

# CHAPTER I

## INTRODUCTION

### 1.1 General Background

Nepal, a federal democratic republic, is a landlocked country lying between India and the Tibetan Autonomous Region of China. It is the birth place of Buddha and has tallest mountain in the world-Mount Everest (8,850 m). It has agro based economy with diverse ethnicity, religions and languages. Nepal is a multi-cultural, multi-linguistic and multi-religious country. Nepal has a various landscape, ranging from the Terai plains in the south to the mountainous Himalayas in the north, which makes it a major tourist destination.

Nepal estimated population in 2008 was 29,519,114 and growth rate was 2 %. Birth rate: 29.9/1000; infant mortality rate: 62.0/1000; life expectancy: 60.9; density per sq km: 206. Asian Development Bank in 2008 has showed that Nepal is one of the poorest country in the world with per capita income \$ 388 per annum. Nepal estimated GDP in 2007 was \$10.328 billion. Though Nepal has made slow and stable progress in reducing poverty in the past period with poverty rate estimated to have declined to 31% in 2004 from 42% in 1996, Nepal has lasting poverty in many parts of the country since 80% of Nepal population still lives in rural areas and the country is described by small landholdings, rapid population growth and a weak ecosystem (ADB, 2008).

Nepal's first attempt towards planned economic development started in 1956 when it initiated its first development plan. The current three year interim plan of the government which started from fiscal year 2008 and which will continue till fiscal year 2010, to guide development over the transitional period after the conflict, plays a vital role to emphasise on reducing poverty, improving the living conditions of the poor, and establishing lasting peace and stability. The plan target is to achieve

annual average economic growth of 5.5% and to bring overall poverty rate to 24% by FY 2010 (ADB, 2008).

Financial infrastructure of the economy consists of financial institution, financial intermediation and financial market. Development of financial infrastructure is one of the strategic variables to uplift the economy. Financial institution play the vital role in the progress of economic growth of the country. Financial institution helps the process of resource mobilization. It collects funds from the public and put them in financial assets, such as deposits, loans and bonds rather than tangible property.

Financial institutions provide service as intermediaries of the debt and capital markets. They are responsible for transferring funds from lenders to borrowers, in need of those funds. The presence of financial institutions makes easy the flow of money through the economy. For this, savings are combined to moderate the risk brought to provide funds for loans. Depository institutions provide loans to and accept deposits from, nonfinancial firms (and individuals), while nonfinancial firms provide deposits to, and obtain loans from, depository institutions (Saunders and Cornett, 2004:315). Thus the depository institutions mobilize the resources by transferring from surplus units to deficit units. They provide depositors highly liquid divisible assets at a lower risk while the borrowers receive resources as per their need. But satisfaction of savers and borrowers decides the success of intermediary function of the financial institutions.

One of the important financial institutions in the economy are banks and the banking sector play an important role in the development of the economy of the country. Commercial banks are the largest group of depository institutions appraised from asset size and play a significant role in economic growth and development of under-developed countries like Nepal. Commercial banks are the nerve-centre of the capital market, industrial and trading activities of a country (Singh, 2005:11). For the economic development of the country commercial bank play vital role by

helping in mobilization of saving, helping in the development of the priority sector, directing funds into desired channels, implementation of the policies of the government, implementation of monetary policy etc.

The history of modern financial system of Nepal was begun in 1937 A.D. with the establishment of the Nepal Bank Ltd. (NBL) as the first commercial bank of Nepal with the joint ownership of government and general public. The establishment of Nepal Rastra Bank as a central bank in 1956 A.D. was a significant milestone in the development of banking system. After the establishment of NRB, Nepal witnessed a systematic development of the financial system. A number of financial institutions were established like Nepal Industrial Development Corporation in 1959, Rastriya Banijya Bank in 1966, Agriculture Development Bank in 1968 and Securities Exchange Center in 1977.

As of the result of liberal economic policy of the government, Nepal opened its doors to foreign investors as joint venture partners in the banking sector, which transformed commercial banking services in Nepal. Joint ventures are the result of contract between two or more parties to undertake a venture and to share the profit or loss there of in agreed partnership. As a first joint venture bank in Nepal, Nabil Bank Ltd. was established in 1984 A.D. Similarly Nepal Investment Bank Ltd., Standard Chartered Bank Ltd. and Himalayan Bank Ltd., were established under joint venture in 1986, 1987 and 1993 A.D. respectively. The established joint venture banks gave a new horizon and dimensions to the financial sector of the country. Besides, competing joint venture commercial banks have played a crucial role in modernizing the banking system. At present there are 25 Commercial Banks including joint venture commercial banks in Nepal. The most recent ones established so far are Citizens Bank International Ltd., Prime Commercial Bank Ltd., Bank of Asia Nepal Ltd., Sunrise Bank Ltd., NMB Bank Ltd. etc.

Nepal Bangladesh Bank Ltd. was launched in June 1994 with an authorized capital of Rs.240 million and Paid up capital of Rs.60 million as a Joint Venture Bank with International Finance Investment & Commerce Bank Ltd. of Bangladesh. Nepal Bangladesh Bank Ltd has 1 corporate office and 17 branches. The major

objective of the bank is to provide banking services to the different divisions such as industries, businessmen, priority sector, entrepreneurs, weaker section of the society and every other people who need banking services. Nepal Bangladesh Bank Ltd. is providing complete Commercial Banking services to its customers. In addition accepting deposits it provides services like consortium finance, working capital loan, term loan, demand loan, hire purchase loan, education loan, housing loan, trade finance, letter of credit, bank guarantee, bills purchase, remittance service, locker facility, ATM, any branch banking & SMS banking. The bank has its Nostro Correspondents in countries like India, Australia, USA, UK, Japan and other parts of the world.

The bank was in great crisis in November 2006. The Bank had had deteriorating financial health with huge losses since huge sum of money had gone to the bad loan. So, Nepal Rastra Bank took the charge of the management of the bank. Currently Bank is being handled by Joshi Group and the bank is in recovery process.

## **1.2 Focus of the Study**

Here the focus is to analyze the financial performance of Nepal Bangladesh Bank Ltd. in the framework of CAMEL. Financial performance analysis is the process of spotting out the strength and weakness of the firm by associating relationship between items of the balance sheet and profit and loss account. More specifically the study focuses on trend of capital adequacy ratio comparing with NRB Standard, non-performing loan ratios comparison with industrial average, trend of loan loss ratio, trend of operating expenses ratio, trend of earning per employee, trend of return on equity, return on assets, net interest margin, profit margin and earning per share and trend of cash and equivalent to total deposit, cash and equivalent to total asset, cash balance with NRB to total deposit, cash in vault to total deposit and loan to deposit ratios comparing with industrial average of the study period of six years from FY 2000/01 to 2005/06.

### **1.3 Statement of Problem**

The financial position of any financial institution should be analyzed from CAMEL approach. The rising profits and high stock price of any bank doesn't prove its sound health. To be a sound bank it should be appraised from CAMEL approach. So any bank's soundness should be determined on the basis of capital adequacy, asset quality, management quality, earning quality, liquidity quality and sensitivity to market risk. Thus, the general problem of the study will go through the analysis of financial performance of NBBL in the framework of CAMEL. The specific problems are as follows:-

- a) How the bank is managing its capital adequacy?
- b) What is the trend of non-performing loan and loan loss provision in the bank?
- c) How the bank is managing their expenses with respect to revenues?
- d) What is the trend of earnings made by the bank?
- e) What is the trend of liquidity position of the bank?

### **1.4 Objectives of the Study**

The fundamental objective of the study will be to analyze the financial performance of NBBL in the framework of CAMEL. The specific objectives of the study are as follows:-

- a) To investigate the bank's capital adequacy.
- b) To investigate the trend of non-performing loan and loan loss provision in the bank.
- c) To evaluate the bank's managing their expenses with respect to revenues.
- d) To evaluate the trend of earning made by the bank.
- e) To evaluate the trend of liquidity position in the bank.

## **1.5 Significance of the Study**

Research work has importance since it creates new things and information and includes new writing in the existing field. The significance of the study is to fill the research gap in the area of financial performance analysis in the framework of CAMEL, of commercial bank with respect to Nepal Bangladesh Bank Ltd. The first and foremost importance of the study is to the researcher for accomplishing the academic requirement of master degree. It is also important to the NBBL itself, since the study has shown many weaknesses of the bank and has given some valuable recommendations. It will be also useful to commercial banks, investors, shareholders, customers, researchers and other interested people. The study is valuable in adding new things in the field of commercial banks and their financial performance analysis.

## **1.6 Limitations of the Study**

Every study has limitations since it can't cover every field. So this research work is also not exceptional. This research has been conducted to fulfill the requirement for the degree of master of business studies. So the study may not be able to show the consistency and accuracy in every area. Mainly the study has limitations in the following area:

1. This study is confined to financial performance analysis in the framework of CAMEL of Nepal Bangladesh Bank Ltd. So the whole study will revolve around financial performance analysis of NBBL.
2. The study has covered the period of six years (FY 2000/01 to FY 2005/06) and the study is dependent on data taken from secondary sources. It hasn't covered FY 2006/07 and 2007/08 because after the crisis on FY 2006 bank has not done any Annual General Meeting, thus bank has not taken out Annual Reports after FY 2006.
3. The data published by different authorities do not tally. Figure published by Nepal Rastra Bank and bank's annual report differ. These inconsistencies in data has been major limitation. However this study has given priority to the data published by bank.

## **1.7 Organization of the Study**

The study has been arranged into five chapters: Introduction, Review of Literature, Research Methodology, Presentation and Analysis of Data and Summary, Conclusions and Recommendations.

The introduction chapter comprises the general background, focus of the study, statement of the problem, objectives of the study, importance of the study, limitations of the study and organization of the study. Like wise review of literature comprises conceptual review and review of existing literature in the relevant areas. The third chapter research methodology is related to methodology implemented in the study. It includes research design, justification for the selection of study unit, nature and sources of data, data collection procedure, data processing, methods of data analysis and financial tools to measure financial performance. Similarly presentation and analysis of data deals with systematic presentation and analysis of data. Various financial and statistical tools have been used to analyze and interpret the data. The final chapter summary, conclusions and recommendations provides summary and conclusions of the study and offers important recommendations to be followed by bank for improvement in their financial achievements.

## CHAPTER II

### REVIEW OF LITERATURE

This chapter includes literature reviews relating to commercial banks and financial performance analysis occupying CAMEL. This includes conceptual background and review of related studies.

#### **2.1 Conceptual Background**

This sub-section exhibits the theoretical side of the study. It carries out concept of commercial bank, functions of commercial bank, historical development of commercial bank, concept of financial performance analysis, concept of CAMEL components etc.

##### **2.1.1 Concept of Commercial Bank**

Commercial banks are among the most important financial institutions in the economy. This institution accepts deposits from the public and advances loan to those who are in need. They provide various other services such as credit creation, agency work and general services besides dealing in money. In general a bank collects money from those who have to spare or who are saving it out of their income and it lends this money to those who require it. Therefore commercial bank is a commercial establishment which accepts deposits, advance loans, and at the same time repay the accepted deposits and make profits. A commercial bank is a type of financial intermediary. It raises funds by collecting deposits from lenders (businesses and consumers) and makes loans to borrowers (businesses and consumers). It also buys corporate bonds and government bonds. Its primary liabilities are deposits and primary assets are loans and bonds.

Commercial bank takes deposits from individuals and institutions, and pay interest on them. It lend money, whether in the form of overdrafts (short-term) or



longer-term loans (e.g. mortgages on houses). These banks also provide credit card services, trade finance and other services to companies. It is important to note that commercial banks serve both individuals and companies/organizations/governments.

### **2.1.2 Concept of Joint Venture Banks**

A joint venture is a unit formed between two or more parties to start economic activity together. The parties agree to create a new unit by both adding equity, and then sharing in the revenues, expenses, and control of the enterprise. The joint venture can be for a long term business relationship or for a specific endeavor only. A joint venture may be a corporation, limited liability company, partnership or other legal structure.

Joint ventures banks are mostly collaborations between a local and foreign company. Reasons to create Joint Venture Banks are to put up corporation's strengths, reducing costs and risks, economies of scale, approach to new technologies, approach to new customers, expanding financial resources, developing new managerial practices. And the competitive objectives to create joint venture banks are to anticipate competition, manipulating structural development of the industry, improving quickness, formation of stronger competitive entity, improving speediness to capture market etc. The other objectives are expansion, transfer of technologies and skills and synergies.

A joint venture is a legal corporation that takes the form of a short term or long term partnership in which the persons jointly undertake a transaction for shared profit. Generally each party contributes assets and share risks. Joint ventures can involve any type of business transaction and the parties involved can be individuals, groups of individuals, companies, or corporations.

Joint ventures are also extensively used by corporations to gain entrance into foreign markets. Foreign companies form joint ventures with domestic companies already present in markets the foreign companies would like to enter. The foreign companies normally bring new technologies and business/managerial practices into

the joint venture, while the domestic companies have the relationships and essential governmental documents within the country along with being established in the domestic industry.

### **2.1.3 Functions of Commercial Banks**

#### **Offering Savings Deposits/Accepting Deposits**

One of the earliest sources of funds consisted of offering savings deposits-interest bearing funds left with banks for a period of weeks, months, or years sometimes bearing relatively high rates of interest (Rose, 1999:8). This is one of the crucial functions because banks mainly depend on the funds deposited with them by the public. The banks collect money from those who have surplus to lend to those who require loans. Commercial banks accept deposits by mobilizing the savings of the depositors. They pay interest on the deposits to mobilize the savings and retain deposits. As per requirement people can deposit cash in either of the following accounts:-

##### **a. Saving Deposit Account**

This type of account mobilizes small savings of the people. There is a limit on total weekly withdrawals. Banks provide interest on this account but the interest rate is less than the interest provided in fixed deposit account.

##### **b. Current Deposit Account**

In this type of account a depositor can deposit and withdraw funds any number of times he likes. This type of account is opened by those who regularly withdraw and deposit funds. Generally the bank doesn't provide interest to the account holder.

##### **c. Fixed Deposit Account**

Cash is deposited in this type of account for fixed period of time. Depending on the length of time period and amount of deposit the banks pay higher rate of interest on such deposit. The depositor can withdraw the deposited amount only after the expiry of the period for which the deposit has been made.

#### d. **Recurring Deposit Account**

Here the depositor has to deposit specified amount every month for specified period of time and the amount cannot be withdrawn before the maturity of the given period except under the exceptional situation.

#### **Making Loans**

Another vital function of commercial bank is to advance loans. A certain portion of cash received as deposits is kept in the reserve and remaining is given as loan. Making loans is important because banks have to pay interest on deposits. The interest rate they charge on the loans is higher than the interest rate they pay on deposits and the difference is their profit. Banks grant following types of loans:-

- a. **Overdraft:** Here the borrower is allowed to withdraw more than his current balance. The drawee has to pay interest on extra amount withdrawn. Within the short period the amount has to be repaid. The service is offered for short term to trustworthy customers only.
- b. **Discounting Bills of Exchange:** Here, the bank buys the bill of exchange or promissory note before it is due and credits the value of the bill after a discount charge to the customer's account. The transaction is basically an advance against the security of the bill and the discount represents the interest on the advance from the date of purchase of the bill until it is due for payment.
- c. **Cash Credit:** It is a type of a loan given to customer on the basis of his current assets, receivables and fixed assets by pledging them in favor of the bank. The loan is given as a fixed amount. The banks open the account in the name of the borrower and allow him to withdraw cash at any time. Interest is charged to the whole amount whether the borrower withdraws the whole amount or part of it.
- d. **Money at Call:** It is a type of a loan which is for short period generally from 1 to 14 days. These loans are made to other banks and financial institutions
- e. **Call Loans:** It is a loan used to finance the purchase of securities, and which may be called at the discretion of the borrower or the lender on demand

- f. **Credit to Government:** Commercial Banks provide indirect credit to Government by investing in their securities.

### **Creation of Credit**

One of the fundamental functions of the bank is to create credit. Credit creation is the multiple expansions of banks demand deposits. Banks advance a major portion of their deposits to the borrowers and keep smaller parts of deposits to the customers on demand. This tendency on the part of the commercial banks to expand their demand deposits as a multiple of their excess cash reserve is called creation of credit. When a loan is advanced to an individual or a business concern, it is not given in cash. The bank opens a deposit account in the name of the borrower and allows him to draw upon the bank as and when required. The loan advanced becomes the gain of deposit by some other bank. Loans thus make deposits and deposits make loans.

### **Promoting Cheque System**

A cheque is the most accepted credit instrument used by the depositor to make payments. Cheque is the credit instrument through which the depositor directs the bank to make payment to the payee. Cheques have become more convenient method of settling debts than cash in the modern business transactions.

### **Agency Function**

Commercial banks offer agency functions to their customers. Such agency functions are as follows:

- a. **Remittance of Funds:** Banks transfer funds on behalf of the customer from one place to another through cheques, drafts etc.
- b. **Purchase and Sale of Securities:** On behalf of the customers commercial banks undertake the purchase and sale of several securities like shares, stocks, bonds, debentures etc.

- c. **Collection and Payment of Credit Instruments:** Commercial Banks are also involved in collecting and paying various negotiable instruments like cheques, bills of exchange, hundies, promissory notes etc. They also pay rents, income tax, fees, insurance premium, telephone/mobile bills etc on behalf of the customers.
- d. **Representation and Correspondence:** Commercial Banks also act as representatives and correspondents of the clients for involving in activities like booking of vehicles, plots, obtaining passports, travel tickets etc.
- e. **Bullion Trading:** Commercial banks also do business in bullions like gold and silver.
- f. **Collection of Dividends on Shares:** Commercial banks collect dividends on shares and interest on debentures of their customers.

### **General Utility Functions**

- a. **Locker Facilities:** Commercial Banks provide locker facilities to their customers for keeping their valuables and important documents at a very minimal annual rent.
- b. **Issuing of Traveler's Cheques:** Banks issue traveler's cheques which help their customers to travel without fear of loss of money and theft.
- c. **Issuing Letter of Credit:** Letter of credit is widespread in foreign trade. It is issued by the banks to their customers certifying their credit worthiness.
- d. **Carrying out Currency Exchanges:** History shows that one of the first services offered by banks was currency exchange—a bank stood ready to trade one form of currency, such as dollars, for another, such as francs or pesos, in return for a service fee. In today's financial market place, trading in foreign currency is usually carried out primarily by the largest banks due to risk involved and the expertise required to carry out such transactions (Rose, 1999:8).
- e. **Acting as Information Banks:** Commercial Banks collect the financial, economic and statistical data relating to industry trade and commerce and provide to various interested parties.

