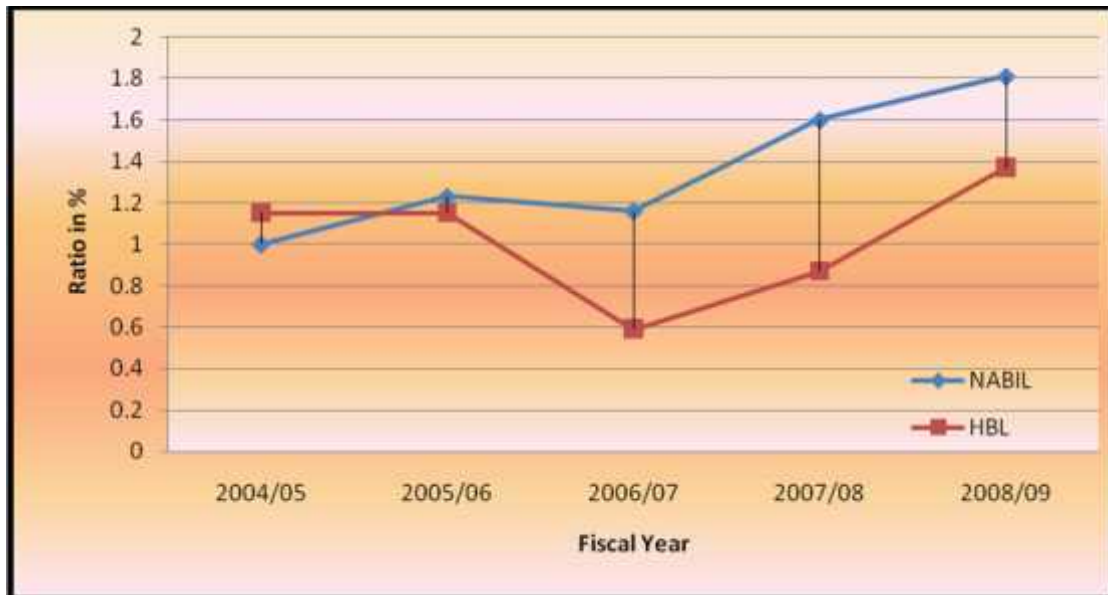
4.1.6 Sensitivity to Market Risk

Sensitivity to market risk refers to the risk that changes in market conditions could adversely affect earning and/or capital. Market risk encompasses exposure associated with changes in interest rate, foreign exchange rates, commodity price, equity price etc. while all of these items are important, the primary risk in most banks is the interest rate risk (IRR), which is the focus of this study. With a view to minimize the IRR, NRB requires the bank to adopt gap analysis adopted for minimization of liquidity risk 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 and over one year. The effect on the profitability is measured by multiplying the changes in interest rate, R_i in the ith maturity bucket annualized with cumulative gap.

Table 4.15

GAP Analysis

(Rs. In Millions, Ratio in %)

Particulars	1-90	91-180	181-270	271-365	>365	Total
NABIL						
RSAs	8396	2922	2028	3992	26988	44325
RSLs	8280	1215	2116	2858	29856	44325
GAPi (RSAs-RSLs)	116	1707	(88)	1133	(2888)	
CGAPi (RSA-RSL)	116	1823	1735	2868		
RSA/RSL	1.01	2.40	0.96	1.40	0.90	1.00
CGAPi Ratio (CGAP/Total RSA)(%)	1.38	62.39	85.55	71.84	0.00	0.00
R(%)				1%	1%	
NII = CGAP* R				28.68	0.00	
% Changes in NII				0.01		
HBL						
RSAs	16385	5523	3959	3946	10942	40755
RSLs	11539	6398	3095	6935	12787	40755
GAPi (RSAs-RSLs)	4846	(875)	(864)	(2989)	(1846)	
CGAPi (RSA-RSL)	4846	3971	4835	1846		
RSA/RSL	1.42	0.86	1.28	0.57	0.86	1.00
CGAPi Ratio (CGAP/Total RSA)(%)	29.58	71.90	122.13	46.78	0.00	0.00
R(%)				1%	1%	
NII = CGAP* R				18.46	0.00	
% Changes in NII				0.03		

(Source: Financial Reports of NABIL & HBL)

The above table showed that the net financial assets (RSAs-RSLs) of NABIL repricing in the short term maturity bucket ranging from 0-91 days to 271-365 days was positive except in the period of 181-270 days. Thus, the net financial assets was highest, i.e. Rs 1133 millions, in 271-365 days, and such net financial assets was negative in the long term maturity bucket. The CGAP or the interest rate sensitivity ratio to the total earning assets was highest, 85.55%, in the period of 181-270 days, and was 71.84% in the period of 271-365 daays and 0% in the long term maturity bucket. It indicates that RSAs and RSLs repricing in short term maturity bucket is highly sensitive to the interest ratio. With the simulated interest rate change by 1%, the NII of NABIL changes by 28.68%, this indicated sensitivity in the short run.

The net financial assets (RSAs-RSLs) of HBL repricing in the short term maturity bucket ranging from 0-91 days to 271-365 days was found to negative, except in 0-91 days where the net financial assets was Rs 4846 millions. Also in the long term maturity bucket (>365 days), the gap was negative. The CGAP or the interest sensitivity ratio to the total earning assets was highest, 122.13%, in the period of 181-270 days, and was 46.78% in the period of 271-365 days and 0% after 1 year onward. It indicates that RSAs and RSLs repricing in short term maturity bucket is highly sensitive to the interest rate. With the simulated interest rate change by 1%, the NII of HBL changes by 18.46%, which indicated quite sensitivity in the short run maturity bucket.

Comparing two banks, it can be concluded that the RSAs and RSLs is more sensitive with the interest rate in NABIL than in HBL in the short run maturity, since the   NII of NABIL was greater than that of HBL.

4.2 Primary Data Analysis

For the primary data analysis purpose, a set of questionnaire, which includes 9 questions related to the CAMELS components, has been prepared and distributed to the employee of the Nepal Arab Bank Limited and Himalayan Bank Limited. A total set of 20 questionnaires has been prepared and distributed to 10 employees of each of the banks. The responses obtained from them are than tabularized in the forthcoming sections.

4.2.1 Satisfaction on Onsite Supervision

To ensure the smooth running of the banks and to ensure the security of deposit holders, the NRB annually makes the onsite supervision and then rates, known as CAMELs Rating, the bank on its financial performance. To examine whether the respondents are satisfied with such supervision of NRB and the rating given, the respondents were asked on this matter.

Table 4.16

Satisfaction on Onsite Supervision

Responses	NABIL		HBL		Total	
	No.	%	No.	%	No.	%
Yes	4	40	7	70	11	55
No	5	50	3	30	8	40
Don't Know	1	10	0	0	1	5
Total	**10**	**100**	**10**	**100**	**20**	**100**

(Source: Field Survey, 2010)

The above table showed that 40% of NABIL's staffs were satisfied with the onsite supervision of NRB, whereas 50% were unsatisfied and 10% were neither satisfied nor dissatisfied by such supervision. Thus, it can be assumed that the majority of the NABIL's staffs were not satisfied with the onsite supervision and the rating. Unlike in NABIL, the majority of the respondents in HBL were satisfied with the supervision, and thus 70% of them strongly affirmed their satisfaction, whereas only 30% were not satisfied with the NRB supervision.

However in overall, 55% of the respondents (11 out of 20) were satisfied with such supervision, 40% of the respondents (8 out of 20) were not satisfied, and 5% of the respondents (1 out of 20) was neither satisfied nor dissatisfied. Thus, considering the total majority, it can be assumed that the onsite supervision made by NRB was satisfactory and effective.

Figure 4.15

Satisfaction on Onsite Supervision
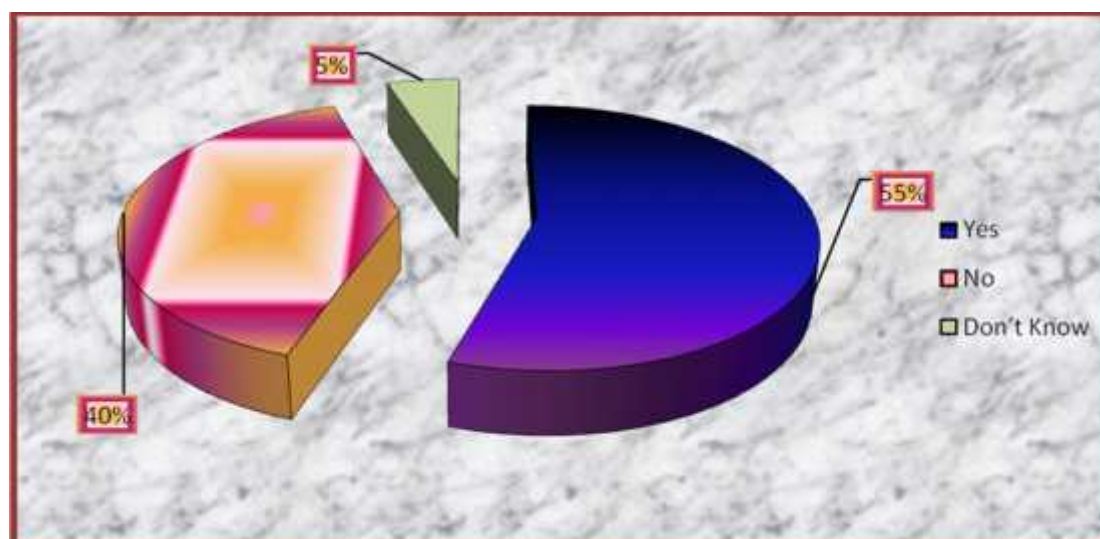
4.2.2 Appropriate Ratio for CAR

As per the BASEL II, the minimum capital requirement should be 8%, whereas NRB have adopted 12% till the date and proposed 10% for the fiscal year 2009/10. Thus, to determine which CAR would be appropriate in the Nepal's context, the respondents were asked on this matter.

Table 4.17

Appropriate Ratio for CAR

Responses	NABIL		HBL		Total	
	No.	%	No.	%	No.	%
Exactly 8%	2	20	1	10	3	15
Exactly 10%	5	50	7	70	12	60
Exactly 12%	3	30	2	20	5	25
Total	**10**	**100**	**10**	**100**	**20**	**100**

(Source: Field Survey, 2010)

As seen in above table, the 50% of the NABIL's respondents (5 out of 10) said that the CAR should be 10% as proposed by NRB for the fiscal year 2009/10, while 30% (3 out of 10) of them sated the current practice of 12% as

appropriate rate and 20% (2 out of 10) of the respondents of NABIL affirmed 8% as directed by BASEL II. Similarly, 70% of the respondents of HBL (7 out of 10) said that the CAR should be 10%, 20% of them said that the ratio should be 12% and only 10% said that the ratio should be 8%. Hence, in each bank, the majority of the respondents favored the proposed, not the existing, CAR of NRB to be the appropriate, and the least favored the ratio of BASEL II.

In overall, 60% of the total respondents favored the proposed CAR ratio of NRB effective from the fiscal year 2009/10, 25% of them buttressed the existing CAR ratio adopted by NRB, and only 15% said to adopt the BASEL II minimum requirement.

Figure 4.16

Appropriate Ratio for CAR
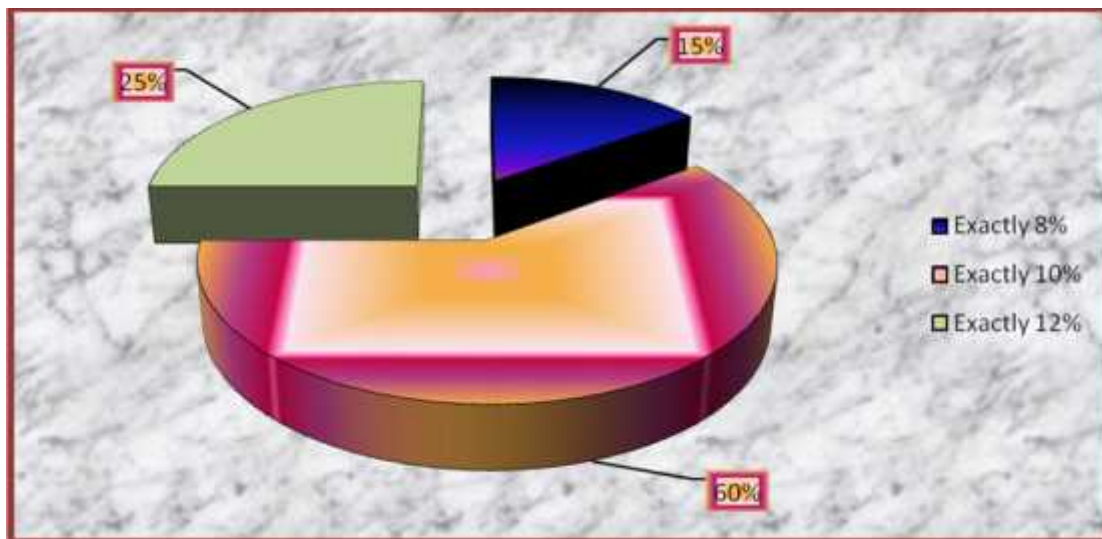
4.2.3 Impact of NPA on Financial Health

To monitor the assets quality of the bank, it is crux to know the impact of non-performing loan on the financial health. Thus, the respondents were asked whether the NPA really inversely affects the financial soundness. The responses obtained from them are presented in the table below.

Table 4.18

Impact of NPA on Financial Health

Responses	NABIL		HBL		Total	
	No.	%	No.	%	No.	%
Yes	8	80	9	90	17	85
No	0	0	0	0	0	0
Don't Know	2	20	1	10	3	15
Total	**10**	**100**	**10**	**100**	**20**	**100**

(Source: Field Survey, 2010)

The above table showed that the majority (80%) of the respondents of NABIL said that the NPA affects the financial health of the bank, while 20% said that they have no idea. Similarly, 90% of the respondents of HBL said that NPA do affect the financial soundness, and 10% of the respondents remained neutral. Thus, in overall 85% of the total respondents (17 out of 20) and 15% of the respondents (3 out of 20) said that the NPA affects the financial health and don't know respectively.