- f. **Acting as a Referee:** Banks act as a referee by giving information about the economic status of their customers to domestic and foreign traders if it is desired by their customers.
- g. **Acting as Underwriters:** Commercial Banks act as underwriters for underwriting new issues of Government and corporations for a commission.

#### **2.1.4 Historical Development of Bank**

The beginning of banking system can be traced to the beginning of genuine history. The priests of Greek temples carried on a successful business of safe keeping and lending, centuries before the development of modern banking.

The development of the modern banks has very small beginning. The former bankers were goldsmith who dealt in precious metals and, as such had to arrange for the safety of their wealth. Slowly people with surplus gold or money began to deposit their precious metal with such persons. While everyone believed in the honesty and ability of these goldsmiths to honor the receipts issued. Slowly the receipts began to pass from one hand to another hand in discharge of compulsions. In this way, these receipts began to circulate as bank notes. From experience the goldsmiths slowly get to know that only a small portion of the precious metal deposited with them was withdrawn by the depositors. So they started to lend out a part of these deposits to other borrowers.

The granting of credit began in very early stages in the growth process of civilization. In Babylon, credit was given even in 2000 B.C. In ancient Greece and Rome, the practice of granting credit was widely prevalent. As far as the banking institution of a public nature is concerned, the 'Bank of Venice' believed to be the first bank established in 1157. After that the 'Bank of Barcelona' and 'Bank of Geneva' were established in 1401 and 1407 respectively. The processes of present day commercial banking have their roots in the operations of the 17<sup>th</sup> century banks of Europe like Bank of Austerdum (Holland) in 1609, Bank of Hemberg (Germany)

in 1619 and Bank of England in 1694. After that in 18<sup>th</sup> century, the banking operations were done by joint stock companies which become the base for modern banking system (Singh, 2005:46).

A government office named "Tejarath Adda" used to provide some limited banking facilities like deposit and lending, only to government staff before modern banking was introduced in Nepal. Likewise there were group of merchants, who would sit around "Ason" a place in Kathmandu, providing currency exchange facility Indian currency to Nepali currency. They were also a type of money lender somehow meeting the local credit demand.

The history of modern financial system of Nepal was begun in 1937 A.D. with the establishment of the Nepal Bank Ltd. (NBL) as the first commercial bank of Nepal with the joint ownership of government and general public. Nepal Rastra Bank (NRB) was established after 19 years since the establishment of the first commercial bank ( i.e.,NBL). After the establishment of NRB, Nepal witnessed a systematic development of the financial system. In 1966 A.D. the second commercial bank, Rastriya Banijya Bank was established.

In the mid-eighties, Nepal opened its doors to foreign investors as joint venture partners in the banking sector, which revolutionized commercial banking services in Nepal. As a result Nabil Bank Ltd. was established in 1984 A.D. as a first joint venture bank in Nepal. Similarly Nepal Investment Bank Ltd., Standard Chartered Bank Ltd., Himalayan Bank Ltd., Nepal Bangladesh Bank Ltd. were established under joint venture in 1986, 1987, 1993 and 1994 A.D. respectively.

Most of the commercial banks came into existence after the restoration of democracy in 1990 A.D. At present there are 25 commercial banks in Nepal. The most recent ones established so far are Citizens Bank International Ltd., Prime Commercial Bank Ltd., Bank of Asia Nepal Ltd., Sunrise Bank Ltd., NMB Bank Ltd. etc.

### **2.1.5 Supervisory and Monitoring System of the Nepal Rastra Bank**

During the early period of the NRB's establishment, its effort was primarily focused on increasing the circulation of Nepalese currency throughout the country, developing the domestic banking system and stabilizing the exchange rates of Nepalese currency. It was only later, when the financial market began to expand, that the supervisory function of the Nepal Rastra Bank started to gain importance.

The NRB Act 2012 had empowered Nepal Rastra Bank to conduct the supervision of financial institutions. This Act was subsequently replaced by NRB Act 2058 which has provided more autonomy, authority and accountability to the core central banking function, which undoubtedly includes the supervision function as well. Since then, the supervisory oversight and regulatory functions of the bank have been enhanced considerably.

After the establishment of Nepal Rastra Bank, a Supervision Unit was instituted in NRB to execute the supervision function. Slowly as the supervisory function started to gain importance, this unit was converted into "Division" in 2031 B.S., under the Banking Development and Credit Department and later in 2041 B.S. into a separate department named Inspection and Supervision Department. Now, there are two separate departments executing the supervision function of NRB. Bank supervision department is responsible for the inspection and supervision of all the commercial banks while Financial Institution Supervision Department oversees the inspection and supervision of all other Financial Institutions licensed by NRB.

Though central bank is critiqued for carrying two different tasks together, almost all central banks regulators and supervisors of banks as well as monetary authority, the Bank Supervision Department organizes the supervisory functions of the Central Bank. The work of the Department is divided into four units: On-site Supervision, Off-site Supervision, Policy Planning and Analysis Unit and the Internal Administration Unit.



These examinations of banks focus on six components known together as CAMELS: C for capital protection, A for asset quality, M for management competence, E for earnings strength, L for liquidity risk exposure and S for sensitivity to market risk. The banks are awarded a grade of 1 (best) through 5 (worst) on each component. Examiners use these six scores to award a composite CAMELS rating, also expressed on a 1 through 5 scales. The scores are kept confidential to facilitate the flow of information between examiners and bankers. The component of bank's management cannot be assessed only in terms of the returns submitted by the bank. Thus, the off-site supervision cannot make use of the CAMELS rating. So, a separate rating has been devised for the off-site supervision which uses the components of CAMELS except for the "M" representing management, and the rating is, thus, labeled CAELS.

### **2.1.6 Concept of Financial Performance Analysis**

Financial analysis refers to an assessment of the viability, stability and profitability of a business. Financial analysis is done for assessing the firm's:

- a. **Profitability**- its ability to earn income and sustain growth in both short-term and long-term. A company's degree of profitability is usually based on the income statement, which reports on the company's results of operations;
- b. **Solvency**- its ability to pay its obligation to creditors and other third parties in the long-term. It is based on the company's balance sheet.
- c. **Liquidity**- its ability to maintain positive cash flow, while satisfying immediate obligations. It is based on the company's balance sheet.
- d. **Stability**- the firm's ability to remain in business in the long run, without having to sustain significant losses in the conduct of its business. Assessing a company's stability requires the use of both the income statement and the balance sheet, as well as other financial and non-financial indicators.

The type of analysis of the financial performance varies according to the specific interests of the party involved. Investors are primarily concerned with the profitability of the firm. They are concerned with present and expected future earnings and stability of these earnings, plus their covariance with the earnings of other companies. Bond holders are interested in the cash flow ability of the company to service debt over the long run. So they are concerned with analyzing the capital structure of the firm, the major sources and uses of funds, profitability and prospects of future profitability. Creditors are concerned with liquidity of the firm. Their claims are short term and through the analysis of its liquidity, the ability of a firm to pay the claims can be evaluated. The management of the firm is interested in all aspects of financial analysis that outside suppliers of capital use in evaluating the firm. Specifically it is concerned with profitability on investment in the various assets of the corporation and the efficiency of asset management.

For the evaluation of the financial condition of the corporation certain yardstick is needed. The most common one is ratio relating two pieces of financial data to each other. Financial ratios are useful indicators of a firm's performance and financial situation. Most ratios can be calculated from information provided by the financial statements. Financial ratios can be used to analyze trends and to compare the firm's financials to those of other firms. Analysis of the various ratios gives a better understanding of the financial performance of the corporation than from the analysis of the financial data alone.

Ratio Analysis is the powerful tool to interpret the financial performance of the corporation through which the strength and weakness as well as historical performance and current financial condition can be concluded. The analysis of financial ratios involves two types of comparison. The first is comparing present ratio with past and projected future ratios for the same company. The second is comparing ratios of one firm with ratios of similar firms or with industry averages. Such a comparison gives view to the comparative financial condition and performance of the firm.

By calculating of a set of financial ratios the company real position can be known whether it is progressing or worsening. The analysis of financial statement reveals the true state of the firm at a point of time and its financial results for a specified period. An analysis of these statements provides important information for all concerned parties (Pradhan, 2000:45). Therefore, virtually any use of financial statements or other financial data for some purpose is financial analysis. Hence financial analysis is the conversion of financial data into useful information for decision making

### **2.1.7 Financial Performance Analysis in the Framework of CAMEL**

In 1978 the Federal Institution Examination Council which includes senior management officials from several U.S regulatory agencies – the office of the comptroller of the currency the Federal Reserve, the Federal Deposit Insurance Corporation, the office of Thrift Supervision, and the National Credit Union Association decided to design a standardized rating system. These agencies adopted the CAMEL in 1979. In 1996, the CAMEL was revised to include “S” for sensitivity to market risk.

CAMEL is a short form for five measurements of a financial institution: Capital adequacy, Asset quality, Management, Earning and Liquidity management. CAMEL was created initially to enable North American bank regulation to measure the financial and managerial soundness of U.S. commercial institution using key ratios indicators and institutional policies and procedures.

Each of the five factors is scored from one to five, with one being the strongest rating. An overall composite CAMEL rating, also ranging from one to five, is then developed from this evaluation. As a whole, the CAMEL rating, which is determined after an on-site examination, provides a means to categorize banks based on their overall health, financial status, and management. The Commercial Bank

Examination Manual produced by the Board of Governors of the Federal Reserve System in U.S describes the five composite rating levels as follows:

- CAMEL = 1 an institution that is basically sound in every respect.
- CAMEL = 2 an institution that is fundamentally sound but has modest weaknesses.
- CAMEL = 3 an institution with financial, operational, or compliance weaknesses that cause for supervisory concern.
- CAMEL = 4 an institution with serious financial weaknesses that could impair future viability.
- CAMEL = 5 an institution with critical financial weaknesses that render the probability of failure extremely high in the near term.

Since 1998, the Basel Committee on Banking Supervision of the Bank of International Settlements (BIS) has recommended using capital adequacy, assets quality, management quality, earnings and liquidity (CAMEL) as criteria for assessing financial institution. In the most of the countries monetary authorities are using this system for evaluating bank performance and healthy position of bank since it consider all areas of banking operations. Now CAMEL model is an internationally accepted tool for evaluating performance and predicting bank failure.

### **2.1.8 Capital Adequacy**

Capital adequacy reflects the overall financial situation of the banks and also the ability of the management to meet the need of extra capital. It reflects the leverage the bank has to take the advantage of profitable investment opportunities that may come up in future as well as to resist unexpected difficulty.

Capital adequacy requirements have existed for a long time, but the two most important are those specified by the Basel committee of the Bank for International Settlements. Basel 1 defined capital adequacy as a single number that was the ratio of a banks capital to its assets. There are two types of capital, tier one and tier two. Tier one capital is core capital and tier two capital is supplementary capital. Elements of tier one capital are paid up equity capital, irredeemable non-cumulative

preference shares, share premium, general reserve, accumulated profit, capital redemption reserve, capital adjustment reserve, dividend equalization reserves and other free reserves. Amount of fictitious assets, goodwill, investment in the financial instruments issued by the organization having the own financial interest, investment in financial instruments issued by the organized organization in excess to the limit specified by NRB are deducted from the sum of all elements of the primary capital to come at the core capital. Likewise, elements of tier two capital are cumulative and redeemable preference shares, subordinated term debt, hybrid capital instruments, general loan loss provision, investment adjustment reserve, assets revaluation reserve, exchange equalization reserve and other reserves. Hence the total capital of commercial banks is made up of core capital and supplementary capital.

The key requirement was that tier one capital was at least 8% of assets. Each class of asset has a weight of between zero and 1 (or 100%). Very safe assets such as government debt have a zero weighting, high risk assets (such as unsecured loans) have a rating of one. Other assets have weightings somewhere in between. The weighted value of an asset is its value multiplied by the weight for that type of asset.

The Basel 1 accord is to be replaced, in stages, by new rules (Basel 2). Basel II is also a capital adequacy related standard framed by Basel committee. The Basel II aims to replace Basel I and to make the capital framework more risk sensitive. Basel II has recommended major revision on the international standard on bank's capital adequacy, which requires bank to implement risk management policies that bring into line capital adequacy assessment with underlying credit risk, market risk, and operational risk. Basel 2 is based on three "pillars": minimum capital requirements, supervisory review process and market forces. The first "pillar" is similar to the Basel 1 requirement, the second is the use of sophisticated risk models to ascertain whether additional capital (i.e. more than required by pillar 1) is necessary. The third pillar requires more disclosure of risks, capital and risk management policies. This encourages the markets to react to the taking of high risks.

There are various approaches of Basel II. For credit risk there are Standardized approach, Foundation IRB approach and Advanced IRB approach. The approaches for operational risk are Basic Indicator approach, Standardized approach and Advanced Measurement approaches. And for market risk Standardized approach, Internal Model approach and Net Open Position approach are available. Among these various approaches Nepal Rastra Bank has decided that Commercial Bank in Nepal will initially adopt following approaches:

1. Simplified Standardized approach for credit risk.
2. Basic Indicator approach for operational risk.
3. Net Open Position approach for market risk

All banks, “A” class financial institutions within the scope of this framework should adopt the recommended approaches by Mid July 2008. Though the true Basel II is almost impracticable for the numbers of years in our context, yet the trip should be initiated to keep in touch with the international developments. It is persuaded by the different simplest options available in the framework. The simplest approaches are viable and it is proposed to start from them.

Leverage ratio is used to compute the capital adequacy of a bank. This ratio calculates the ratio of a bank’s book value of core capital to the book value of its assets. The higher the ratio the higher the level of capital adequacy. The Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991 has fixed five target zones: i. five percent or higher ii. four percent or more iii. Less than four percent iv. less than three percent v. two percent or less of leverage ratio. The leverage ratio falling in the first zone means the bank is well capitalized. The leverage ratio falling in the second zone implies the bank is adequately capitalized. The leverage ratio falling in the third zone shows the bank is under capitalized. Similarly the leverage ratio falling in the fourth zone entails the bank is significantly undercapitalized and the leverage ratio falling on the fifth zone indicates the bank is critically undercapitalized.

The leverage ratio described above doesn’t consider risk adjusted assets. So the 1993 Basel Accord imposed the capital ratio to risk adjusted assets of banks.

According to this, core capital should be equal to or greater than 4 percent of the risk weighted assets of bank and the amount of supplementary capital should not go beyond the amount of core capital and the total capital should be equal or greater than 8 percent of risk weighted assets.

### **Directives Relating to Capital Adequacy Norms of NRB**

The total capital of bank is made up of Core capital/Primary capital and Supplementary Capital. Nepal Rastra Bank has been instructing all the commercial banks to maintain the certain proportion of minimum capital fund every fiscal year on the basis of risk weighted assets. So given below are percentage of the minimum capital funds that has been directed by the NRB to maintain by the commercial bank in different fiscal year.

<b><u>FY</u></b>	<b><u>Required Capital Fund on the Basis of Risk-Weighted Assets(%)</u></b>	
	<u>Core Capital</u>	<u>Capital Fund</u>
2058/59	4.5%	9.0%
2059/60	5.0%	10.0%
2060/61	5.5%	11.0%
2061/62	5.5%	11.0%
2062/63	5.5%	11.0%

In accordance with clause 31 of Banking and Financial Institution Ordinance (BAFIO), 2004, the “A” class banks are required to keep minimum paid-up capital as follows:

- a. Rs. 1000 million to operate all over Nepal.
- b. Rs. 250 million to operate all over Nepal except kathmandu Valley.

Nepal Rastra Bank has revised the policy relating to Bank and financial institution establishment from March 27, 2007. According to it the newly

established commercial banks are required to keep Rs.2000 million to operate all over Nepal and the regional level commercial bank's minimum paid of capital requirement has been removed.

### **2.1.9 Asset Quality**

One of the most significant areas in determining the overall condition of a bank is asset quality. The major aspect effecting asset quality is the quality of the loan portfolio and the credit management scheme. Loans are generally the leading of the asset items and can also carry the maximum amount of possible risk to the bank's capital account. Securities can often be a large portion of the assets and also have certain risks. Further items which influence asset quality are other real estate, other assets, off-balance sheet items and, to a lesser extent, cash and due from accounts, and premises and fixed assets.

Management team often uses considerable time, energy, and resources, particularly on their loan portfolio. Troubles within this portfolio can distract from their ability to effectively and gainfully handle other areas of the company. Management need to be careful and focused in their review of the various asset quality areas, as they have an important impact on all other sides of bank operations.

Asset quality refers to the quantity of financial strength and risk in a bank's assets, normally loans and investments. To assess the current condition and future feasibility of the bank, a thorough evaluation of asset quality is a must.

The asset quality of the bank impacts, in varying degrees, all components of a bank's financial performance. There can have a negative impact from excessive amount of classified assets on earnings through lower interest income, higher provisions to the loan loss reserve and increased administrative costs for managing and collecting these assets. There can be also a negative impact on the adequacy of bank capital because of asset quality problems. Inferior asset quality also reflects upon management's competence. Thus, it is necessary for the board members to bring policies to limit the bank's credit risk and to monitor the bank for compliance with policies.



Asset management is related to the left hand side of the bank balance sheet. Bankers are concerned with the quality of their loans since that provides earnings for the bank. Loan quality and asset quality are two terms with ultimately the same meaning.

The maintenance of sound asset quality is a fundamental aspect of banking. It is the prime responsibility of each bank's management to set policies and procedures to ensure that the bank maintains sound asset quality, strong portfolio management, prudent risk controls, effective credit review and classification procedures, and an appropriate methodology for dealing with problem exposures.

The single greatest risk in banking is the risk of loan losses. This is because loans typically comprise a majority of the assets in most banks. It's not hard to imagine an entire year's worth of earnings being completely eliminated because of one or two large loans being charged off. Because the coverage is so vast, a significant amount of time has to be spent assessing asset quality, primarily loan quality, at almost every examination.

The major reason behind measuring the asset quality is to ascertain the component of non performing assets as a percentage of total asset/loan and advances. Moreover the ratio of loan loss provision to non performing loan is also need to be analyzed. It reflects the safety margin for the bank against non performing loan. Higher ratio shows good health of the bank.