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

Figure 4.17

Impact of NPA on Financial Health
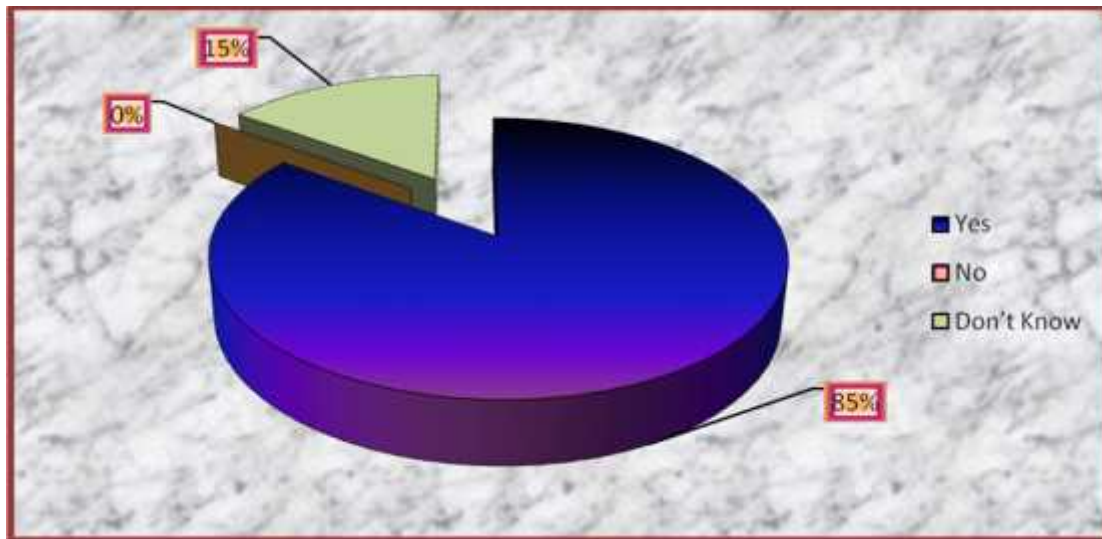
4.2.4 Method to Resolve Problem of NPA

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

Table 4.19

Method to Resolve Problem of NPA

Responses	NABIL		HBL		Total	
	No.	%	No.	%	No.	%
Strict Recovery Policy	3	30	4	40	7	35
Monitoring	4	40	5	50	9	45
New Rule & Regulations	1	10	0	0	1	5
Rebate for Timely Payment	2	20	1	10	3	15
Total	**10**	**100**	**10**	**100**	**20**	**100**

(Source: Field Survey, 2010)

The above table showed that 40% of the respondents from NABIL said monitoring the activities of the borrower is the best method for resolving the problem of NPA. Similarly, 30% stated strict recovery policy, 20% said

provision of rebate for timely payment and 10% affirmed formulation of new rule and regulation regarding NPA is the best method for resolving the NPA's problem.

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

Figure 4.18

Method to Resolve Problem of NPA
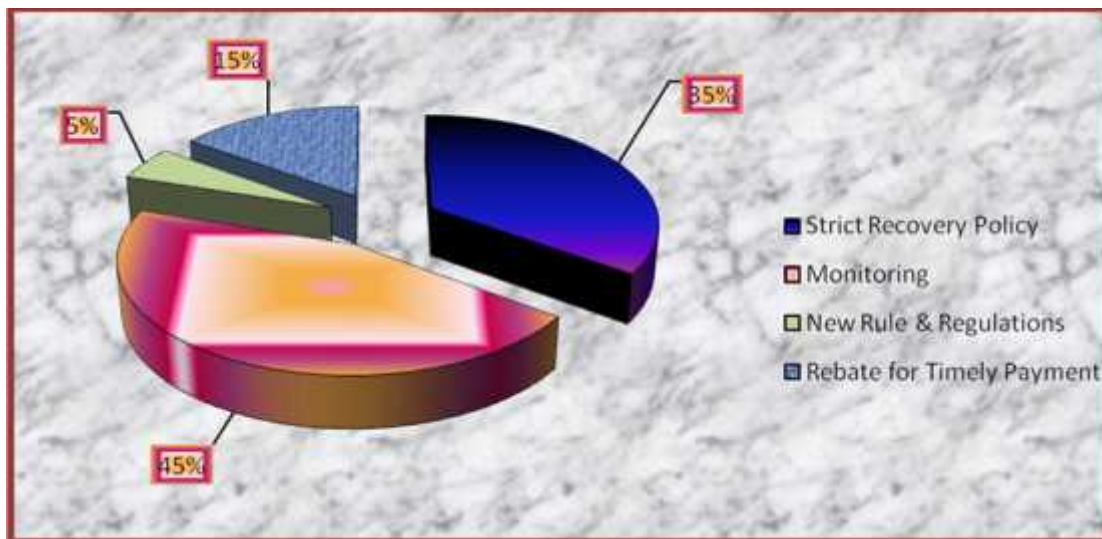
4.2.5 Time to Follow Up for Recovery

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

Table 4.20

Time to Follow Up for Recovery

Responses	NABIL		HBL		Total	
	No.	%	No.	%	No.	%
Within a Week	2	20	3	30	5	25
Within Two Weeks	7	70	4	40	11	55
Within a Month	1	10	2	20	3	15
After One Month Onwards	0	0	1	10	1	5
Total	**10**	**100**	**10**	**100**	**20**	**100**

(Source: Field Survey, 2010)

The table demonstrated that 55% of the respondents, 11 out of 20, were in the view that banks should follow up for the recovery within two weeks after due date. Similarly, 15% of the respondents, 3 out of 20, have opined that within a month after due date will be the best time that the bank should start for recovery. Also, 25% of the respondents, 5 out of 20 and 5% of the respondents, 1 out of 20, opined that within a week and after one month onward respectively will be the best time for follow up.

Looking each category, the majority of NABIL's respondents, 7 out of 10, and the majority of HBL respondents, 4 out of 40, have supported within two weeks. Eventually, considering the overall majority and the majority of each bank, it can be concluded that within two weeks after the matured date of loan will be the best time for bank to follow up for recovery process.

Figure 4.19

Time to Follow Up for Recovery
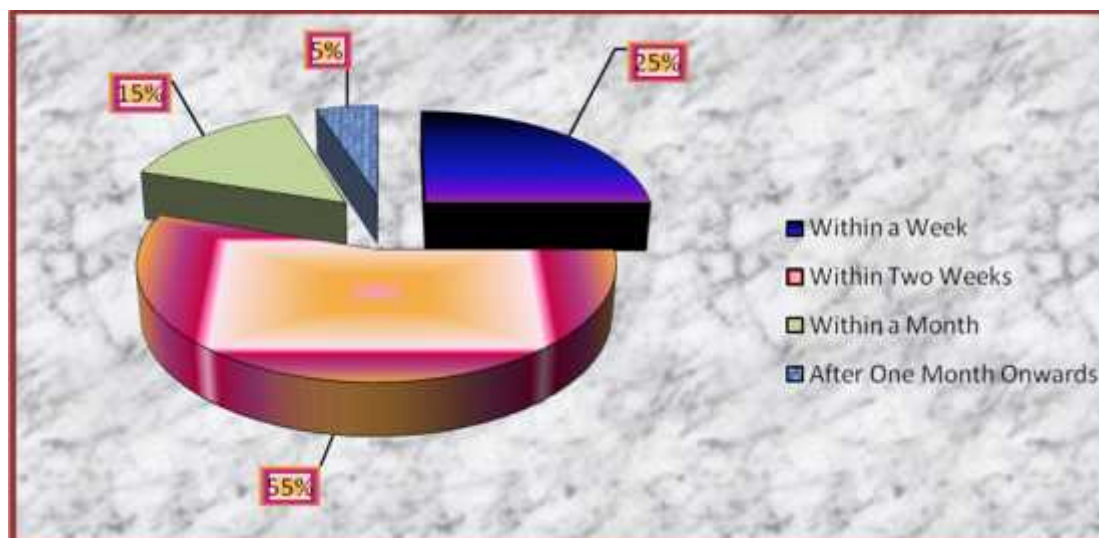
4.2.6 Crux for the Effective Management of Human Resource

Under CAMELs approach, management of the bank is also rated on. Thus to know the crucial measure that the bank should take for the effective management of the human resource, the respondents were asked on this regard. The responses obtained from them are presented in the table below.

Table 4.21

Crux for the Effective Management of Human Resource

Responses	NABIL		HBL		Total	
	No.	%	No.	%	No.	%
Good Working Environment	2	20	3	30	5	25
Incentive	1	10	2	20	3	15
Increased Facilities	1	10	1	10	2	10
Responsibility Increment	1	10	0	0	1	5
Promotion	2	20	2	20	4	20
Appropriate Position	3	30	2	20	5	25
Total	**10**	**100**	**10**	**100**	**20**	**100**

(Source: Field Survey, 2010)

The above table showed that the majority, 30%, of the respondents of NABIL said that by assigning the appropriate position to the appropriate employee, the productivity of the employee can be increased and the human resource could be effectively managed. Likewise, 20% respondents each said promotion and good working environment, 10% each said providing incentive, increased facilities and responsibility increment could be crucial for increasing the productivity of the employee.

In contrast, the majority, 30%, of the respondents of HBL forced the good working environment as the most crucial for productivity increment of employee, while 20% each stated incentive, promotion and appropriate position, and 10% increased facilities to increase productivity. In overall, the majority, 25%, of the total respondents, 5 out of 20, each stated the good working environment and appropriate position for productivity increment. Thus, considering the overall majority and the majority of each bank, it can be considered that the good working environment and appropriate position for appropriate employee are both equally crux for increasing the productivity of the staff.

Figure 4.20

Crux for the Effective Management of Human Resource
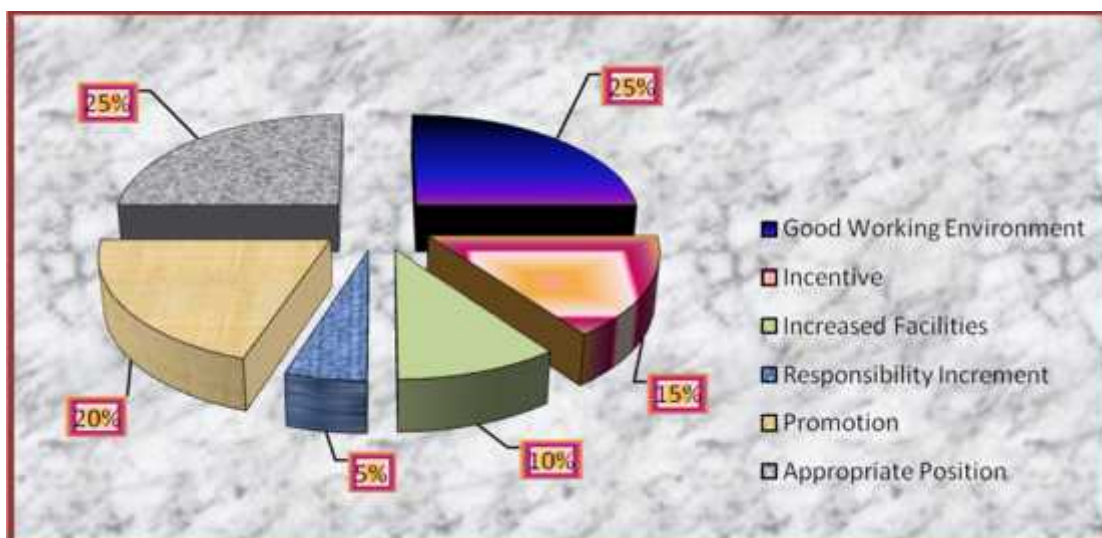
4.2.7 Suggestion to Increase Earning Capacity

The fourth component of CAMELs rating is concerned with the earning capacity of the bank. Thus, to examine what factor most led to increase the earning capacity, the respondents were asked to provide their suggestion. The responses obtained from them are presented in the table below.

Table 4.22

Suggestion to Increase Earning Capacity

Responses	NABIL		HBL		Total	
	No.	%	No.	%	No.	%
Promote Non-Int. Deposit	0	0	1	10	1	5
Reduce Operating cost	1	10	0	0	1	5
New Deposit Scheme	1	10	1	10	2	10
Sound Credit Policy	5	50	4	40	9	45
Investment Diversification	2	20	3	30	5	25
Increase Emp. Productivity	1	10	1	10	2	10
Total	**10**	**100**	**10**	**100**	**20**	**100**

(Source: Field Survey, 2010)

The above table showed that the majority, 50%, of the respondents from NABIL suggested that sound credit policy of the bank increases the earning capacity. After that, 20% said diversification of investment, 10% each said reducing the operating cost, increasing employee productivity and introducing new deposit scheme increases the earning capacity.

Alike in NABIL, the majority, 45%, of the respondents from HBL were in the view that sound credit policy is the most requirements for increasing earning capacity. Likewise, 30% said investment diversification and 10% each suggested promoting non-interest bearing deposit, new deposit scheme and increasing employee productivity for enhancing earning capacity. Hence, looking the responses from each bank individually and the overall majority of the responses, it can be concluded that bank needs to have sound credit policy most in order to ameliorate the earning capacity.

Figure 4.21

Suggestion to Increase Earning Capacity
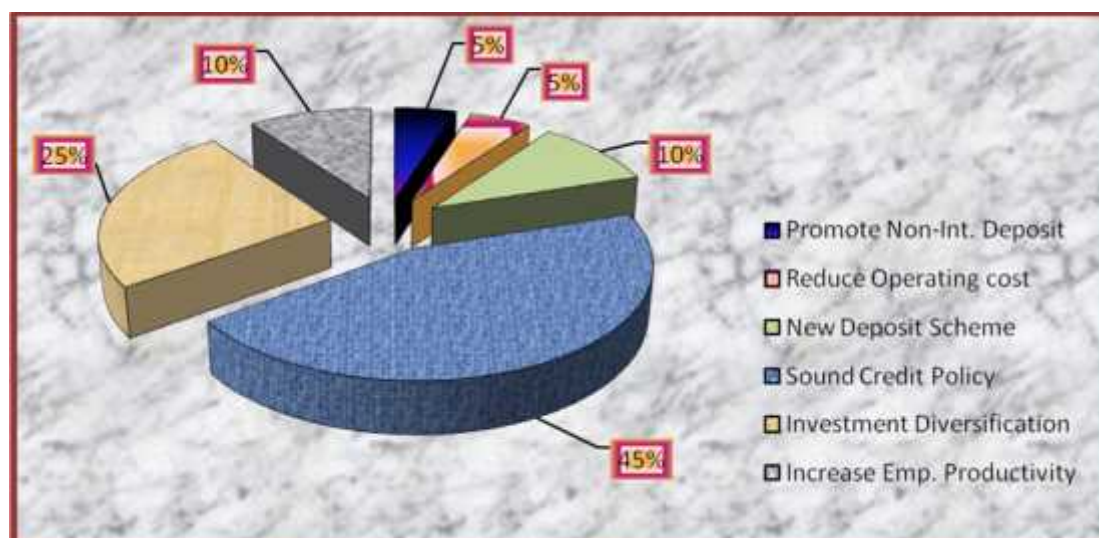
4.2.8 Adequacy of CRR to Ensure Deposit Security