One of the factors affecting the health of the banks is credit risk. The degree of the credit risk depends on the quality of assets held by banks. Banks should have in place appropriate credit risk grading systems to help assess asset quality and credit exposures, including both performing and non-performing facilities. Credit risk grading systems offer a number of benefits. Analysis of a bank's entire book can reveal important insights to bank management into the functioning and, ultimately, the health of a bank. Information on credit categories, and the spread of exposures across the grading system, provides a valuable snapshot of a bank's risk appetite. Time series data showing movements within grading categories provide insights into

the changing nature and composition of a bank's book. Credit risk grading systems provide the means for a more systematic assessment of asset quality. They are particularly useful in assisting in the early detection of asset quality problems within a bank by highlighting credits with above normal risks. This often allows for special monitoring of such facilities, and enables the development of strategies to eliminate any weaknesses. Many banks use credit risk grading systems to develop more appropriate risk/reward pricing policies based on risk profiles. They can be used also as a portfolio management tool to recognize the degrees of risk associated with lending to various industries, areas, or types of borrower.

Non-performing assets, also called non-performing loans, are loans, made by a bank on which repayments or interest payments are not being made on time. A loan is an asset for a bank as the interest payments and the repayment of the principal create a stream of cash flows. It is from the interest payments that a bank makes its profits. Banks usually treat assets as non-performing if they are not serviced for some time. If payments are late for a short time a loan is classified as past due. Once a payment becomes really late (usually 90 days) the loan is classified as non-performing.

A high level of non-performing assets compared to similar lenders may be a sign of problems, as may as sudden increase. However this needs to be looked at in the context of the type of lending being done. Some banks lend to higher risk customers than others and therefore tend to have a higher proportion of non-performing debt, but will make up for this by charging borrowers higher interest rates, increasing spreads.

### **Directives Relating to Assets Quality by NRB**

NRB has directed Commercial Banks regarding the concentration of loan. Commercial banks can grant the fund base loan to a single borrower or borrowers related to the same business group up to the 25% of its primary capital and it can provide the non-fund case loan up to 50 percent of its core capital.

It has directed banks to classify the loans into performing loan and non performing loan. The loans that are not due and 3 months past due are called pass loans or performing loans. Moreover non-performing loans are classified into three groups: i. Substandard ii. Doubtful iii. Loss. The loans that are past due for more than 3 months or 6 months past due are called substandard loan. The loans that are past due for more than 6 months or one year past due are called doubtful loans and the loans that are past due for more than one year are called loss loans.

NRB has directed commercial banks to keep loan loss provision according to loan classification. So for pass loan/performing loan commercial bank has to make provision of 1 percent, for substandard loan 25% provision has to be made, for doubtful loans 50% and for loss loans 100% provision has to be made by commercial banks.

#### **2.1.10 Management Quality**

Assessing management quality requires professional judgment of a bank's compliance to policies and procedures, aptitude for risk-taking, development of strategic plans, and the degree of involvement by the bank's officers and directors in making decisions. The quality of a bank's management is key to its long-run survival, and one of management's greatest challenges is coping with the industry's increasing uncertainties and accompanying risks. Internally, this means that bankers must effectively allocate scarce resources, implement controls and procedures to minimize risks and control costs, and be open to the use of new technologies to increase operating efficiencies. Externally, they must keep pace with new regulatory actions, economic fluctuations, societal trends, technological advances, and changes taking place in the global economy.

Management factors generally explain why one bank survives while another fails when facing almost identical circumstances. It is the management of the bank that determines success or failure. Management incompetence in its broad sense is a major cause of bank failure. The ultimate determinant of whether or not a bank fails is the ability of its management to operate the institution efficiently and to evaluate

and manage risk. Many studies of bank performance and bank failure cite management quality as the most important factor to long-run survival. For a bank to continue to survive, its management must understand, manage, and control the increased risks inherent in today's financial environment. This means that bankers must effectively allocate resources and efficiently control the bank's operations.

It involves a subjective analysis for measuring the efficiency of the management. Though it is difficult to measure, several indicators yet can together serve as an indicator of management soundness. Return on net worth, earning per employee, expenses ratio, cost per loan, average loan size and cost per unit of money lent can be used for measuring management quality. NRB has been using a separate rating for the off-site supervision which uses the components of CAMELS except for the "M" representing management, and the rating is, thus, labeled CAELS.

### **2.1.11 Earnings Quality**

Earnings quality is an important aspect of evaluating an entity's financial health, yet investors, creditors, and other financial statement users often overlook it. Earnings quality refers to the ability of reported earnings to reflect the company's true earnings, as well as the usefulness of reported earnings to predict future earnings. Earnings quality also refers to the stability, persistence, and lack of variability in reported earnings. The evaluation of earnings is often difficult, because companies highlight a variety of earnings figures: revenues, operating earnings, net income, and pro forma earnings. In addition, companies often calculate these figures differently. The income statement alone is not useful in predicting future earnings.

Bellovary, Giacomino, and Akers (2005) have cited in their article that Teets ["Quality of Earnings: An Introduction to the Issues in Accounting Education," *Issues in Accounting Education*, 17 (4), 2002] states that "some consider quality of earnings to encompass the underlying economic performance of a firm, as well as the accounting standards that report on that underlying phenomenon; others consider quality of earnings to refer only to how well accounting earnings convey information about the underlying phenomenon."

Pratt defines earnings quality as “the extent to which net income reported on the income statement differs from true earnings” [in F. Hodge, “Investors’ Perceptions of Earnings Quality, Auditor Independence, and the Usefulness of Audited Financial Information,” *Accounting Horizons* 17 (Supplement), 2003]. Penman [“The Quality of Financial Statements: Perspectives from the Recent Stock Market Bubble,” *Accounting Horizons* 17 (Supplement), 2003] indicates that quality of earnings is based on the quality of forward earnings as well as current reported earnings. Schipper and Vincent [“Earnings Quality,” *Accounting Horizons* 17 (Supplement), 2003] define earnings quality as “the extent to which reported earnings faithfully represent Hicksian income,” which includes “the change in net economic assets other than from transactions with owners.”

Banking decisions are made based on their effect on profitability. This is true whether the decision involves increasing efficiency, lowering costs, expanding the business, shifting to new services, or a host of other business decisions. The backbone of profitability is the net interest income of the banks, computed as the surplus of interest income over the interest expenses. Understanding profitability provides insight into the concept of profitability and the elements of an income statement. It gives insights into the financial health of the banks.

The different indicators of profitability are return on equity, return on assets, earning-spread ratio, interest-spread ratio, gross margin, operating profit margin, and net profit margin. The financial indicator used by Nepal Rastra Bank for profitability is return on total assets. Besides it employs measures like interest income, net interest income, non interest income, net non interest income, non operating income, net non operating income, and net profit to assess the profitability of commercial banks.

### **2.1.12 Liquidity**

Liquidity for a bank means the ability to meet its financial obligations as they come due. Bank lending finances investments in relatively illiquid assets, but it funds its loans with mostly short term liabilities. Thus one of the main challenges to

a bank is ensuring its own liquidity under all reasonable conditions. Commercial banks differ widely in how they manage liquidity.

A small bank derives its funds primarily from customer deposits, normally a fairly stable source in the aggregate. Its assets are mostly loans to small firms and households, and it usually has more deposits than it can find creditworthy borrowers for. Excess funds are typically invested in assets that will provide it with liquidity. The holding of assets that can readily be turned into cash when needed, is known as asset management banking. In contrast, large banks generally lack sufficient deposits to fund their main business dealing with large companies, governments, other financial institutions, and wealthy individuals. Most borrow the funds they need from other major lenders in the form of short term liabilities which must be continually rolled over. This is known as liability management, a much riskier method than asset management. A small bank will lose potential income if gets its asset management wrong. A large bank that gets its liability management wrong may fail.

The key to liability management is always being able to borrow. Therefore a bank's most vital asset is its creditworthiness. If there is any doubt about its credit, lenders can easily switch to another bank. The rate a bank must pay to borrow will go up rapidly with the slightest suspicion of trouble. If there is serious doubt, it will be unable to borrow at any rate, and will go under. In recent years, large banks have been making increasing use of asset management in order to enhance liquidity, holding a larger part of their assets as securities as well as securitizing their loans to recycle borrowed funds.

A large depositor assumes a risk and needs to know something about the bank's own balance sheet. However a healthy balance sheet does not eliminate all risk. Even if the depositor knows the bank has adequate liquidity, others may not. Large depositors must therefore be concerned about what others are likely to believe. A rumor about a bank, even though unfounded, can trigger a run that causes a solvent bank to fail.

The banks should be able to honor the demand for payment by its depositors and other stakeholders. In order to do so, banks maintain certain volume of liquid assets, the size and volume determined by the bank's size of operations and the past trends.

Liquidity risk is the risk to a bank's earnings and capital arising from its inability to timely meet obligations when they come due without incurring unacceptable losses. Bank management must ensure that sufficient funds are available at a reasonable cost to meet potential demands from both funds providers and borrowers. Although liquidity risk dynamics vary according to a bank's funding market, balance sheet, and inter corporate structure, the most common signs of possible liquidity problems include rising funding costs, requests for collateral, a rating downgrade, decreases in credit lines, or reductions in the availability of long-term funding.

Liquidity risk is a greater concern and management challenge for banks today than in the past. Increased competition for consumer deposits, a wider array of wholesale and capital market funding products, and technological advancements have resulted in structural changes in how banks are funded and how they manage their risk.

Managing liquidity involves estimating liquidity needs and providing for them in the most cost-effective way possible. Banks can obtain liquidity from both sides of the balance sheet as well as from off-balance-sheet activities. A manager who attempts to control liquidity solely by adjustments on the asset side is sometimes ignoring less costly sources of liquidity. Conversely, focusing solely on the liability side or depending too heavily on purchased wholesale funds can leave the bank vulnerable to market conditions and influences beyond its control. Effective liquidity managers consider the array of available sources when establishing and implementing their liquidity plan.

Operating accounts such as vault cash, cash items in process of collection, correspondent accounts, usually are not liquid assets in an ongoing institution. These

accounts are needed to put up daily business transactions; if these funds are used, they must be refilled before further business activities are conducted. Most well managed banks maintain the minimum balance needed to accommodate transactions in these accounts, since the balances do not generally earn interest.

Many ratios can help quantify liquidity; they can also be used to create limits that preserve it. But unless ratios are used regularly and interpreted in light of qualitative factors, ratios will not by themselves reveal material liquidity trends. Ratios should always be used in combination with more qualitative information about borrowing capacity, such as the likelihood of increased requests for early withdrawals, decreases in credit lines, decreases in transaction size, or shortening of term funds available to the bank. For example, a well-capitalized bank may have a loan to deposit ratio of 90 percent and not have any liquidity problems, while another bank with the same ratio may be reduced of liquidity and nearly insolvent because it relied heavily on a concentration of short-term credit-sensitive deposits for day to day funding.

Bank's liquidity coverage can be measured by analyzing the sources and uses of liquidity. In this method, total net liquidity is calculated by deducting the total of uses of liquidity from the total of sources of liquidity. Total loans/total deposits, total loans/total equity capital, purchased funds/total assets, core deposit/total assets and total fee paid commitments/total equity capital are examples of common ratios used by commercial banks to monitor current and potential funding levels. The denominators of the calculations can be altered if the bank's circumstances give up; for example, a bank that has issued considerable subordinated debt might make the denominator total deposits plus borrowings. In the numerator, any investment securities or time deposits that are considered illiquid could be combined with loans or measured separately.

For the financial performance analysis of commercial banks to measure the liquidity position, NRB uses total loan to total deposit ratio, cash and equivalents to total assets ratio, cash and equivalents to total deposit ratio, NRB balance to total deposit ratio.



## **Directives Relating to Maintenance of Liquidity by NRB**

According to directive no.13/061/062 Nepal Rastra bank has directed commercial banks to deposit to NRB the amount ratio of 5% from their liability of deposit. A provision of fine also has been made for failure to deposit required percentage to NRB.

The applicable rate of penalty is as follows:

First time shortfall = Equivalent to bank rate.

Second time shortfall = Equivalent to 2 times of bank rate.

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

For the purpose of examination of compliance of liquidity requirement the procedures will be as follows:

1. A weekly shall compromise from each Sunday through Saturday.
2. The cash reserve requirement will be examined on the basis of the average weekly balance of deposit liabilities of immediately preceding fourth week. If the whole week is holiday, the average weekly deposit balance of the previous week is taken into calculation.
3. For the purpose, weekly information statement for Monday to Friday (balance of previous day to be supplied for the holiday) shall compulsorily be submitted to NRB's Inspection and Supervision Department within 15 days from the date of end of the week.
4. For the purpose of calculating the weekly average (Monday to Friday) of total deposit, cash in vault and balance held with NRB, the weekly total aggregate amount is to be divided by 5. Balance of previous day to be supplied if any day happens to be holiday.

### **2.1.13 Sensitivity to Market Risk**

Sensitivity to market risk shows the extent to which changes in interest rates, foreign exchange rates, commodity prices, or equity prices can unfavorably affect a bank's earnings or capital. Since banks are involved in operations like

lending and borrowing, dealing in foreign exchange, selling of assets which were kept for securities etc. These are all associated with market risk such as interest rate risk, foreign exchange rate risk and commodity price risk. It is one of the most complicated areas of banking and it's an area where management has less experience. Thus sensitivity to market risk reflects to the risk that changes in market condition could unpleasantly influence earning or capital. But in this study this component has been dropped off due to complications in information collection.

## **2.2 Research Review**

This sub-section research review includes review of articles and review of dissertations.

### **2.2.1 Review of Articles**

In this chapter, those studies and issues are reviewed which are related to financial performance analysis of banks and area related to the study.

A. D., Wirnkar and Tanko (2008) in their study “ CAMEL(S) and banks performance evaluation: The way forward.” have mentioned that observed evidence on the use of ratios for banks' performance appraisal include; Beaver (1966), Altman (1968), Maishanu (2004), Mous (2005). Beaver (1966) was the first person to use financial ratios for predicting bankruptcy. His study was limited to looking at only one ratio at a time. Altman (1968) changed this by using a multiple discriminant analysis (MDA). His analysis combined the information from several financial ratios in a single prediction model. But there was critique on the MDA model. Maishanu (2004) identified eight financial ratios that could serve in informing financial analysts on the financial state of a bank. Mous (2005) found that the decision tree approach performed better than the multiple discriminant analysis (MDA) with decision tree correctly classifying 89% of bankrupt banks within two years while multiple discriminant analysis (MDA) got 81%. The financial ratios used had variables; profitability, liquidity, leverage, turnover and total assets. The

changing nature of the banking industry has made such evaluations even more difficult, gingering the need for more flexible alternative forms of financial analysis.

A. D., Wirnkar and Tanko carried out their research work to find the adequacy of CAMEL in capturing the overall performance of a bank; to find the relative weights of importance in all the factors in CAMEL; and lastly to inform on the best ratios to always adopt by banks regulators in evaluating banks' efficiency. Here specifications are defined as inputs (number of employees, fixed assets and deposits) mapping onto outputs (operating income, deposits and loans). The purposive sampling technique was used. The presentation of data was in tables and analyzed via the Efficiency Measurement System (EMS) 1.30 software of Holger School and independent T-test equation. The findings revealed the inability of each factor in CAMEL to capture the wholistic performance of a bank. Also revealed, was the relative weight of importance of the factors in CAMEL which resulted to a call for a change in the acronym of CAMEL to CLEAM. In addition, the best ratios in each of the factors in CAMEL were identified. For example, the best ratio for Capital Adequacy was found to be the ratio of total shareholders' fund to total risk weighted assets. The paper concluded that no one factor in CAMEL was enough to depict the overall performance of a bank. Among other recommendations, banks' regulators are called upon to revert to the best identified ratios in CAMEL when evaluating banks performance.

Jackson (1974) carried out study on "Commercial banking performance and structure: A factor analysis approach." This study briefly presents Phillips' theoretical model of the banking environment that integrates the concepts that underlie many of the previous studies in this area. It then empirically isolates the clusters of related traits that occur in banking, as a guide to future research concerning the banking industry. Finally, it tentatively explains some sources of observed banking performance as suggested by its empirical analysis. The factor analysis captures all but two variables: state bank membership and profitability. It would thus appear that bank profitability is not strongly related to any of the variables considered. It utilizes factor analysis 'as an explanatory rather than as a purely statistical technique. According to Jackson, the use of numerous correlated

variables in regression may thus give rise to econometric inconsistencies in banking studies. More importantly, given these complex patterns, policy makers should not be surprised if attempts to restrict banking competition lead to unanticipated, if not undesirable, effects on the nation's financial structure, conduct, or performance.

Paradi and Schaffnit (2004) have done study on “Commercial branch performance evaluation and results communication in a Canadian bank—a DEA application.” They have focus on evaluating the performance of the commercial branches of a large Canadian bank using data envelopment analysis. Two production models are considered in this country-wide evaluation. One model, looking directly at resource usage, is most useful to the branch manager. The other model, incorporating financial results, is more geared towards senior management. They introduce non-discretionary factors to reflect specific aspects of the environment a branch is operating in, such as risk and economic growth rate of the region. Both input and output multipliers are constrained by incorporating market prices as well as managerial preferences, in order to get effectiveness measures. The cost minimization study led to valuable results pertaining to the performance of individual branches. Notable is the methodology introduced here that shows how to present graphical and numeric outcomes to managers. Gap maps, pie charts and target tables are produced for each branch to provide performance goals for the managers. Useful information has also been obtained at the district level. Output oriented models were analyzed to reflect the bank's recent emphasis towards growth in some areas.

Gilbert, Meyer and Vaughan (2000) in their article “The Role of a CAMEL Downgrade Model in Bank Surveillance” examines the potential contribution to bank supervision of a model designed to predict which banks will have their supervisory ratings downgraded in future periods. Bank supervisors rely on various tools of off-site surveillance to track the condition of banks under their jurisdiction between on-site examinations, including econometric models. Each quarter the surveillance staff at the Board of Governors provide the supervision staff in the Reserve Banks the probabilities of failure by the banks subject to Fed supervision, based on the coefficients of this bank failure model and the latest call report data for

each bank. According to the writers the number of banks downgraded to problem status in recent years has been substantially larger than the number of bank failures. During a period of few bank failures, the relevance of this bank failure model for surveillance depends to some extent on the accuracy of the model in predicting which banks will have their supervisory ratings downgraded to problem status in future periods. This paper compares the ability of two models to predict downgrades of supervisory ratings to problem status: the Board staff model, which was estimated to predict bank failures, and a model estimated to predict downgrades of supervisory ratings. They conclude that the downgrade model may prove to be a useful supplement to the Board's model for estimating failures during periods when most banks are healthy, but that the downgrade model should not be considered a replacement for the current surveillance framework.