The NRB has directed different uniform rate in different periods. Effective from the fiscal year 2003/04, the NRB directed 5% of the total deposit as CRR, whereas for the fiscal year 2008/09 the CRR is 5.5%. Thus, to examine whether such percentage is sufficient to ensure the deposit security, the respondents were asked to express their opinions.

Table 4.23

Adequacy of CRR to Ensure Deposit Security

Responses	NABIL		HBL		Total	
	No.	%	No.	%	No.	%
Yes	4	40	5	50	9	45
No	4	40	4	40	8	40
Don't Know	2	20	1	10	3	15
Total	**10**	**100**	**10**	**100**	**20**	**100**

(Source: Field Survey, 2010)

The above table showed that 40% of the respondents of NABIL said that the CRR of NRB is adequate for ensuring the deposit security and thus reflects the sound liquidity. However, 40% of the respondents of NABIL were in the view

that the CRR is not adequate and the other 20% said don't know on this matter. Similarly, 50% of the respondents of HBL, 5 out of 10, stated that the CRR is sufficient for ensuring the security of depositholders and liquidity of the banks, while 40% of the respondents of HBL, 4 out of 10, said that the CRR is not adequate to reflect the liquidity and ensure the security, and 10% of the respondents, 1 out of 10, said don't know.

In overall, 45% of the respondents agreed on the adequacy of CRR to ensure the deposit security, 40% disagreed and 15% remained neutral. Thus considering the majority of the overall, it can be assumed that the CRR is sufficient in ensuring the deposit security.

Figure 4.22

Adequacy of CRR to Ensure Deposit Security
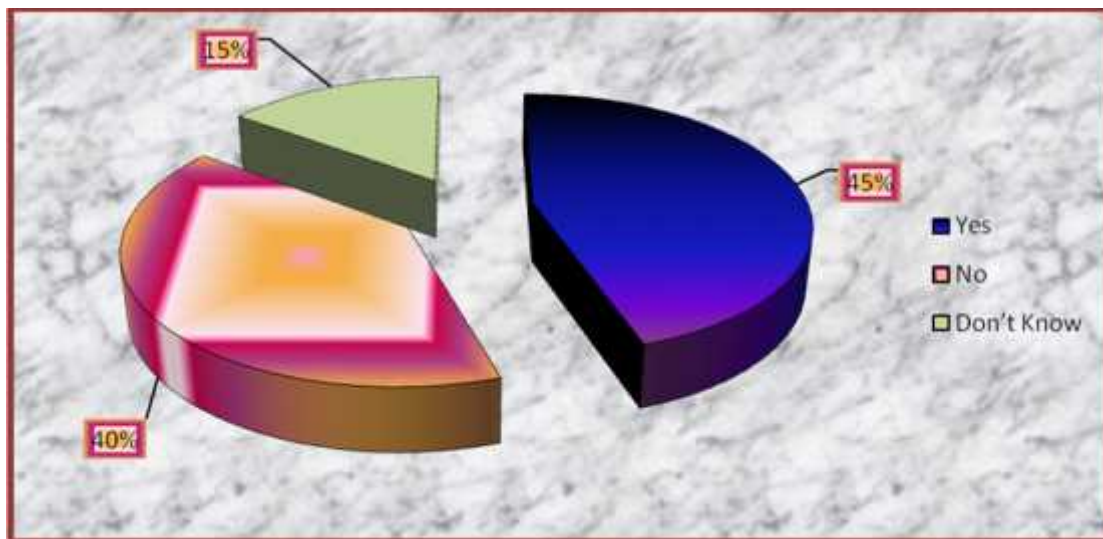
4.2.9 Most Affecting Market Risk

The sixth component of the CAMELS deals with the sensitivity to the market risk. Thus to investigate the market risk that mostly affects the earnings and/or capital of the bank, the respondents were asked to express their opinions.

Table 4.24

Most Affecting Market Risk

Responses	NABIL		HBL		Total	
	No.	%	No.	%	No.	%
Interest Rate Change	6	60	4	40	10	50
Exchange Rate Fluctuation	3	30	4	40	7	35
Commodity Price Change	1	10	2	20	3	15
Total	**10**	**100**	**10**	**100**	**20**	**100**

(Source: Field Survey, 2010)

The above table showed that the majority of the total respondents, 10 out of 20 (50%), stated that the interest rate change in the market mostly affects the earning and/or capital of the bank and hence is most risky than other market risks. Whereas, 35% of the respondents, 7 out of 20, stated that the exchange rate volatility is most risky, and 15% of the respondents, 3 out of 20, said commodity price change as the most risky market risk.

Gazing the respondents of each bank, the majority of the NABIL respondents, 60%, and the 40% of the HBL respondents suggested interest rate change as the most risky market risk, while 30% of the NABIL respondents, and 40% of the HBL respondents implied exchange rate fluctuation, and 10% of the NABIL respondents and 20% of the HBL respondents assumed commodity price change as the most risky market risk. Considering the overall majority, it can be concluded that the interest rate change is the most risky market risk that inversely reflects the earning and/capital of the bank.

Figure 4.23

Most Affecting Market Risk

Legend:
- Interest Rate Change
- Exchange Rate Fluctuation
- Commodity Price Change

Values shown: 50%, 35%, 15%
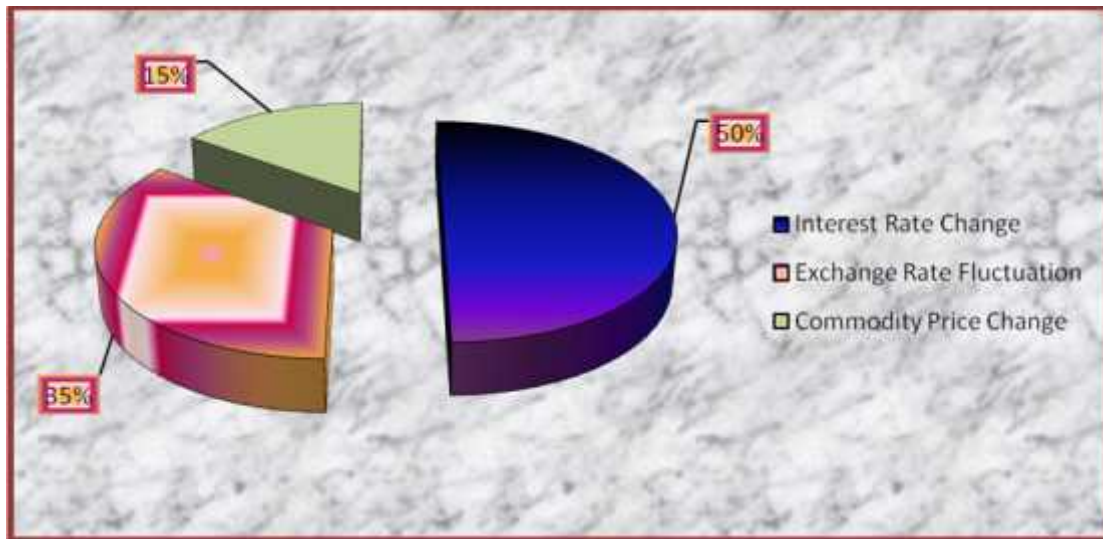
4.3 Major Findings of the Study

After analyzing both the primary and secondary data with the aid of CAMELS framework, the following major findings have been drawn;

Findings from Secondary Data Analysis

) The core capital adequacy ratio maintained by both the banks met the minimum core capital adequacy ratio set by NRB. In average, the core capital adequacy ratio of NABIL was 9.88% and HBL was 8.95%. And the supplementary capital adequacy ratio was below the maximum requirement of NRB. However, the capital adequacy ratio maintained by the both the banks did not meet the minimum requirement in most of the years.

) The non performing loan to total loan of both the banks was lower than the industry average. In average, the ratio of NABIL was 1.07%, HBL was 4.44% and industry was 14.34%. Similarly, the average loan loss provision to total loan of NABIL was 2.30% and that of HBL was 5.09%. On the basis of these ratios, the assets quality of NABIL was less risky than that of HBL.

- The average operating expenses to operating income of NABIL was 29.47% and that of HBL was 40.14%. Similarly the earning per employee of NABIL was Rs. 1.62 and HBL was Rs. 0.92. Hence, management of NABIL was more sound than that of HBL.

- The average ROSE of NABIL was 32.32% and HBL was 23.65%. Likewise, the average ROA of NABIL was 2.55% and that of HBL was 1.56%. Similarly, the net interest margin of NABIL was 67.08% and HBL was 59.24%, and EPS of NABIL was Rs. 117.37 and HBL was Rs. 58.49%. Considering these all, the earning quality of NABIL was better than that of HBL.

- The average liquid assets to total assets of NABIL was 25.80% and HBL was 29.72%. In most of the years, the CRR maintained by both the banks did not meet the minimum requirement of NRB, indicating poor liquidity position. In average, the CRR of NABIL was 4.38% and HBL was 4.90%. Likewise, cash at vault to total deposit of NABIL was 1.36% and HBL was 1.03%. In overall, the liquidity position of HBL was superior to that of NABIL.

- The net financial assets of NABIL was more sensitive to the interest rate than that of HBL. The NII of NABIL was 28.68% and HBL was 18.46%.

Findings from Primary Data Analysis

- 55% of the respondents were satisfied with the onsite banking supervision of NRB. The majority of the respondents, 60%, opined that the proposed CAR ratio, 10%, of NRB is better than that directed by BASEL and the existing ratio of 12%.

- 85% of the respondents agreed that NPA has inverse impact on the financial health of the bank. And 45% suggested that monitoring the activities of the borrower is the best method for resolving the problem of NPA. Likewise, 55% suggested that the bank should follow up recovery within the two weeks after due date.

- 25% of the respondents each suggested that good working environment and the appropriate position for the appropriate employee are equally crucial to increase the employee productivity and thus enhance the human resource management, the 3rd component of CAMELS.
- 45% of the respondents said that the sound credit policy is most for increasing the earning capacity of the banks. While only 25% stated for the diversification of investment.
- Regarding to liquidity, 45% said that the CRR is adequate for ensuring the security of the deposit. Among the three market risks, interest rate change, exchange rate fluctuation and commodity price change, the majority of the respondents said that the interest rate change is the most risky market risk to affect the earnings and/or capital.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

How should the strength of banks be best assessed? Answering this question is at the core of the business of two very different economic agents: policymakers and credit rating agencies. While the policymaker's main objective is to minimize the costs associated with existing financial-markets safety nets, the objective of rating agencies is to provide investors with an adequate measurement of the risks involved in instruments issued by the financial institutions they rate.

In evaluating the financial performance and condition of banks, regulators use a combination of on-site examinations and off-site surveillance systems. During an on-site exam, regulators visit a bank's offices to evaluate its financial soundness and compliance with laws and regulatory policies, to assess the quality of its management team, and to evaluate its systems of internal control. Based on the findings of the exam, regulators assign the bank a composite rating, known by the acronym CAMELS, which refers to the six components of the regulatory rating system: capital adequacy, asset quality, management, earnings, liquidity, and sensitivity. The main goals of bank supervision are generally to act as a delegated monitor on behalf of insured depositors or other stakeholders, to protect the safety and soundness of the financial system, and to counteract the moral hazard incentives created by the government safety net. However, changes in supervisory policy also may have significant effects on macroeconomic or regional economic health if banks respond by altering their lending behavior.

Bank supervisory authorities assign each bank a score on a scale of one (best) to five (worst) for each factor. If a bank has an average score of one or two it is considered to be a high-quality institution, while banks with scores of three or more are considered less-than-satisfactory. If CAMELS ratings were made public, they are very likely to have an impact on the prices of bank securities, and the current information-sharing relationship between examiners and bankers for

supervisory monitoring could be adversely changed. As a result, CAMELS ratings are often held in high confidentiality and known only to a financial institution's top management.

For the study, two banks, namely Nepal Arab Bank Limited and Himalayan Bank Limited, have been selected to measure the financial performance in the framework of CAMELS rating, onsite supervision. To achieve the objective set out both the secondary data and primary data have been used and different statistical tools were extensively used.

5.2 Conclusion

On the basis of secondary data analysis, it can be concluded that the capital foundation of NABIL was more adequate than that of HBL in protecting its depositors and creditors and in commensuration the risk associating activities, since the average CCAR of NABIL was higher than that of HBL. Further, both the banks have maintained Tier 1 capital adequately above the NRB standard. However, the CAR ratio verified that both the banks were failed to comply with the NRB's norms in most of the years. The assets management indicated that NABIL was more successful than HBI in managing the assets, since the loan and advances of NABIL was less risky than that of HBL. Also, the loan loss provision to total loan disbursement further enlightened that NABIL had better coverage of pass loans and restructured loan on total loan.

The management component of CAMELS rating showed that NABIL was more success than HBL in controlling operating expenses in comparison to operating income. In addition, the earning per employee indicated that the employee of NABIL was more productive than that of HBL. Thus, it can be inferred that NABIL was more success in managing human resource than HBL. The earning component of CAMELS rating verified that NABIL had the higher income earning capacity than HBL from effectively mobilizing the shareholder's equity, since the ROSE of NABIL was higher than that of HBL. Also, it can be concluded that NABIL had the greater capacity than HBL in effectively mobilizing the total

assets to generate net profit. Further, NABIL was quite success than HBL in managing the interest expenses. Besides these, NABIL is the higher profit earning bank than HBL in terms of per share.