Cole and Gunther (1998) have done study on “Predicting Bank Failures: A Comparison of On- and Off-Site Monitoring Systems.” On-site examinations are regulators' primary tool for monitoring the financial condition of federally insured depository institutions. In the paper, they have assessed the speed with which the information content of the supervisory rating assigned during bank exams—the CAMEL rating—decays. According to them this is an important issue because cost and regulatory burden considerations often cause CAMEL ratings to be assigned relatively infrequently. As a benchmark for information content, econometric forecasts of bank failures generated by applying a probit model to publicly available accounting data. For the banks with ratings more than one or two quarters old, the probit model provides a more accurate indication of survivability. When compared with all CAMEL ratings available at a given point in time, the econometric forecasts provide a more accurate indication of failure. Further analysis reveals that this overall finding reflects the tendency for a CAMEL rating's information content to deteriorate noticeably beginning in the second or third quarter after the rating initially was assigned.

Li, Shanling, et al (2001) in their study “Comparative Performance of Chinese Commercial Banks: Analysis, Findings and Policy Implications” investigates the financial performance of Chinese banks by using financial ratio

analysis. The analysis shows that the low profitability of state-owned commercial banks results from their higher ratio for non-interest expenses and lower interest margin than joint-equity banks. The much lower profit margin in state-owned banks draws down their levels of ROE and ROA, even with the offsetting effects of more efficient utilization of their assets and higher financial leverage. Although data limitations prevent them from studying the risk profiles of the banks in detail, it is clear that these Chinese banks generated lower returns with higher financial risks than their Western counterparts. The paper concludes with a discussion of major issues affecting Chinese bank performance. Significant difficulties encountered in assessing bank performance are also identified and discussed.

Yue (1992) has done study on “Data envelopment analysis and commercial bank performance: A primer with Missouri banks.” This paper describes a particular methodology called Data Envelopment Analysis (DEA), that has been used previously to analyze the relative efficiencies of industrial firms, universities, hospitals, military operations, baseball players and, more recently, commercial banks. The use of DEA is demonstrated by evaluating the management of 60 Missouri commercial banks for the period from 1984 to 1990. The relative efficiency of these banks is examined using two alternative DEA models: the CCR model and the additive DEA model. The DEA methodology discussed in this article has the potential to provide crucial information about banks’ financial conditions and management performance for the benefit of bank regulators, managers and bank stock investors. The DEA framework is extremely general, permitting multiple criteria for evaluation purposes. Moreover, DEA requires only data on the quantity of inputs and outputs; no price data are necessary. This is especially appealing in the analysis of banking because of the difficulties inherent in defining and measuring the prices of banks’ inputs and outputs.

Cargill (1989) has written article on “CAMEL ratings and the CD market.” This article investigates the relationship between CD rates as a measure of bank risk and the confidential CAMEL scores assigned to a bank as a result of an onsite examination. CAMEL ratings determine whether a bank is placed on the problem list and expresses the examiner's belief that the bank should be subjected to

enhanced surveillance. In the view of regulators, CAMEL ratings are based on inside information and hence should be confidential. The empirical results in this article suggest that CAMEL ratings are primarily proxies for available market information about the quality of a bank. The first draft of this article was prepared while the author was a Visiting Scholar at the Federal Deposit Insurance Corporation in the summer of 1988.

Tai (2004) has written article on “Can bank be a source of contagion during the 1997 Asian crisis?” This paper tests whether bank can be a source of contagion during the 1997 Asian crisis using asset return data from a crisis country – Thailand. In particular, the writer has examined whether Thai banking sector can produce contagion effects in both conditional means and volatilities of its foreign exchange and stock markets during the crisis after controlling economic fundamentals. The test results show that contagion-in-mean effects appear to be multidirectional since return shocks emanating from any one of the three markets can sweep across all markets, but contagion-in-volatility effects are mainly driven by the negative return shocks originating in the banking sector. Overall the empirical evidence indicates that the past return shocks originating from banking sector have significant impact not only on the volatilities of foreign exchange and aggregate stock markets, but also on their prices, suggesting that bank can be a major source of contagion during the crisis.

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

Baral (2005) wrote an article on “Health Check-up of Commercial Banks in the Framework of CAMEL: A Case Study of Joint Venture Banks in Nepal.” This paper examines the financial health of joint venture banks in the CAMEL framework. He concludes that the health of joint venture banks is better than that of the other commercial banks. He has examined indicators of different components of CAMEL and it indicates that the financial health of joint venture banks are not so strong to manage the possible large scale shocks to their balance sheet and their health is fair. Nonperforming assets of all joint venture banks under study are far below the aggregate percentage of non performing assets of commercial banks. Both Non performing asset ratio and Loan loss reserve ratio show that joint venture banks are improving the quality of their assets year by year. Performance of management of joint venture banks is satisfactory, relative to the industry average. Indicators of management efficiency show relatively healthy joint venture banks in Nepal. Earning/profitability indicators—ROE, ROA and PM—showed that financial health of joint venture banks is not so weak. Liquidity indicators of joint venture banks showed that they have high level of liquidity and are facing the high liquidity problem.

### **2.2.2 Review of Dissertations**

A range of thesis works have been done in different aspects of commercial banks such as financial performance, lending policy, interest rates structure, investment policy, resource mobilization, capital structure etc. So, in this section review of dissertations has been carried out related to the study.

Bhandari (2005) has done study on “Financial Performance Analysis of Himalayan Bank Ltd. in the Framework of CAMEL.” The objective of the study was to comprehend the financial performance of HBL through CAMEL framework. The study has covered the time span of FYs 1998/99 through 2003/04. He used financial tools like capital adequacy ratio, core capital adequacy ratio, supplementary capital adequacy ratio, non performing loan ratio, loan loss ratio, total expenses to total incomes ratio, earning per employee, return on equity, net interest margin, earning per share, NRB balance to total deposits ratio etc. The statistical tools



used are average, standard deviation, coefficient of variation and least square trend analysis. The researcher concluded that the bank is running with the adequate capital, non performing loans to loan ratio is in declining trend where as loan loss provision is in increasing trend. The indicators of management and the earning quality showed the decreasing trend where as the overall liquidity position of bank is good.

Gurung (1995) performed study on “A Financial Study of Joint Venture Banks in Nepal.” The objective of the study was to examine the financial strengths and weaknesses of Nepal Grindlays Bank Ltd. and Nepal Indosuez Bank Ltd. The study has covered the time span of FYs 1986/1987 through 1992/93. He has used various financial ratios like profitability, current, activity, capital structure and statistical tools like Karl Pearson’s coefficient of correlation. On the basis of different financial indicators, the researcher has found that performance of NGBL is better than of NIBL.

Poudel (1997) conducted study on “A Comparative Analysis of Financial Performance between Nepal Bank Ltd. and Nepal Grindlays Bank Ltd.” The objective of the study was to provide comparative highlights and study of NBL and NGBL in terms of functions, growth and development. He used financial tools like liquidity ratio, credit ratio, turnover ratio, structural ratio etc. The analysis of liquidity position of these commercial banks showed different positions. In some cases the liquidity ratios of NBL are higher than NGBL and in some cases the ratios of NGBL are higher than NBL. NGBL had better credit position than NBL in terms of short term investment .NBL had better turnover than NGBL but the overall profitability of NGBL is better than the profitability of NBL.

Amatya (1993) conducted study on “An Appraisal of Financial Position of Nepal Bank Ltd.” He concluded that the total deposit of the bank on an average increased by 17.9% in the study period. Trade and commercial advanced have been playing major role in the credit composition of the bank. The volume of transaction is high in all respects but the bank doesn’t show higher ratio of profit i.e. it shows decreasing trend of profit.

Bajracharya (2036) conducted study on “An Evaluative Study on the Mobilization of Commercial Bank Resources.” The study revealed that Nepal Bank Ltd. and Rastriya Baniya Bank are investing their major portion of deposits in secured and less profitable sectors such as government securities and are unable to mobilize their resources and deposits in more productive sectors.

Thapa (2001) has done her study on “A Comparative Study on Investment Policy of Nepal Bangladesh Bank Ltd. and Other Joint Venture Banks.” The objective of the study was to evaluate the liquidity, profitability, assets management efficiency and risk position of NBBL in comparison to Nepal Arab Bank Ltd. and Nepal Grindlays Bank Ltd. and to examine the fund mobilization and investment policy of NBBL through off- balance sheet and on-balance sheet activities in comparison to other two banks. The researcher concluded that the liquidity position of NBBL is comparatively not better than of Nabil and NGBL and the liquidity ratios are moderately fluctuating. NBBL is not in better position regarding its on-balance sheet as well as off-balance sheet activities in comparison to Nabil and NGBL.

Joshi (1989) in his dissertation entitled, “A study of Financial Performance of Commercial Banks” found satisfactory liquidity position of commercial bank and highly leveraged. They were found adopting conservative credit policy, so they were interested much on loans and advances that form the main sources of income. The researcher concluded that the profit performance of NBL was better than NGBL.

Similarly Parajuli (1990) conducted study on “A Comparative Study of Financial Performance of Joint Venture Banks with Special Reference to Nepal Grindlays Bank Ltd. and Nepal Arab Bank Ltd.” The researcher concluded that the liquidity position of Nabil was more efficient than Grindlays Bank Ltd and deposit also was found more of Nabil in comparison to Grindlays Bank Ltd in the study period. Mobilization of deposits, loans and advances to fixed deposit ratio and DPS and DPR of NGBL are higher than of Nabil on average.

Deoja (2001) performed study on “A Comparative Study of the Financial Performance between Nepal State Bank of India Limited and Nepal Bangladesh Bank Limited.” The main objective of the study was to assess the trend of deposits and loans & advances of NSBIL and NBBL. He used financial tools like liquidity ratio, profitability ratio, turnover ratio, leverage ratio etc. The researcher concluded that the cash and bank balance to current assets, saving deposit to total deposit etc. of NSBIL are higher while fixed deposit to total deposit, loans and advances to current assets of NBBL are higher and NBBL has better turnover than NSBIL in terms of loan and advances to total deposits ratio and loan and advances to fixed deposit ratio. Through the calculation of different ratio the researcher has concluded that both banks are highly leveraged.

Similarly Acharya (1997) conducted study entitled “A Comparative Study of Financial Performance of Joint venture Banks in Nepal, especially Nepal SBI Bank Ltd. and Nepal Indosuez Bank Ltd.” He found that the liquidity position of the banks is below the normal standard of 2:1 i.e. inadequate. Comparatively this ratio of NIBL was better on an average. Both the banks were found to be efficient in utilizing their total assets.

Another study accomplished by Poudel (1985) “ A Case Study on Capital and Assets Structure of Nepal Bank Ltd.” concluded that the proportion of loans and advances offered varied widely from year to year. Return on total assets showed decreasing trend over the study period. The capital structure was in high gear. He recommended to do investment in productive sectors and to reduce the operating expenses to enhance profitability.

Shrestha (1990) performed a study on “A Portfolio Behavior for Commercial Banks in Nepal.” For the analysis purpose she has took the Agriculture Development Bank and commercial banks in aggregate. She has uncovered that the debt to equity ratios of commercial banks was minimum of 8.30% in year 1971 and the maximum of 1583.3% in 1974. Likewise, the debt to equity ratio of ADB/N was minimum of 21.44% in 1972 and maximum of 652.74% in 1990. The researcher concluded that

the Nepalese commercial banks were highly leveraged and unsafe. She added that the capital adequacy ratio explained the strength of the capital base of commercial banks. Higher the capital adequacy ratio, higher is its internal sources.

A study was conducted by Shakya (1995) entitled “Financial Analysis of Joint Venture Banks in Nepal.” The objective of the study was to have comparative financial performance evaluation of Nepal Arab Bank Ltd. and Nepal Grindlays Bank Ltd. The study covered the time period of FYs 1988/89 to 1993/94. He used financial ratios like leverage, activity, profitability, liquidity, growth and valuation and statistical tools like simple average, Karl Pearson’s correlation coefficient, student T-test and index. The researcher concluded that in spite of the increase in loans and deposits of both banks, their performance measured in terms of deposit utilization was not pleasing. In addition the researcher concluded that the financial performance of Nabil was better than NGBL.

Ranabhat (1997) has done a study on “Financial Performance of Finance Companies in Nepalese Context.” The objective of the study was to analyze the financial performance of finance companies. It has covered the time period from FY 1991/92 to FY 1995/1996. Analytical tools like index, percentage change and comparative study has been used. He uncovered that the performance of finance companies in regard to housing loans, hire purchase was unsatisfactory. In addition the researcher concluded that the finance companies have not managed to reach in true professional approach.

Bist (2004) has done study on “Financial Performance of Nepal Bangladesh Bank and Nepal SBI Bank: A Comparative Study” The objective of the study was to examine the financial performance of NBBL and NSBI Bank. The study covered the time period of five years from FY 1997 to FY 2001. He has used financial tools like liquidity, capital structure, activity, profitability etc and statistical tools like arithmetic mean, coefficient of variation, correlation analysis and probable error. The study concluded that the liquidity position of NSBI was better than NBBL. The capital structure ratio showed that the capital structure of both the banks were highly leveraged. Similarly the activity ratio has showed that both the banks had

efficiently utilized their assets to income generation. Finally the researcher concluded that NBBL was better positive on activity, profitability, and other ratios and NSBI had better position on liquidity and capital structure ratio.

Even though many different studies have been done on financial performance analysis of commercial banks but very few have done financial performance analysis of commercial banks in the framework of CAMEL. Financial performance analysis of NBBL has been done several times but this study attempts to do financial performance analysis of NBBL in the framework of CAMEL. So as a fulfillment of a research gap this study will contribute by analyzing financial performance of NBBL through CAMEL framework for the period of year 2001 to 2006.

## CHAPTER III

### RESEARCH METHODOLOGY

The general objective of the study is to analyze the financial performance of NBBL in the framework of CAMEL. So this chapter deals with the research methodology to achieve the objective. This chapter contains research design, justification for the selection of study unit, nature and sources of data, methods of data collection, data analysis tools and limitation of methodology.

#### **3.1 Research Design**

As the focus of the study is to analyze the financial performance in the context of CAMEL of NBBL, so the research design followed for the study is basically a historical and analytical case study. Thus to achieve the objective descriptive cum analytical research methodology is followed. Some financial and statistical tools are applied to examine facts and descriptive techniques are adopted to evaluate financial performance of NBBL.

#### **3.2 Justification for the Selection of the Study Unit**

This study is conducted to find out the reasons how NBBL, one of the profitable joint venture bank of Nepal came into a crisis situation on 2006. Since many has done study on analysis of financial performance of profitable joint venture banks but this study attempts to do analysis of financial performance of bank in crisis.

#### **3.3 Nature and Sources of Data**

The study is largely based on the secondary data relating to the financial performance as they are readily available at the concerned bank. For the purpose of the study, the annual reports of the bank are used as the major sources of data. In addition with the annual reports of the bank required data and information have been collected from NRB directives, annual reports, banking supervision annual reports,

various articles published in the journals, website of NBBL and various publications dealing in the subject matter of the study. Formal and informal talks with staffs were also beneficial for the study.

### **3.4 Data Collection Procedure**

The study is largely based on secondary data. The annual reports and other information of NBBL have been collected from head office and bank's website and other websites related to the study. NRB directives, annual reports, banking and financial statistics, banking supervision annual reports etc are collected from NRB website. Literature review is collected from Central Library T.U., Western Regional Library Pokhara. Some supplementary data and information have been collected from NRB publication, different journals, magazines, websites and other published and unpublished reports documented by concerned authorities.

### **3.5 Data Processing**

Data were extracted from the bank's annual reports financial statements. Then data were entered into the excel sheet to work out the financial ratios. Different financial ratios were worked out with the computer programs Microsoft excel and word.

### **3.6 Methods of Data Analysis**

Descriptive tools have been applied for the analysis of the financial performance to several statistical tools such as average, standard deviation, coefficient of variation have been used for the analysis. The financial and statistical tools used in the study are presented in the upcoming section.

#### **3.6.1 Financial Tools**

There are various financial tools which are used to analyze the financial performance. The ratios used in this study are as follows:

#### **1. Capital Adequacy**

##### **1.1 Leverage Ratio**

Leverage ratio is the ratio which is used to calculate the financial leverage of a company to get an idea of the company's methods of financing or to measure its ability to meet financial obligations. It shows the relationship between core capital and total assets. It measures the adequacy of the core capital. It is calculated by using the following model:

$$LR = \frac{CC}{TA} \quad \dots \dots \dots (3.6.1)$$

Where,

LR = Leverage Ratio

CC = Core Capital

TA = Total Assets

## 1.2 Total Capital Ratio

Total capital ratio shows the relationship between total capital fund and total risk weighted assets. It measures the adequacy of the total capital. It is computed by using the following model:

$$TCR = \frac{TC}{RWA} \quad \dots \dots \dots (3.6.2)$$

Where,

TCR = Total Capital Ratio

TC = Total Capital (core capital plus supplementary capital)

RWA = Risk Weighted Assets

## 1.3 Core Capital Ratio

Core capital ratio is the numerical relationship between core capital and total risk weighted assets. It measures the adequacy of core capital and financial soundness of a bank. It evaluates the proportion of core capital in total risk weighted assets. It shows the contribution of core capital in capital adequacy. The ratio is used to analyze the core capital adequacy of the banks. It is calculated by using the following model.



$$\text{CCR} = \frac{\text{CC}}{\text{RWA}} \quad \dots \dots \dots (3.6.3)$$

Where,

CCR = Core Capital Ratio

CC = Core Capital

RWA = Risk weighted Assets

## 1.4 Supplementary Capital Ratio

Supplementary capital ratio shows the relationship between supplementary capital and risk weighted assets. The ratio is used to analyze the supplementary capital adequacy of the banks. Supplementary capital includes general loan loss provision, assets revaluation reserve, subordinated term loan, exchange equalization reserve, hybrid capital instruments, excess loan loss provision, and investment adjustment reserve. It is determined by using the following model;

$$\text{SCR} = \frac{\text{SC}}{\text{RWA}} \quad \dots \dots \dots (3.6.4)$$

Where,

SCR = Supplementary Capital Ratio

SC = Supplementary Capital

RWA = Risk Weighted Assets.

## 2. Assets Quality

### 2.1 Non Performing Loan Ratio

It shows the relationship between non performing loan and advances and total loan and advances. It measures the proportion of non performing loan and advances in total loan and advances. Higher ratio implies higher portion of non performing loan. The ratio is used to assess the asset quality of the bank and determined by using the following model;

$$\text{NPAR} = \frac{\text{NPA}}{\text{TLA}} \quad \dots \dots \dots (3.6.5)$$

Where,

NPAR = Non performing assets ratio

NPA = Non performing assets

TLA = Total loan and advance

## 2.2 Loan Loss Reserve Ratio

It illustrates the relationship between loan loss reserve and total loan and advances. It measures the proportion of loan loss provision in total loan and advances. It is worked out by using the following model;

$$\text{LLRR} = \frac{\text{LLR}}{\text{TLA}} \quad \dots \dots \dots (3.6.6)$$

Where,

LLRR = Loan Loss Reserve Ratio

LLR = Loan Loss Reserve

TLA = Total Loan and Advance

## 3. Management Efficiency

### 3.1 Operating Expenses Ratio

It shows the relationship between total operating expenses and total operating revenue. It measures the proportion of total operating expenses in total operating revenue. High ratio indicates that the bank is not operating efficiently. It is calculated by using the following model

$$\text{OER} = \frac{\text{TOE}}{\text{TOR}} \quad \dots \dots \dots (3.6.7)$$

Where,

OER = Operating Expenses Ratio

TOE = Total operating expenses, and it comprises of interest expenses, office operating expenses, currency exchange loss, employees expenses, bad loan advance written off and loan loss provision.

TOR = Total operating revenue, and it contains interest income and non- interest income.

### 3.2 Earning Per Employee

Earning per employee is the relationship between net operating income and number of employees. It is calculated by dividing net operating income by number of employees. Low earning per employee shows that the bank is not operating efficiently. The formula is as follows;

$$\text{EPE} = \frac{\text{NOI}}{\text{NOE}} \quad \dots \dots \dots (3.6.8)$$

Where,

EPE = Earning per employee

NOI = Net operating income

NOE = Number of employees.

## 4. Earning Performance

### 4.1 Return on Equity

Return on equity is the relationship between net income and shareholder equity. It measures the rate of return on the shareholders' equity of the common stock owners. It measures a firm's efficiency at generating profits from every rupee of net assets, and shows how well a company uses investment rupees to generate earnings growth. ROE is equal to a fiscal year's net income (after preferred stock dividends but before common stock dividends) divided by total equity (excluding preferred shares).

$$\text{ROE} = \frac{\text{NI}}{\text{E}} \quad \dots \dots \dots (3.6.9)$$

SE

Where,

ROE = Return on equity

NI = Net income

SE = Shareholder Equity

## 4.2 Return on Assets

Return on assets is calculated by dividing net income by total assets. It shows how profitable a company's assets are in generating revenue. Return on assets gives an idea as to how efficient management is at using its assets to generate earnings. It is calculated by dividing a company's annual earnings by its total assets. If a company has a ROA of 20%, it means that the company earned Rs.0.20 for each Rs.1 in assets.

$$\text{ROA} = \frac{\text{NI}}{\text{TA}} \dots \dots \dots (3.6.10)$$

Where,

ROA = Return on assets

NI = Net income

TA = Total assets

## 4.3 Profit Margin

A ratio of profitability calculated as net income divided by total operating revenues. A higher profit margin indicates a more profitable bank that has better control over its costs. It shows the proportion of net income in total operating revenues. A 20% profit margin, for example, means the bank has a net income of Rs.0.20 for each rupee of revenue.

$$\text{PM} = \frac{\text{NI}}{\text{}} \dots \dots \dots (3.6.11)$$

TOR

Where,

PM = Profit margin

NI = Net income

TOR = Total operating revenue

#### **4.4 Net Interest Margin**

Net interest margin shows the relationship between net interest income and total earning assets. It is a measurement of the difference between the interest of the income generated by banks and the amount of interest paid out to their lenders. It is expressed as a percentage of what the financial institutions are earning minus the interest that it pays on borrowed funds to its investors. It is the proportion of interest spread to earning assets.

$$\text{NIM} = \frac{\text{NII}}{\text{EA}} \quad \dots \quad \dots \quad \dots \quad (3.6.12)$$

Where,

NIM = Net interest margin

NII = Net interest income and it is interest incomes minus interest expenses

EA = Earning assets and it includes loans & advances plus investment on securities.

## 4.5 Earning Per Share

The portion of a company's profit allocated to each outstanding share of common stock. Earning per share serves as an indicator of a company's profitability. It provides a direct measure of the returns flowing to the bank's stockholders. Earning per share is generally considered to be the single most important variable in determining a share's price.

$$\text{EPS} = \frac{\text{NI}}{\text{NCS}} \quad \dots \quad \dots \quad \dots \quad (3.6.13)$$

Where,

EPS = Earning per share

NI = Net income

NCS = No. of shares of common stock

## 5. Liquidity

### 5.1 Loan to Deposit Ratio

This is the ratio of the amount of loan to the amount of deposit. This is a measure of liquidity in the banking sector. It is the amount of a bank's loans divided by the amount of its deposits at any given time. The higher the ratio, the more the bank is relying on borrowed funds, which are generally more costly than most types of deposits.

$$\text{LDR} = \frac{\text{TLA}}{\text{TD}} \quad \dots \quad \dots \quad \dots \quad (3.6.14)$$

Where,

LDR = Loan to deposit ratio

TLA = Total loan and advance (before deduction of loan loss reserve)

TD = Total deposit

## 5.2 Cash and Equivalent to Total Deposit

It shows the relationship between total liquid fund to total deposit. It shows the overall short term liquidity position. The higher ratio implies the better liquidity position. The formula is as follows:

$$\text{CETDR} = \frac{\text{CE}}{\text{TD}} \quad \dots \quad \dots \quad \dots \quad (3.6.15)$$

Where,

CETDR = Cash and equivalent to total deposit

CE = Cash and equivalent

TD = Total deposit

## 5.3 Cash and Equivalent to Total Assets Ratio

This is the ratio of cash and equivalent to total assets. It is the amount of cash and equivalent divided by amount of total assets. This is a measure of liquidity in banking sector. It is calculated by using the following model:

$$\text{CETAR} = \frac{\text{CE}}{\text{TA}} \quad \dots \quad \dots \quad \dots \quad (3.6.16)$$

Where,

CETAR = Cash and equivalent to total assets ratio

CE = Cash and equivalent

TA = Total assets

#### 5.4 Cash Balance with NRB to Total Deposit Ratio

It is the ratio of NRB cash balance to total deposit. It measures the proportion of NRB cash balance to total deposit. It shows whether bank is holding the balance required by NRB. The formula is as follows:

$$\text{CBNRBR} = \frac{\text{CBNRB}}{\text{TD}} \quad \dots \dots \dots (3.6.17)$$

Where,

CBNRBR = Cash balance with NRB to total deposit ratio

CBNRB = Cash balance with NRB

TD = Total deposit

#### 3.6.2 Statistical Tools

There are various statistical tools which are used to analyze the financial performance. The statistical tools used in this study are as follows:

##### 1. Average

An arithmetic average is derived from dividing sum of the values by the number of observations. It is used to summarize the data as symbol of mass data. It is usually denoted by  $\bar{X}$ . Thus it is expressed as:

Where,

$$\bar{X} = \frac{\sum X}{N} \quad \dots \dots \dots (3.6.18)$$

$\bar{X}$  = Mean of the values

$\sum X$  = Summation of values

$N$  = Number of observations



## 2. Standard Deviation

The standard deviation measures the spread of the data about the mean value. It is useful in comparing sets of data which may have the same mean but a different range. It is a degree of the dispersion of a set of values. The standard deviation is usually denoted with the letter  $\sigma$ . It is termed as the root-mean-square deviation of the values from their mean, or as the square root of the variance. It was originated by Galton in the late 1860s, the standard deviation is the most universal measure of statistical dispersion, measuring how widely spread the values in a data set are.

$$\begin{aligned}
 S.D. &= \sqrt{\frac{\sum (X - \bar{X})^2}{N}} \\
 &= \sqrt{\frac{\sum X^2}{N} - \left[ \frac{\sum X}{N} \right]^2} \dots \dots \dots (3.6.19)
 \end{aligned}$$

Where,

$X$  = Individual value

$N$  = Number of observations

$\bar{X}$  = Simple arithmetic mean

## 3. Coefficient of Variation

The coefficient of variation represents the ratio of the standard deviation to the mean, and it is a useful statistic for comparing the degree of variation from one data series to another. The coefficient of variation allows you to determine how much risk you are assuming in comparison to the amount of return you can expect from your investment. The lower the ratio of standard deviation to mean return, the better is the risk-return tradeoff. It is calculated as follows:

$$CV = \frac{\sigma}{\bar{X}} \dots \dots \dots (3.6.20)$$

Where,

$\sigma$  = Standard deviation

$\bar{X}$  = Mean  
 CV = Coefficient of variation

#### 4. Least Square Trend Analysis

Least square trend analysis is used to find out trend of ratios. The equation used for trend is as follows:

$$= a + bX \dots \dots \dots (3.6.21)$$

Where,

$Y$  = Dependant Variables  
 $X$  = Independent variable  
 $a$  = Y- intercept  
 $b$  = slope of the trend line

In the above equation,

$$b = \frac{\sum XY - n \bar{X}\bar{Y}}{\sum X^2 - n \bar{X}^2}$$

$$a = \bar{Y} - b\bar{X}$$

#### 3.7 Limitation of Methodology

Since the study is done with in the structure of the case study research design, so it has the limitations of the case study research design in which the study as well as the methodology is limited. The study won't be able to show the whole scenario due to a single unit taken for the study.

Various financial and statistical tools used for data collection in the study are not free from criticisms. So it also enforces limitation. Since the various financial and statistical tools used to analyze the collected data are based on certain assumptions, so reliability of the analysis depends upon the circumstances on which the models are based.

## CHAPTER IV

### **PRESENTATION AND ANALYSIS OF DATA**

This chapter includes presentation and analysis of data. Since the objective of the study is to analyze the financial performance of Nepal Bangladesh Bank Ltd. in the framework of CAMEL, so various tools and techniques have been used for the analysis purpose. Similarly various charts and tables have been constructed.

#### **4.1 Capital Adequacy**

Banks and other financial institutions have sufficient capital to keep them out of difficulty. This not only protects depositors, but also the wider economy. Banks should have sufficient capital to support its risks assets in unity with risk weighted capital ratio framework. The adequacy of bank capital is the most essential aspect of bank. It provides cushion to absorb operational and abnormal losses.

##### **4.1.1 Leverage Ratio Analysis**

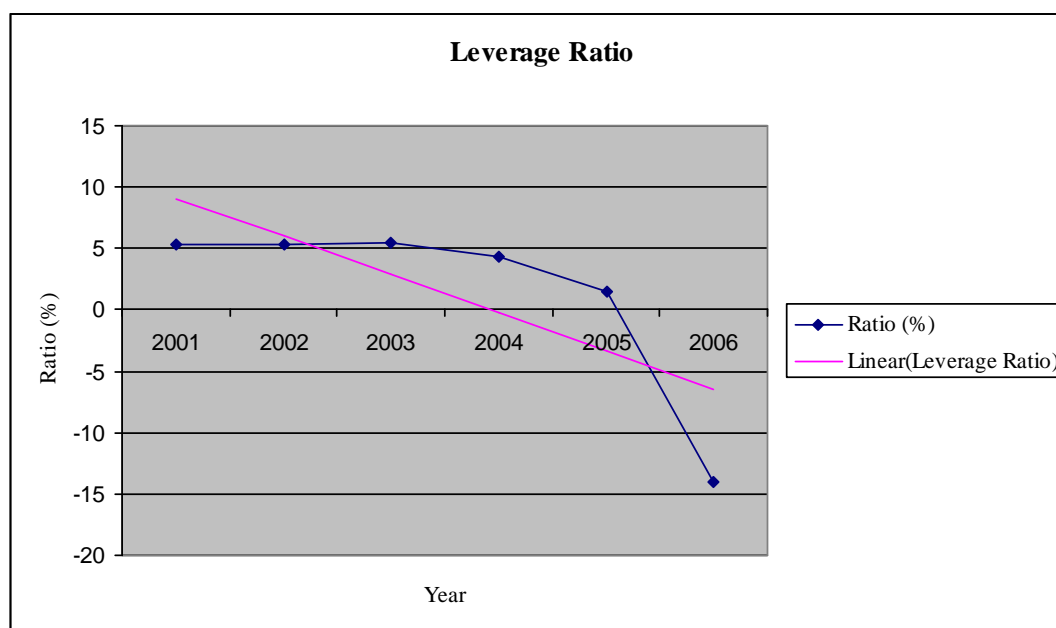
Leverage ratio shows how much amount of shareholders funds is used to finance a bank's assets. It measures the ratio of a bank's book value of primary capital to the book value of its assets. The lower the ratio the more highly leveraged is the bank and the higher the ratio the less leverage is the bank. Leverage Ratio calculates the relationship between primary capital and total assets of the bank. It shows the percentage of core capital in the total assets. Normally leverage ratio of 5 percent or more than 5 percent shows that commercial banks are well capitalized.

**Table 4.1: Leverage Ratio**

FY (as at mid July)	2001	2002	2003	2004	2005	2006
Core Capital (in million Rs)	561.6	590.72	646.16	616.17	193.32	(1639.10)
Total Assets (in million Rs)	10593.91	11102.23	11932.61	14257.97	12480.85	11709.28
Leverage Ratio(%)	5.30	5.32	5.41	4.32	1.55	-14.00

Source: NBBL, Annual Reports, 2001-2006

From the above table we can see that the trend of leverage ratio is in increasing trend from year 2001 to 2003 but thereafter it is in decreasing trend from year 2004 and also in year 2006 the ratio is negative. The core capital is very low in year 2005 and it is negative in year 2006 which shows the very poor financial condition of the bank. There is no enough shareholders fund to manage the shock in balance sheet. This show the creditors and depositors funds are in high risk. The mean ratio of the bank is 1.32 percent and the coefficient of variation of them is 580.7 percent which is too much variable and very inconsistent also.

**Figure 4.1**

$$y = -3.11143x + 12.20667$$

Figure 4.1 shows that the leverage ratio with the least square trend line. It is in increasing trend from year 2001 to 2003 but it shows negative trend thereafter. The slope of the trend line is negative which shows the decreasing trend of leverage ratio. The ratio trend is falling down in high speed in year 2005 and 2006 which indicates the core capital of the bank is not only decreasing in high speed but also with huge negative amount.

#### **4.1.2 Capital Adequacy Ratio Analysis**

Capital adequacy requirements have existed for a long time, but the two most important are those specified by the Basel Committee of the Bank for International Settlements. Basel 1 defined capital adequacy as a single number that was the ratio of a bank's capital to its assets. There are two types of capital, tier one and tier two. The first is primarily share capital, the second other types such as preference shares and subordinated debt. Each class of asset has a weight of between 0 to 100%. Very safe assets such as government debt have a zero weighting, high risk assets (such as unsecured loans) have a rating of one. Other assets have weightings somewhere in between. The weighted value of an asset is its value multiplied by the weight for that type of asset. The Basel 1 accord is to be replaced, in stages, by Basel 2. Basel 2 is based on three "pillars": minimum capital requirements, supervisory review process and market forces. The first "pillar" is similar to the Basel 1 requirement; the second is the use of sophisticated risk models to ascertain whether additional capital (i.e. more than required by pillar 1) is necessary. The third pillar requires more disclosure of risks, capital and risk management policies. This encourages the markets to react to the taking of high risks.

Capital adequacy ratio is the measure of bank's capital. This ratio is used to protect depositors and promote the stability and efficiency of financial systems. Capital adequacy ratio above the central bank standard indicates the sufficiency of the capital and the ratio below the standard indicates lack of adequate capital in bank. Higher capital ratio above the standard indicates higher security to depositors, strong financial position and higher internal sources. On the opposite, the lower

capital adequacy ratio below the standard indicates lower security to depositors, comparatively weak financial position and lower internal sources.

The central bank of Nepal, Nepal Rastra Bank has fixed the minimum requirement of capital adequacy ratio i.e. total capital fund( core capital plus supplementary capital) to total risk adjusted assets as 8%, 9%, 10%, 11%, 11% and 11% in the year 2001, 2002, 2003, 2004, 2005, 2006 respectively. The commercial banks of Nepal have to follow the directives issued by NRB and have to maintain capital adequacy ratio as per directives.

Table 4.2 presents the observed values of capital adequacy ratio of Nepal Bangladesh Bank Ltd of the last six years from 2001-2006.

**Table 4.2: Capital Adequacy Ratio**

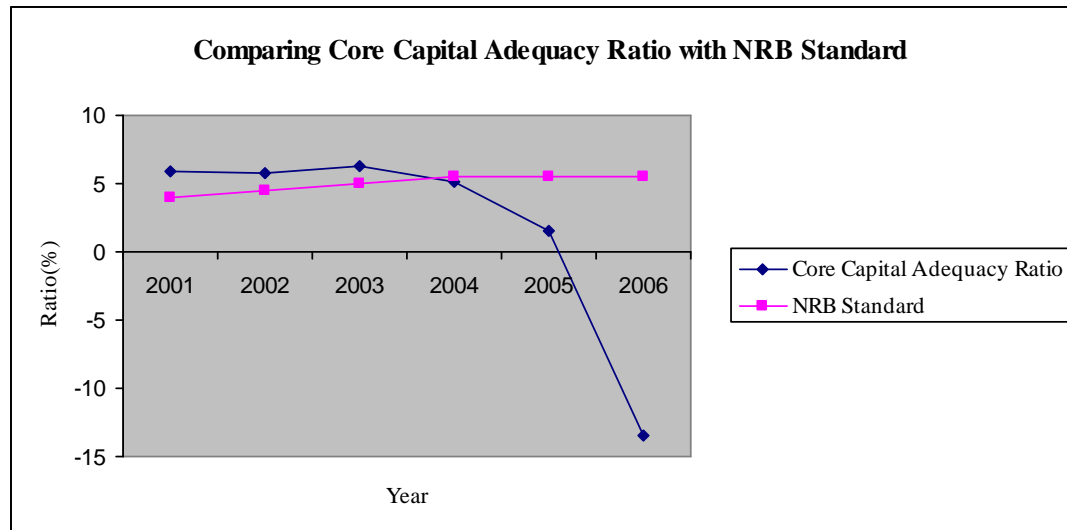
FY (as at mid July)	2001	2002	2003	2004	2005	2006
Capital Fund (in million Rs)	879.49	1018.13	843.256	800.60	429.513	(1639.10)
Total Risk Weighted Assets (in million Rs)	9454.55	10266.68	10395.86	11910.55	12816.93	12162.05
Capital Adequacy Ratio(%)	9.30	9.92	8.11	6.72	3.35	-13.48
Nepal Rastra Bank Standard(%)	8.00	9.00	10.00	11.00	11.00	11.00
Capital Adequacy Ratio Excess/Short(%)	1.30	.92	-1.89	-4.28	-7.65	-24.48

Source: NBBL, Annual Reports, 2001-2006

As shown in the table 4.2 the capital adequacy ratio of NBBL is maximum in the year 2002 which is 9.92% and is minimum in the year 2006 which is -13.48%. The ratio of the bank is in increasing trend from year 2001 to 2002 but it is declining from year 2003 onwards and in year 2006 it is also showing negative ratio. The capital fund of the bank is in fluctuating trend. From year 2003 it is seen that capital

fund is decreasing in high speed and finally it is negative by 1639.10 million in year 2006. The ratio is excess in two years 2001 and 2002 and negative in the years 2003, 2004, 2005 and 2006.