The liquidity component of CAMELS rating indicated that the liquidity position of HBL was more sound than that of NABIL, since the average liquid assets to total deposit of HBL was greater than that of NABIL. Although both the banks failed to meet the NRB's provision in most of the years within the last five fiscal years, it can be concluded that HBL had slightly more sound liquidity than NABIL on the basis of cash reserve ratio. However, in the context of cash at vault and total deposit, NABIL had better liquidity position than HBL. The last component, sensitivity to market elaborated that NABIL is more prone to the market than HBL, since the RSAs and RSLs is more sensitive with the interest rate in NABIL than in HBL in the short run maturity.

Similarly, the primary data buttress to conclude that most of the respondents were satisfied with the onsite banking supervision of NRB. However, the proposed CAR ratio is better than that directed by BASEL and the existing ratio. Further, the majority of the respondents agreed that NPA has inverse impact on the financial health of the bank, monitoring the activities of the borrower is the best method for resolving the problem of NPA, and the bank should follow up recovery within the two weeks after due date. Further, it can be concluded that good working environment and the appropriate position for the appropriate employee are equally crucial to increase the employee productivity and thus enhance the human resource management, the 3rd component of CAMELS. Also, sound credit policy is most for increasing the earning capacity of the banks. Eventually, it can be concluded that that the previous CRR is better than the existing CRR, as single uniform rate and among the three market risks; interest rate change, exchange rate fluctuation and commodity price change, interest rate change is the most risky market risk to affect the earnings and/or capital.

5.3 Recommendations

On the basis of the major findings drawn in the fourth chapter and the conclusion derived in this chapter, the following recommendations have been provided, within the context of CAMELS rating, for the enhancement of the banks operation;

- Although both the banks have met both the core capital adequacy ratio and the supplementary capital adequacy ratio, the banks did not meet the capital adequacy ratio, which may jeopardize the bank in relation to risk. So, both the banks, NABIL & HBL, should meticulously synchronize the CCAR and SCAR to meet the CAR.

- Even though the non performing loan to total loan of NABIL and HBL was far below the industry average ratio, both the banks need to trace out the causes of default loan and should shrewdly prevent such circumstances.

- The management quality analysis, third component of CAMELS, showed that HBL's management was weak compared to that of NABIL. So, HBL needs to inevitably ameliorate its performance by increasing the productivity of the staff, controlling the operating expenses and others that are related to managing the system.

- The earning quality analysis, the fourth component of CAMELS, need to be enhanced in HBL compared to that of NABIL. The shareholder's equity, total assets and loan of HBL should be mobilized in most fruitful sector.

- NABIL should concern more in having adequate liquidity. Further, both the banks need to upgrade the cash reserve ratio, which was lower than that of the NRB's minimum requirement in most of the year.

- The onsite supervision of NRB should be made more than once in a year, if NRB seems essential, in order to bind the bank to be in compliance with the direction.

- NRB should strictly adopt fines and penalties to those banks who fail to meet the direction.

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APPENDIX – I

QUESTIONNAIRE

Dear Sir/Madam,

In order to meet the partial requirement for the fulfillment of Master's Degree of Tribhuvan University, I am doing research entitled "Comparative Study of Financial Status & Performance of Nabil Bank Limited & Himalayan Bank Limited in the Framework of CAMELS Rating System". So, in order to achieve the objective the study, I humbly request you to fill up the below questionnaire, which are merely related to the CAMELS components.

Respondents;

Name (Optional): ……………………   b) Position: ………………………

Bank   : …………………….

Please tick out the appropriate answer choice;

1. Are you satisfied with the onsite supervision and the ratings of NRB for your bank?

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

2. The minimum capital adequacy ratio (CAR) as per BASEL II is 8%, however, NRB has directed it to be 12% till now, and proposed 10% from 2009/10. In your opinion what should be the ratio?

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

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

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

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

    a) Strict Recovery Policy   c) New rule and regulations

    b) Monitoring   d) Rebate for timely Payment

5. If the borrower is having with overdue outstanding, the bank should start follow up;

    a) Within a week   c) Within one month

    b) Within two weeks   d) After one month onwards

6. To increase the productivity of the staff and effective management of human resources, what is crucial?

   a) Good working environment   b) Incentive   c) Increased Facilities

   d) Responsibility Increment   e) Promotion   f) Appropriate Position

7. To increase the earning capacity of the bank, what do you suggest?

   a) Promote non-interest Bearing Deposit

   b) Reduce Operating Cost

   c) New Deposit Scheme

   d) Sound Credit Policy

   e) Investment Diversification

   f) Increase Employee Productivity

8. As per the NRB direction, effective from the fiscal year 2003/04 each bank has to keep 5% of the deposit and from the fiscal year 2008/09 the ratio should be 5.5% of the deposit as cash at NRB. Is such provision adequate for ensuring the security of customer's deposit?

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

9. Which of the following market risk mostly affects the earning of the bank's liquidity?

   a) Interest Rate Change

   b) Exchange Rate Fluctuation

   c) Commodity Price Change

Thank you for your time and effort.

Sincerely,

………………………

Manita Thapa Magar

Shanker Dev Campus

MBS

Calculation of Mean, Standard Deviation and Coefficient of Variation of CCAR

Year	NABIL X	HBL Y	$x = X - \bar{X}$	$y = Y - \bar{Y}$	x^2	y^2
2003/04	11.35	8.33	1.47	-0.68	2.15	0.46
2004/05	10.18	8.65	0.30	-0.36	0.09	0.13
2005/06	10.4	9.61	0.52	0.60	0.27	0.36
2006/07	8.75	9.64	-1.13	0.63	1.29	0.40
2007/08	8.74	8.81	-1.14	-0.20	1.31	0.04
Total	**49.42**	**45.04**			**5.10**	**1.39**

i) Calculation of Mean

        For NABIL   For HBL

Mean $\bar{X} = $ X/5   =   9.88 $\bar{Y} = $ Y/5   =   9.01

iii) Calculation of Standard Deviation ( )
For NABIL   For HBL

$$\sigma_x = \sqrt{\frac{(x-\bar{x})^2}{N-1}} = \sqrt{\frac{5.10}{4}} \qquad \sigma_y = \sqrt{\frac{(y-\bar{y})^2}{N-1}} = \sqrt{\frac{1.39}{4}}$$

       =   1.13   =   0.59

iii) Calculation of Coefficient of Variations
For NABIL   For HBL

$C.V._x = \dfrac{\sigma_x}{\bar{X}} = \dfrac{1.13}{9.88}$ $C.V._y = \dfrac{\sigma_y}{\bar{Y}} = \dfrac{0.59}{9.01}$

       =   11.42   =   6.54

Note: a) The data of core capital adequacy ratio has been extracted from the annual reports
*   of the respective banks which is presented in the previous page (financial indicators).*
*   b) The mean, standard deviation and coefficient of variation of other variables have*
*   been calculated using the same above process.*