**Figure 4.2**



From the above figure we can see that capital adequacy ratio of NBBL in comparison to NRB standard is very poor. In 2001 and 2002 the capital adequacy ratio is above the NRB Standard but from 2003 it is in declining trend and in 2006 the ratio is negative which means the financial strength and soundness of bank is very poor. From the trend of the ratio it can be concluded that the funds of depositors and creditors are in high risk. The bank is not following the directives in the last four years which shows the weak capital base and weak management of NBBL.

### **4.1.3 Core Capital Adequacy Ratio**

Core capital is the primary capital of the commercial bank. Core capital is the minimum amount of capital that the financial institution must have on hand in order to be in compliance with the regulations put in place by Central Bank. The establishment of core capital as a basic requirement for functioning helps to keep the financial community stable as well. This helps to maintain consumer confidence, keep financial institutions viable, and overall minimize shifts in the general

economy. Core Capital includes paid up equity capital, irredeemable non-cumulative preference shares, share premium, general reserve, accumulated profit, capital redemption reserve, capital adjustment reserve, dividend equalization reserves and other free reserves. Amount of fictitious assets, goodwill, investment in the financial instruments issued by the organization having the own financial interest, investment in financial instruments issued by the organized organization in excess to the limit specified by NRB are deducted from the sum of all elements of the primary capital to come at the core capital.

Core Capital adequacy ratio is defined as core capital to total risk weighted assets ratio. It measures the adequacy of shareholders fund. If the ratio is high above the NRB standard it shows the strong financial position of the bank and higher security to creditors and depositors funds and if the ratio is below the NRB standard it shows the weak financial position of bank and higher risk to creditors and depositors funds.

Nepal Rastra Bank has directed through its directives to all commercial banks to maintain minimum core capital ratio for the safety and soundness of the commercial banks. According to NRB directives the Commercial Banks are directed to maintain 4%, 4.5%, 5%, 5.5%, 5.5% and 5.5% in years 2001, 2002, 2003, 2004, 2005 and 2006 respectively.

**Table 4.3: Core Capital Adequacy Ratio**

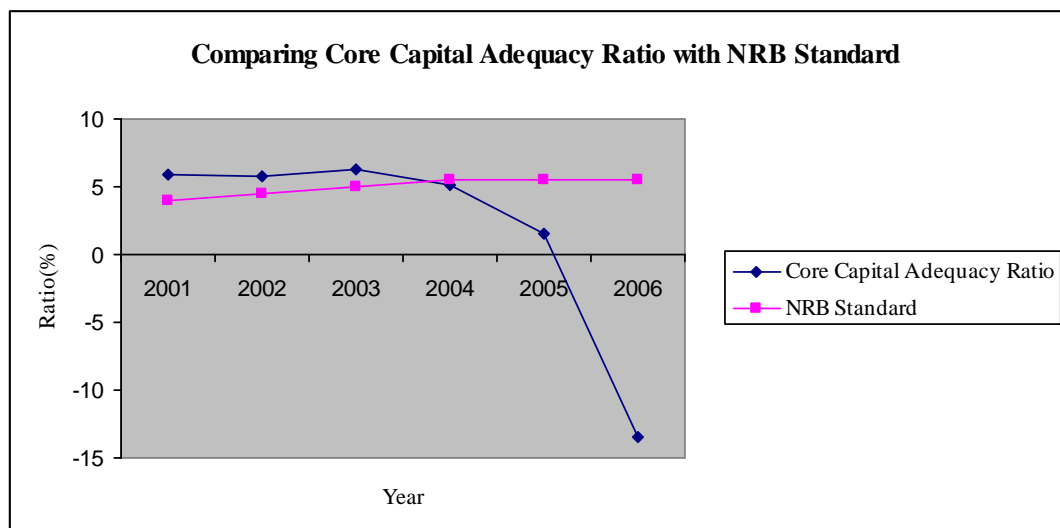
FY (as at mid July)	2001	2002	2003	2004	2005	2006
Core Capital (in million Rs)	561.6	590.72	646.16	616.17	193.32	(1639.056)
Total Risk Weighted Assets(in million Rs)	9454.55	10266.68	10395.86	11910.55	12816.93	12162.05
Core Capital Adequacy Ratio(%)	5.94	5.75	6.22	5.17	1.51	-13.48
NRB Standard(%)	4.00	4.50	5.00	5.50	5.50	5.50
Core Capital Ratio Excess/Short(%)	1.94	1.25	1.22	-.33	-3.99	-18.98

Source: NBBL, Annual Reports, 2001-2006



As shown in the table 4.3, the core capital adequacy ratio of NBBL is maximum of 6.22 percent in FY 2003 and minimum of -13.48 percent in FY 2006 with average ratio of 1.85 percent. From 2001 to 2003 the ratio is in normal trend but from 2004 the ratio is in decreasing trend and also in haphazard and too much disorganized way. From 2001 to 2003 capital adequacy ratio of NBBL shows that it has complied with statutory capital adequacy ratio but from year 2004 to year 2006 it is not complying with the statutory capital adequacy ratio and in year 2006 it is far below the standard ratio which shows very poor condition of capital adequacy of NBBL. The observed value of core capital adequacy ratio of NBBL is shown with NRB standard in figure 4.3 below:

Figure 4.3



From the above figure we can see that core capital adequacy ratio of NBBL in comparison to NRB standard is very poor. In year 2006 it is showing negative ratio. The figure shows that there is no adequate shareholders fund to support the banking activities and the financial strength and soundness of bank is very poor. The trend of ratio is showing that creditors and depositors funds are in risk.

#### 4.1.4 Supplementary Capital Adequacy Ratio Analysis

Supplementary capital is the secondary capital of the commercial bank. Supplementary capital includes general loan loss provision, assets revaluation

reserve, subordinated term loan, exchange equalization reserve, hybrid capital instruments, excess loan loss provision, and investment adjustment reserve. Supplementary capital ratio is a tool used to analyze the supplementary capital adequacy of bank. The ratio shows the percentage of supplementary capital in total risk weighted assets. It also shows the contribution of supplementary capital to the total capital adequacy ratio.

Nepal Rastra Bank has directed to commercial banks to include the supplementary capital in the total capital structure while measuring the capital adequacy ratio. NRB has fixed the maximum limit of supplementary capital ratio as not more than core capital ratio of the bank in each year

**Table 4.4: Supplementary Capital Adequacy Ratio**

FY (as at mid July)	2001	2002	2003	2004	2005	2006
Supplementary Capital (in million Rs)	317.89	427.41	197.097	184.438	236.190	0
Total Risk Weighted Assets (in million Rs)	9454.55	10266.68	10395.86	11910.55	12816.93	12162.05
Supplementary Capital Adequacy Ratio(%)	3.36	4.16	1.89	1.55	1.84	0
NRB Standard %(not more than Core Capital)	5.94	5.75	6.22	5.17	1.51	-13.48
Supplementary Capital Ratio Excess/Short(%)	-2.58	-1.59	-4.33	-3.62	0.33	13.48

Source: NBBL, Annual Reports, 2001-2006

As shown in the table 4.4 the supplementary capital ratio of the bank is 3.36, 4.16, 1.89, 1.55, 1.84 and 0 percent from year 2001 to 2006 respectively. The minimum ratio is 0 percent in the year 2006 and maximum is 4.16 percent in year 2002. The ratio is in increasing trend till year 2002 and in declining trend thereafter. The supplementary capital is in fluctuating trend but in year 2006 it is nil.

Figure 4.4

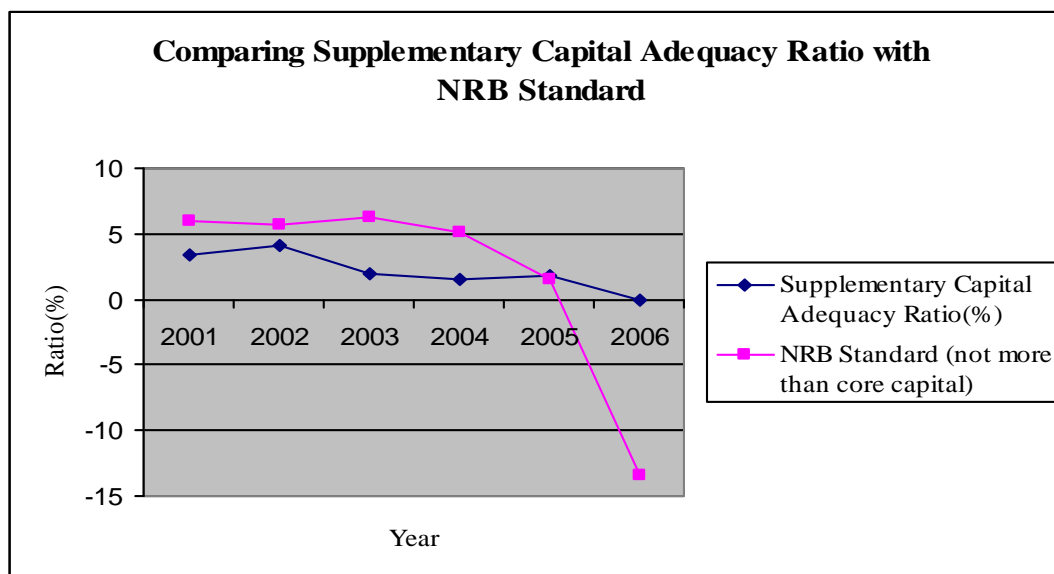


Figure 4.4 shows the comparison of supplementary capital adequacy ratio with NRB standard. The supplementary capital ratio is within the standard of NRB in the first four years of study but it is above the standard in the last two years.

## 4.2 Asset Quality

Asset quality is the fundamental area to be analyzed while doing financial analysis of any bank. In the assets structure loan comprises a major in the assets. So the greatest risk in banking is of loan losses. The bank loan is so risky that charging off of one or two bank loans will completely reduce the entire year's earning. Because of the huge exposure observers give majority of time to assess asset quality, primarily loan quality at almost every observation. While analyzing asset quality existing and potential loss exposure in loan portfolio as well as in investment portfolio and other assets should be observed. Even the bank has very little unfavorably categorized assets quality it could still be rated unsatisfactory due to management inadequacy in controlling the potential credit risk. Asset quality also impacts the other component areas, such as capital, earnings, and especially management. There are other items also in asset composition which impact the asset quality and they are other real estate, other assets, off balance sheet items, cash and bank balance, money at call, premises and fixed assets.

The measurement of asset quality involves much more than simply calculating past due and unfavorable classification ratios. Besides assessing trends in classified assets, bad loans, and credit concentrations, the asset quality component rating takes into account management's ability to underwrite and administer credits in a sensible and sound manner.

The maintenance of sound asset quality is a fundamental aspect of banking. It is the prime responsibility of each bank's management to set policies and procedures to ensure that the bank maintains sound asset quality, strong portfolio management, prudent risk controls, effective credit review and classification procedures, and an appropriate methodology for dealing with problem exposures. The ratio of non performing loans to total loans is often used as major ratio for assessing asset quality. The ratio of provisions to non performing loans provides measure of the delinquent loans for which provisions are already made. In this study assets composition, non performing loan, and loan loss reserve are taken to measure the asset quality of bank.

#### 4.2.1 Assets Composition

Asset composition is related to the left hand side of the bank balance sheet. The asset side of the balance sheet shows how the funds entrusted are utilized. The structure of the balance sheet shows the different types of assets in the descending order of liquidity.

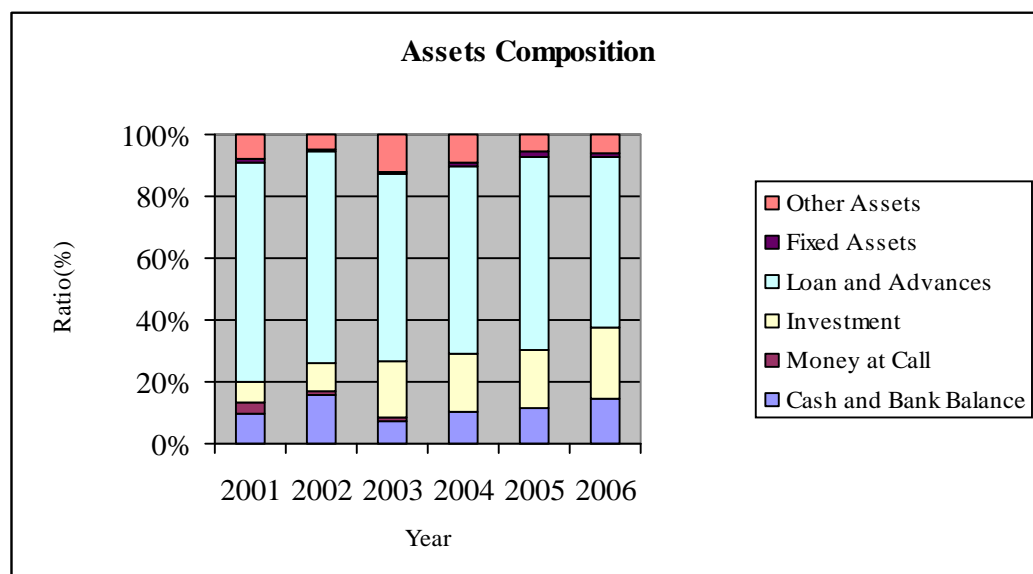
**Table 4.5: Assets Composition ( In Percentage)**

FY (as at mid July)	2001	2002	2003	2004	2005	2006	Mean
Cash and Bank Balance	9.68	15.85	7.55	10.07	11.23	14.47	11.47
Money at Call	3.75	0.90	0.84	-	-	0.26	.96
Investment	6.52	9.09	18.20	18.93	19.32	22.73	15.80
Loan and Advances	69.46	68.75	60.81	60.66	62.40	55.17	63.16
Fixed Assets	0.87	0.82	0.68	1.34	1.52	1.47	1.12
Other Assets	9.71	4.60	11.93	8.99	5.53	5.89	7.49
Total	100	100	100	100	100	100	100

Source: NBBL, Annual reports, 2001-2006

The above table shows the assets composition of NBBL for the fiscal year 2001 through 2006. The percentage of cash and bank balance in the asset composition is increasing up to year 2002 after that it is showing sharp down fall in year 2003 and then moving up from year 2004 till year 2006. Thus the trend is fluctuating haphazardly. The situation of money at call is also not good. It is showing decreasing trend till year 2003 and in the year 2004 and 2005 it is nil and in the year 2006 the percentage is very minimum. Investment is showing increasing trend during the study period. Similarly loan and advances is increasing and decreasing during the study period. Like wise fixed assets is also slightly decreasing and increasing during the study period and the other assets also showing decreasing and increasing trend throughout. It can be seen from the table that major part of the assets is occupied by loan and advances and investment which are highly risky assets. The calculations of the table is shown in the figure below:

**Figure 4.5**



From the given figure it can be seen that the major part of the assets composition is occupied by loan and advances and investment showing increasing trend. Money at call is almost not existing and other assets & cash and bank balance is in both increasing and decreasing trend.

## 4.2.2 Non Performing Loan Ratio

Loans and advances are the major part of the assets composition. So the sound financial condition of bank is largely depended on quality of assets held by them. One of the indicators to measure the quality of the assets being held by bank is non performing asset ratio. The increasing trend of the ratio shows the worsening quality of bank assets. Normally 5 to 10 percent of non performing assets is considered satisfactory for quality of bank assets.

NRB has directed Banks to classify the loans into performing loan and non performing loan. The loans that are not due and 3 months past due are called pass loans or performing loans. Moreover non-performing loans are classified into three groups: i. Substandard ii. Doubtful iii. Loss. The loans that are past due for more than 3 months or 6 months past due are called substandard loan. The loans that are past due for more than 6 months or one year past due are called doubtful loans and the loans that are past due for more than one year are called loss loans.

**Table 4.6: Non Performing Loan Ratio**

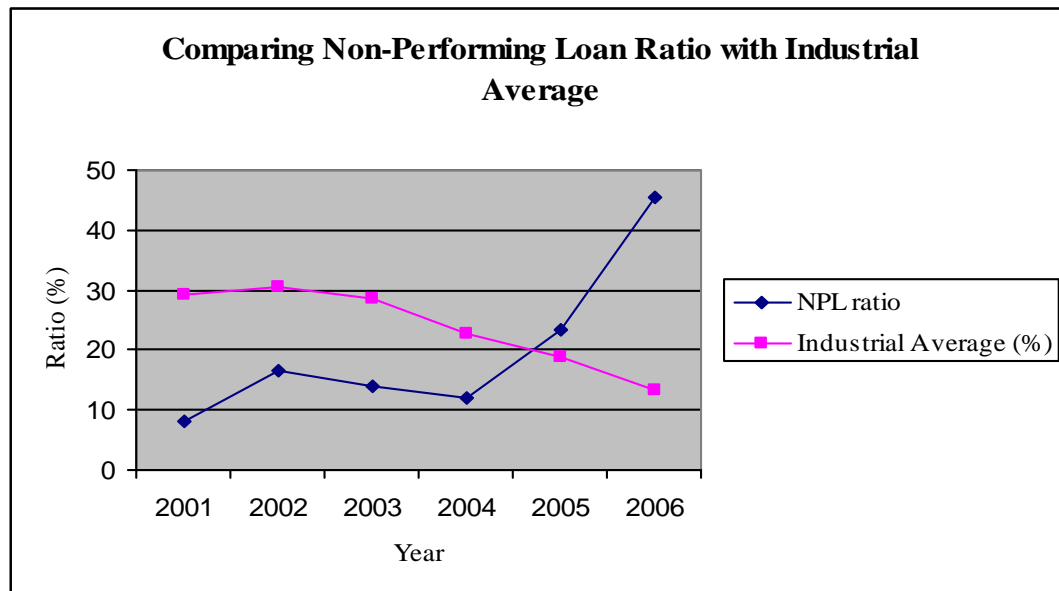
FY (as at mid July)	2001	2002	2003	2004	2005	2006
Non-Performing Loan(in million Rs)	590.05	1275.22	1013.27	1042.18	1832.94	2927.11
Total Loan (in million Rs)	7358.84	7632.42	7247.98	8648.74	7787.69	6460.25
NPL Ratio(%)	8.02	16.71	13.98	12.05	23.53	45.31
Industrial Average(%)	29.31	30.41	28.68	22.77	18.79	13.16

Source: NBBL, Annual Reports, 2001-2006; NRB, Annual Banks Supervision Reports, 2002-2006

The above table shows that the NPL ratios are below the average in the year 2001 through 2004. But in year 2005 the NPL ratio is higher than the industrial average by 4.74 percent and in year 2006 it is more than triple of the industrial

average. The NPL ratio shows that the bank's quality of assets is in deteriorating trend and it has worsen more and more in the year 2005 and 2006.

**Figure 4.5**



In the above figure the NPL ratio curve of the bank is below the industry average curve in the first four years from year 2001 to year 2004 of the study period but it has crossed the industrial average curve and above it in the year 2005 and 2006. It shows the deteriorating quality of assets held by NBBL. It shows the very unsatisfactory level of nonperforming assets in the total assets of NBBL.

### **4.2.3 Loan Loss Reserve Ratio**

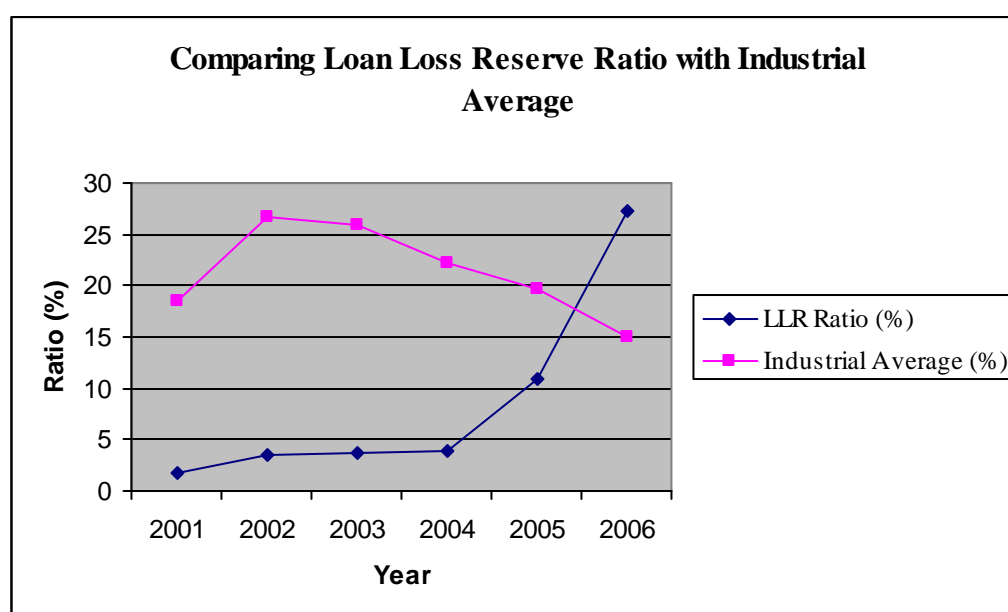
Another indicator to measure the quality of the assets being held by bank is Loan Loss Reserve ratio. The increasing trend of the ratio shows the worsening quality of bank assets. It shows the relationship between loan loss reserve and total loan and advances. The reserve for loan loss denotes the increasing probability of non performing loans in the volume of total loans and advances. On the other hand it is a cushion against future contingency created by the default of the borrowers. The ratio is calculated by dividing loan loss reserve by total loan and advances.

**Table 4.6: Loan Loss Reserve Ratio**

FY (as at mid July)	2001	2002	2003	2004	2005	2006
Loan Loss Reserve (in million Rs)	130.48	269.35	261.87	282.48	843.27	1768.49
Total Loan (in million Rs)	7358.84	7632.42	7247.98	8648.74	7787.69	6460.25
LLR Ratio(%)	1.77	3.53	3.61	3.89	10.83	27.37
Industrial Average(%)	18.55	26.62	25.95	22.13	19.68	15.05

Source: NBBL, Annual Reports, 2001-2006

Table 4.6 shows that loan loss reserve ratio in the study period is showing increasing trend but comparing to industrial average it is far below the industrial average. Till year 2004 the ratio is increasing slightly and then it is increasing in high rate. The loan loss reserve ratio of NBBL indicates that the bank's quality of assets is worsening year by year.

**Figure 4.6**

In the above figure the loan loss reserve ratio curve of the bank is below the industry average curve in the first five years of the study period but it has crossed the industrial average curve and above it in the year 2006. The loan loss



reserve ratio of NBBL indicates that the bank's quality of assets is worsening in the later years of the study period.

### 4.3 Management Quality

Management quality involves a subjective analysis for measuring the efficiency of the management. Though it is difficult to measure, several indicators yet can together serve as an indicator of management soundness. Earning per employee, expenses ratio, cost per loan, average loan size and cost per unit of money lent can be used for measuring management quality. NRB has been using a separate rating for the off-site supervision which uses the components of CAMELS except for the "M" representing management, and the rating is, thus, labeled CAELS. However only operating expenses ratio (OER) and earning per employee (EPE) are used as a indicator for the management quality.

#### 4.3.1 Operating Expenses Ratio

Operating expenses ratio shows the relationship between total operating expenses and total operating incomes. It measures the proportion of total operating expenses in total operating revenue. Low ratio indicates that the bank is operating efficiently and high ratio indicates that the bank is not operating efficiently. Operating expenses includes interest expenses, employees expenses, office operating expenses, currency exchange loss, bad loan advance written off and loan loss provision and operating incomes includes interest incomes and non interest incomes.

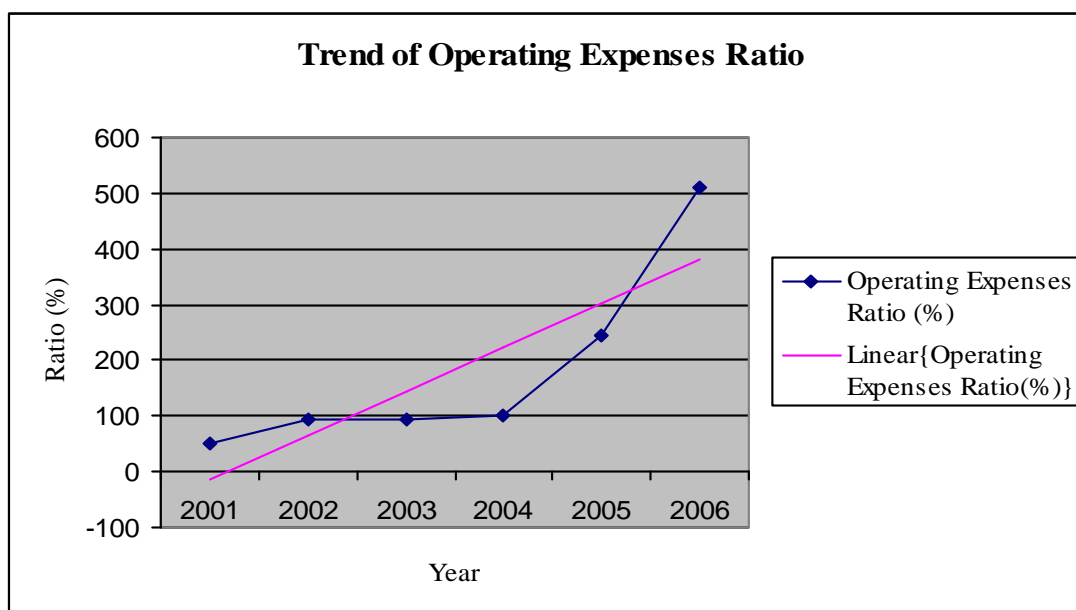
**Table 4.7: Total Operating Expenses to Total Operating Revenues Ratio**

FY (as at mid July)	2001	2002	2003	2004	2005	2006
Total Operating Expenses (in million Rs)	280.22	1011.02	1172.33	1324.55	1317.16	2234.30
Total Operating Revenues (in million Rs)	564.16	1076.80	1243.83	1327.20	535.231	437.139
Operating Expenses Ratio(%)	49.67	93.89	94.25	99.80	246.09	511.12

Source: NBBL, Annual Reports, 2001-2006

As shown in Table 4.7, the operating expenses ratio is in increasing trend. The ratios are distributed from a minimum of 49.67 percent in year 2001 and maximum 511.12 percent in year 2006 with average ratio of 182.47 percent and coefficient of variation between them is 95.60 percent. Since the ratios are increasing rapidly the coefficient of variation is also showing high percentage.

**Figure: 4.7**



$$y = 79.126x + (-94.47)$$

The Figure 4.7 shows the operating expenses ratio in increasing trend. The rising curve of the operating expenses ratio of NBBL shows the increasing operating loss of NBBL. The increasing slope of trend line indicates the increasing expenses with respect to income. The figure shows the worsening condition of NBBL in terms of operating expenses.

### 4.3.2 Earning Per Employee

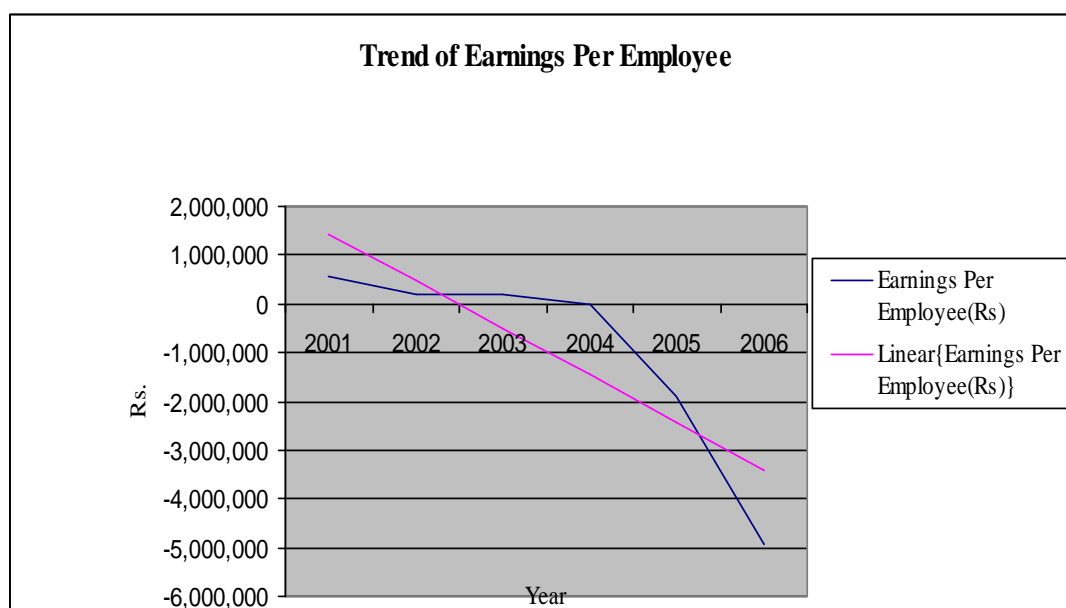
Earning per employee is another indicator of measuring management quality. It shows the relationship between net operating income and number of employees. Low earning per share reflects management inefficiencies. It is calculated by dividing net operating income by number of employees.

**Table 4.8: Earning Per Employee**

Fiscal Year (as at mid July)	2001	2002	2003	2004	2005	2006
Net Profit (in million Rs)	198.75	65.78	71.50	2.64	(781.930)	(1797.16)
No. of Employees	362	365	351	435	410	365
Earning per Employee(Rs.)	549,033	180,219	203,704	6,069	(1,907,146)	(4,923,726)

Source: NBBL, Annual Reports, 2001-2006

Table 4.8 shows earning per employee in rupees. Year 2001 shows the highest earning per employee and in year 2002 it is decreasing and in 2003 it's again increasing and from year 2004 it is showing very sharp decreasing trend and finally year 2005 and year 2006 is showing negative earning per employee. This shows that the management quality of NBBL is very poor and worsening very badly in the last three years of the study period. The mean for earning per employee for the study period is Rs. -981,975 and coefficient of variation is -184.11 percent.

**Figure: 4.8**

$$y = -966386x + 2400378$$

Figure 4.8 shows the curve of earning per employee of the study period along with the least square trend line. The slope of the trend line is negative which indicates the earning per employee is declining year by year and the decline is very sharp. This shows that the NBBL is incurring huge losses in the later years of the study which further proves the inefficiency of the management.

#### 4.4 Earning Quality

Earning quality is the most important factor that determines the Bank's survival and expansion. The quality of the earnings of a bank depends mostly on how well the management manages its assets and liabilities. Profitability ratios are the indicators to measure the earning quality of a bank. Higher profitability ratio indicates higher efficiency of bank and lower profitability ratios indicate lower efficiency of bank.

##### 4.4.1 Return on Equity

Return on Equity measures a firm's efficiency at generating profits from every rupee of net assets, and shows how well a company uses investment rupees to generate earnings growth. It shows the relationship between net income and shareholders equity. The higher ratio represents the sound management and efficient mobilization of the owner's equity.

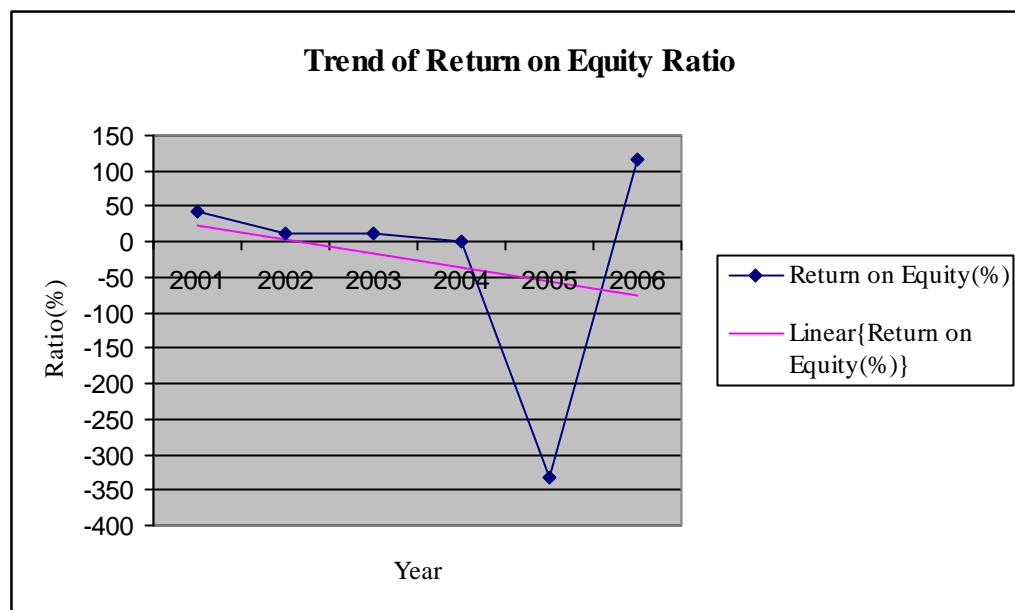
**Table 4.9: Return on Equity**

FY(as at mid July)	2001	2002	2003	2004	2005	2006
Net Profit (in million Rs)	198.75	65.78	71.50	2.64	-781.930	-1797.16
Shareholders Equity (in million Rs)	449.36	626.50	683.93	656.57	234.58	-1562.58
Return on Equity (%)	44.23	10.5	10.45	.40	-333.33	115

Source: NBBL, Annual Reports, 2001-2006

As shown in the table 4.9 the return on equity ratio of the bank is minimum of -333.33 percent in year 2005 and maximum of 115 percent in year 2001. The ratio is in decreasing trend , positive till year 2004 and in year 2005 its negative due to huge net loss. Similarly there is huge loss in year 2006 also but due to the negative shareholders equity the ratio is seen positive.

**Figure 4.9**



$$y = -19.648x + 43.31$$

The above figure 4.9 shows the decreasing trend of return on equity. In year 2005 it has sharply decline with negative ratio which shows that the bank has incurred great loss and in year 2006 the loss is more than double of the year 2005 but due to the high negative shareholders equity it is showing positive ratio and also more than 100 percent. Thus 2006 year has been a more disaster year for NBBL but the figure is showing the upward positive curve line showing a fake view.

#### **4.4.2 Return on Assets**

Return on Assets shows the relationship between net profit and total assets. It shows the percentage of net profit in total assets. Return on assets as a indicator of earning quality indicates how well the management of the bank is converting the

bank's assets into net earning. If a company has a ROA of 10%, it means that the company earned Rs.0.10 for each Rs.1 in assets. Return will be higher if the banks resources are well managed and utilized. According to World Bank the return of assets should be 1 percent and higher in the banking industry.