NABIL's CAMEL ratios

FY	Capital Adequacy Ratio			Assets Quality Ratios					
	CCAR	SCAR	CAR	NPL	LA	Ratio	LLP	LA	Ratio
2004/05	11.35	1.09	12.44	144.51	10946.74	1.32	360.57	10946.74	3.29
2005/06	10.18	1.52	12.31	182.62	13278.78	1.38	356.24	13278.78	2.68
2006/07	10.4	1.64	12.04	178.29	15903.02	1.12	357.24	15903.02	2.25
2007/08	8.75	2.35	11.1	161.09	21759.46	0.74	394.41	21759.46	1.81
2008/09	8.74	1.96	10.7	224.82	27999.01	0.8	409.08	27999.01	1.46
Mean	**9.88**	**1.71**	**11.72**			**1.07**			**2.3**
S.D.	**1.13**	**0.47**	**0.77**			**0.29**			**0.72**
C.V.	**11.42**	**27.67**	**6.6**			**27.13**			**31.35**

FY	Management Quality Ratios					
	Op. Exps.	Op. Inc.	Ratio	NPAT	Emp. No.	Ratio
2004/05	389.82	1194.9	32.62	520.11	426	1.22
2005/06	402.48	1359.51	29.6	635.26	441	1.44
2006/07	428.34	1480.16	28.94	673.96	427	1.58
2007/08	483.65	1670.43	28.95	746.47	416	1.79
2008/09	605.06	2220.98	27.24	1031.05	505	2.04
Mean			**29.47**			**1.62**
S.D.			**1.97**			**0.32**
C.V.			**6.67**			**19.61**

FY	Earning Quality Ratios									
	NPAT	SE	ROSE	NPAT	TA	ROA	Net Int.	Int. Inc.	NIM	EPS
2004/05	520.11	1657.63	31.38	520.11	17064.08	3.05	825.21	1068.75	77.21	105.49
2005/06	635.26	1874.99	33.88	635.26	22329.97	2.84	952.84	1310	72.74	129.21
2006/07	673.96	2057.05	32.76	673.96	27253.39	2.47	1032.05	1587.76	65	137.08
2007/08	746.47	2437.2	30.63	746.47	37132.76	2.01	1220.26	1978.7	61.67	108.31
2008/09	1031.05	3130.24	32.94	1031.05	43867.39	2.35	1645.21	2798.49	58.79	106.76
Mean			**32.32**			**2.55**			**67.08**	**117.37**
S.D.			**1.3**			**0.41**			**7.7**	**14.7**
C.V.			**4.02**			**16.1**			**11.47**	**12.53**

FY	Liquidity Ratios								
	Liquid Assets	Total Deposit	Ratio	NRB Bal.	TD	Ratio	CAV	TD	Ratio
2004/05	3846.24	14586.61	26.37	389.71	14586.61	2.67	146.35	14586.61	1
2005/06	4666.6	19347.4	24.12	318.36	19347.4	1.65	237.82	19347.4	1.23
2006/07	6771.71	23342.29	29.01	1113.42	23342.29	4.77	270.41	23342.29	1.16
2007/08	9270.39	31915.05	29.05	1829.47	31915.05	5.73	511.43	31915.05	1.6
2008/09	7631.5	37348.25	20.43	2648.6	37348.25	7.09	674.39	37348.25	1.81
Mean			**25.8**			**4.38**			**1.36**
S.D.			**3.63**			**2.22**			**0.33**
C.V.			**14.08**			**50.68**			**24.46**

Note: The data have been extracted from the annual reports of NABIL, which have presented in the appendix-III, appendix-IV, appendix-V and appendix-Vi, and the calculations have been done using Microsoft Excel formuale as for CCAR.

HBL's CAMEL ratios

| FY | Capital Adequacy Ratio | | | Assets Quality Ratios | | | | | |
	CCAR	SCAR	CAR	NPL	LA	Ratio	LLP	LA	Ratio
2004/05	8.33	2.68	11.01	1001.4	13451.17	7.44	1026.65	13451.17	7.63
2005/06	8.65	2.62	11.26	1040.8	15761.98	6.6	1119.42	15761.98	7.1
2006/07	9.61	1.51	11.13	641.61	17793.72	3.61	795.72	17793.72	4.47
2007/08	9.64	3.06	12.7	477.23	20179.61	2.36	682.09	20179.61	3.38
2008/09	8.81	2.21	11.02	551.31	25519.52	2.16	726.36	25519.52	2.85
Mean	**9.01**	**2.42**	**11.42**			**4.44**			**5.09**
S.D.	**0.59**	**0.59**	**0.72**			**2.44**			**2.17**
C.V.	**6.54**	**24.39**	**6.31**			**55.11**			**42.68**

| FY | Management Quality Ratios | | | | | |
	Op. Exps.	Op. Inc.	Ratio	NPAT	Emp. No.	Ratio
2004/05	455.97	1195.92	38.13	308.28	501	0.62
2005/06	564.29	1393.53	40.49	457.46	561	0.82
2006/07	613.79	1393.36	44.05	491.82	584	0.84
2007/08	636.53	1597.5	39.85	635.87	591	1.08
2008/09	759.3	1988.05	38.19	752.83	591	1.27
Mean			**40.14**			**0.92**
S.D.			**2.42**			**0.25**
C.V.			**6.02**			**27.53**

| FY | Earning Quality Ratios | | | | | | | | | |
	NPAT	SE	ROSE	NPAT	TA	ROA	Net Int.	Int. Inc.	NIM	EPS
2004/05	308.28	1541.75	20	308.28	27418.16	1.12	884.51	1446.47	61.15	47.91
2005/06	457.46	1766.18	25.9	457.46	29460.39	1.55	977.63	1626.47	60.11	59.24
2006/07	491.82	2146.5	22.91	491.82	33519.14	1.47	1008.17	1775.58	56.78	60.66
2007/08	635.87	2512.99	25.3	635.87	36175.53	1.76	1139.91	1963.65	58.05	62.74
2008/09	752.83	3119.88	24.13	752.83	39320.32	1.91	1407.42	2342.2	60.09	61.9
Mean			**23.65**			**1.56**			**59.24**	**58.49**
S.D.			**2.34**			**0.3**			**1.77**	**6.06**
C.V.			**9.9**			**19.28**			**2.99**	**10.36**

| FY | Liquidity Ratios | | | | | | | | |
	Liquid Assets	Total Deposit	Ratio	NRB Bal.	TD	Ratio	CAV	TD	Ratio
2004/05	7925.28	24814.01	31.94	1604.15	24814.01	6.46	286.53	24814.01	1.15
2005/06	7866.95	26490.85	29.7	1096.25	26490.85	4.14	305.43	26490.85	1.15
2006/07	9922.24	30048.42	33.02	1272.54	30048.42	4.23	177.24	30048.42	0.59
2007/08	9438.33	31842.79	29.64	935.84	31842.79	2.94	278.18	31842.79	0.87
2008/09	8431.62	34681.34	24.31	2328.41	34681.34	6.71	473.76	34681.34	1.37
Mean			**29.72**			**4.9**			**1.03**
S.D.			**3.36**			**1.63**			**0.3**
C.V.			**11.29**			**33.24**			**29.27**

Note: The data have been extracted from the annual reports of HBL, which have presented in the appendix-III, appendix-IV, appendix-V and appendix-Vi, and the calculations have been done using Microsoft Excel formuale as for CCAR.