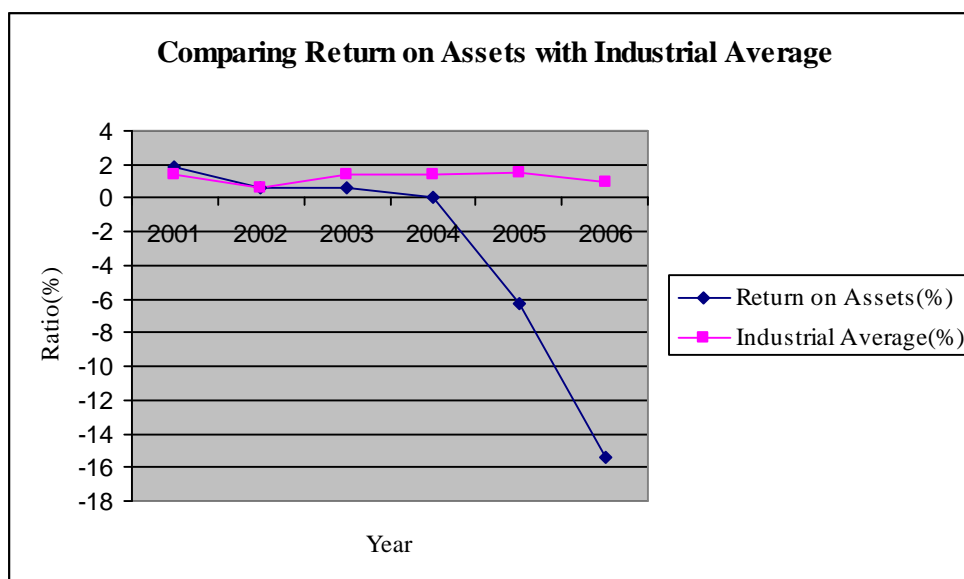
**Table 4.10: Return on Assets**

FY (as at mid July)	2001	2002	2003	2004	2005	2006
Net Profit (in million Rs)	198.75	65.78	71.50	2.64	-781.930	-1797.16
Total Assets (in Million Rs)	10593.91	11102.23	11918.52	14257.97	12480.85	11709.28
Return on Assets (%)	1.88	.59	.60	.02	-6.26	-15.35
Industrial Average(%)	1.37	.64	1.38	1.38	1.48	.95

Source: NBBL, Annual Reports, 2001-2006

As shown in the table 4.10 the return on assets ratio of the bank is minimum of -15.35 percent in year 2006 and maximum of 1.88 percent in year 2001. The ratio is in decreasing trend , positive till year 2004 and in year 2005 and 2006 its negative due to huge net loss. It is below the industrial average in all year of study period except in year 2001.

**Figure 4.10**



The above figure 4.10 shows the comparison of return on assets with industrial average. In the first year of study period the curve of the bank is higher than the industrial average but after that it is showing declining trend. In year 2005 it has sharply decline with negative ratio which shows that the bank has incurred great loss and in year 2006 the loss is more than double of the year 2005 and therefore the curve is declining further.

#### 4.4.3 Profit Margin

Profit margin shows the relationship between net income and total operating revenue. A ratio of profitability calculated as net income divided by total operating revenues. A higher profit margin indicates a more profitable bank that has better control over its costs. It shows the proportion of net income in total operating revenues. A 10% profit margin, for example, means the bank has a net income of Rs.0.10 for each rupee of revenue.

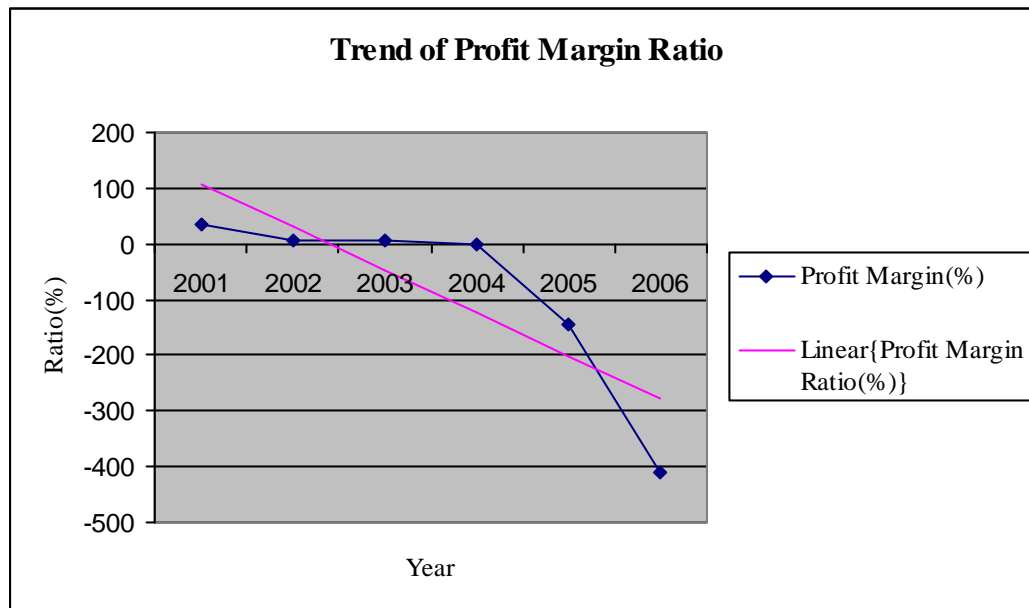
**Table 4.11: Profit Margin**

FY (as at mid July)	2001	2002	2003	2004	2005	2006
Net Profit (in million Rs)	198.75	65.78	71.50	2.64	-781.930	-1797.16
Total Operating Revenue (in million Rs)	564.15	1076.80	1243.83	1327.20	535.23	437.14
Profit Margin (%)	35.23	6.11	5.75	.20	-146.10	-411.12

Source: NBBL, Annual Reports, 2001-2006

As shown in the table 4.11 the profit margin ratio of the bank is minimum of -411.12 percent in year 2006 and maximum of 35.23 percent in year 2001. The ratio is in decreasing trend , positive till year 2004 and in year 2005 and 2006 its negative due to huge net loss. The mean of the ratios for the study period is -84.98 percent and C.V. between them is -202.67 percent.

Figure 4.11



$$y = -76.97x + 184.40$$

The above figure 4.11 shows the comparison of Profit Margin with industrial average. In the first year of study period the curve of the bank is higher than the industrial average but after that it is showing declining trend. In year 2005 it has sharply decline with negative ratio which shows that the bank has incurred great loss and in year 2006 the loss is more than triple of the year 2005 and therefore the curve is declining further.

#### 4.4.4 Net Interest Margin

Net Interest Margin shows the relationship between net interest income and earning assets. It is a measurement of the difference between the interest of the income generated by banks and the amount of interest paid out to their lenders. Earning assets includes loans and advances, bills purchased & discounted and investment. Net Interest Margin shows the percentage a bank earns as interest for each unit of investment made in loan and securities. According to World Bank the interest margin ratio should be 3 to 4 percent or higher in banking industry.

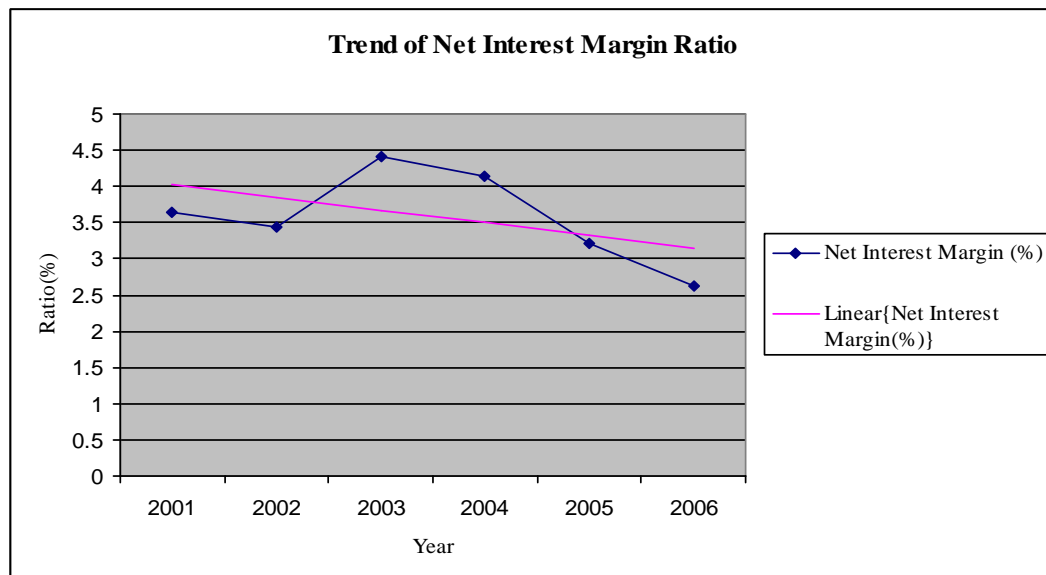


**Table 4.12: Net Interest Margin**

Fiscal Year (as at mid July)	2001	2002	2003	2004	2005	2006
Net Interest Income (in million Rs)	294.20	297.78	415.83	470.14	328.57	240.04
Earning Assets (in million Rs)	8049.92	8641.06	9416.9	11347.91	10199.41	9122.08
Net Interest Margin (%)	3.65	3.45	4.42	4.14	3.22	2.63

Source: NBBL, Annual Reports, 2001-2006

As shown in the table 4.12 the net interest margin ratio of the bank is minimum of 2.63 percent in year 2006 and maximum of 4.42 percent in year 2003. The ratio is in both increasing decreasing trend, slightly decreasing in year 2002 and increasing till year 2004 and then decreasing again in year 2005 and 2006. In year 2006 the net interest margin is 2.63 percent which is not good ratio which indicates the decreasing interest spread of bank.

**Figure 4.12**

$$y = -.173x + 4.192$$

In the past six years, the net interest margin ratio of NBBL was distributed as a maximum ratio of 4.42 percent in year 2003 and minimum ratio 2.63 percent in

year 2006. The mean ratio for the study period is found 3.58 percent and coefficient of variation is 17.96 percent. On the basis of coefficient of variation it can be concluded that the ratios are quite variable.

#### 4.4.5 Earnings Per Share

Earning per share serves as an indicator of a company's profitability. It shows the relationship between net profit and number of shares. It provides a direct measure of the returns flowing to the bank's stockholders. Earning per share is generally considered to be the single most important variable in determining a share's price. It is the amount the shareholders get on every share they held.

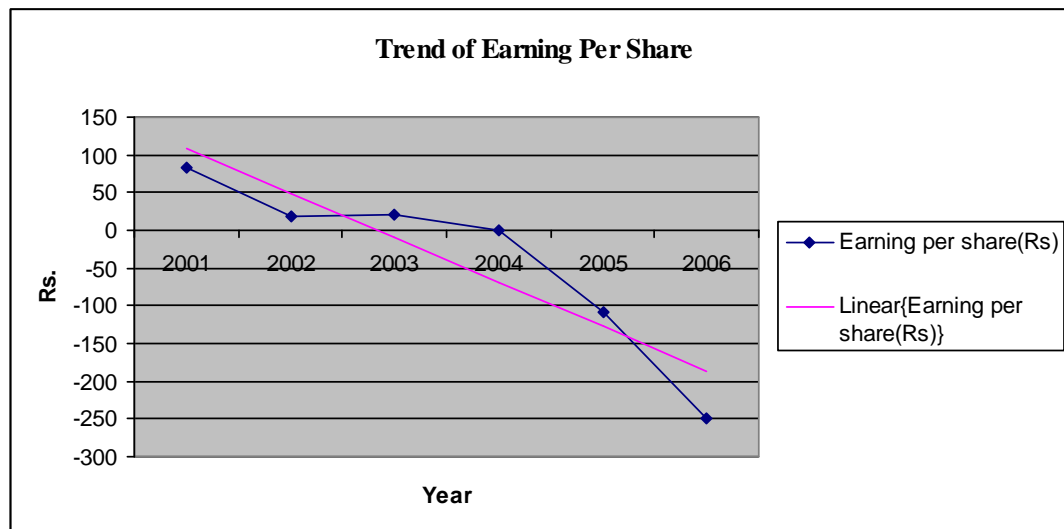
**Table 4.13: Earnings Per Share**

FY (as at mid July)	2001	2002	2003	2004	2005	2006
Net Profit (in million Rs.)	198.75	65.78	71.50	2.64	-781.930	-1797.16
No. of Shares (in million)	2.4	3.6	3.6	3.6	7.2	7.2
Earning Per Share (Rs)	82.81	18.27	19.86	.73	-108.60	-249.61

Source: NBBL, Annual Reports, 2001-2006

The above table 4.13 shows the earning per share of NBBL from the year 2001 to year 2006. Year 2001 shows the highest earning per share and in year 2002 it is decreasing and in 2003 it's again increasing and from year 2004 it is showing very sharp decreasing trend and finally year 2005 and year 2006 is showing negative earning per share. This shows that net profit of the bank is deteriorating very badly during the study period. The mean for earning per share for the study period is Rs.-39.42.

Figure 4.13



$$y = -58.9097x + 166.7607$$

Figure 4.13 shows the curve of earning per share of the study period along with the least square trend line. The slope of the trend line is negative which indicates the earning per share is declining year by year. This shows that the NBBL is incurring huge losses in the later years of the study which further proves the inefficiency of the management.

## 4.5 Liquidity

A bank must always be liquid to meet depositors and creditors demand in order to maintain confidence. Lack of adequate liquidity is the sign that a bank is in serious financial crisis. Liquidity gives opportunities to have new investments and to pay debts when they fall due. Liquidity is the bank's capacity to have accessible, reasonably priced funds. Liquidity risk is the risk to a bank's earnings and capital arising from its inability to timely meet obligations when they come due without incurring unacceptable losses. Bank management must ensure that sufficient funds are available at a reasonable cost to meet potential demands from both funds providers and borrowers. Liquidity management is among the most important activities that bank should conduct. Managing liquidity involves estimating liquidity needs and providing for them in the most cost-effective way possible.

### 4.5.1 Loan to Deposit Ratio

This shows the ratio of the amount of loan to the amount of deposit. This is a measure of liquidity in the banking sector. It is the amount of a bank's loans divided by the amount of its deposits at any given time. The higher the ratio, the more the bank is relying on borrowed funds, which are generally more costly than most types of deposits.

**Table 4.14: Loan to Deposit Ratio**

FY (as at mid July)	2001	2002	2003	2004	2005	2006
Total Loan and Advances (in million Rs.)	7358.84	8083.99	7961.51	9644.69	9626.91	9796.38
Total Deposits (in million Rs.)	8600.81	9534.22	10580.10	12807.38	12125.58	13015.14
Loan/Deposit (%)	85.56	84.79	75.25	75.31	79.39	75.27
Industrial Average(%)	59.45	62.31	61.72	61.48	65.65	66.44

Source: NBBL, Annual Reports, 2001-2006; NRB, Annual Bank Supervision Reports, 2002-2006

The above table 4.14 shows the loan to deposit ratio of NBBL from the year 2001 to year 2006. Year 2001 shows the highest loan to deposit ratio and from year 2002 it is showing decreasing trend due to more increasing trend of total deposit than increasing trend of total loan and advances. In every year of the study period loan to deposit ratio is higher than the industrial average. This shows bank is lending more than the industrial average.

Figure 4.14

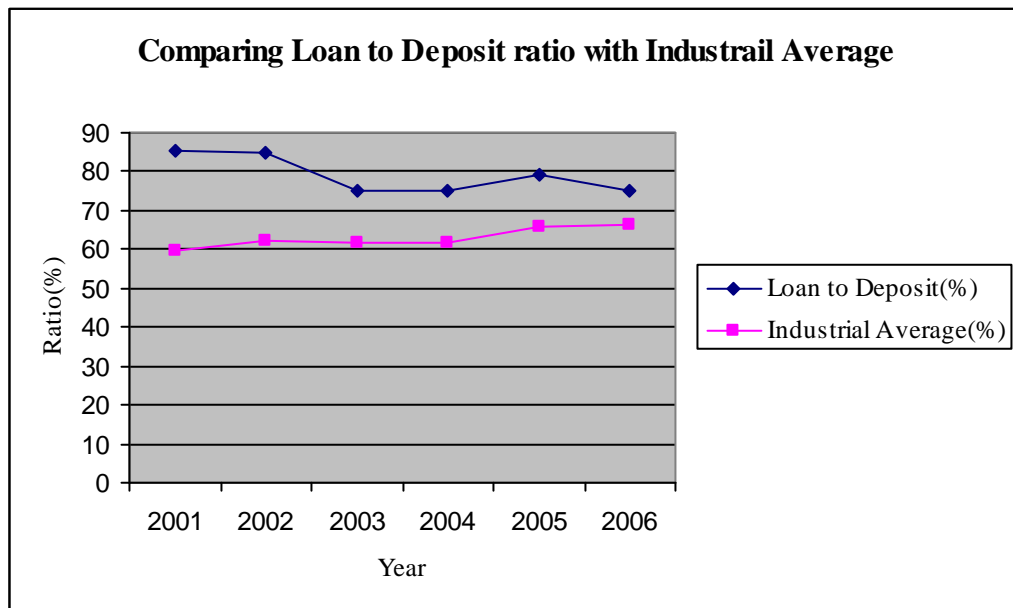


Figure 4.14 shows the comparison of loan to deposit ratio with industrial average of the study period. In the above figure, the loan to deposit curve of the bank is above the industrial average curve in all the observed fiscal years. This depicts the fact that liquidity position of NBBL is not better than the industrial average ratio which shows bank is lending more of its deposits.

#### 4.5.2 Cash and Equivalent to Total Deposit

It shows the relationship between total liquid fund to total deposit. It shows the overall short term liquidity position. The higher ratio implies the better liquidity position. It includes cash in hand, foreign currency in hand, balance with NRB, balance with domestic bank, balance with foreign banks and money at call.

**Table 4.15: Cash and Equivalent to Total Deposit**

FY (as at mid July)	2001	2002	2003	2004	2005	2006
Cash and Equivalent (in million Rs.)	1423.46	1859.31	999.51	1436.47	1401.77	1724.71
Total Deposits (in million Rs.)	8600.81	9534.22	10580.10	12807.38	12125.58	13015.14
Cash and Equivalent/Deposit (%)	16.55	19.50	9.45	11.22	11.56	13.25
Industrial Average(%)	19.72	15.76	13.23	15.46	13.33	10.52

Source: NBBL, Annual Reports, 2001-2006; NRB, Annual Bank Supervision Reports, 2002-2006

The above table 4.15 shows the cash and equivalent to deposit ratio of NBBL from the year 2001 to year 2006. The ratios are in fluctuating trend. Year 2002 shows the highest cash and equivalent to deposit ratio and in year 2003 it is showing decreasing trend and from year 2004 it is showing increasing trend due to more increasing trend of total deposit than increasing trend of cash and equivalent. The industrial average is 16.55, 19.50, 9.45, 11.22, 11.56 and 13.25 in the year 2001 to year 2006. The industrial average ratios show that the ratios are decreasing in the later years of the study and are in fluctuating trend.

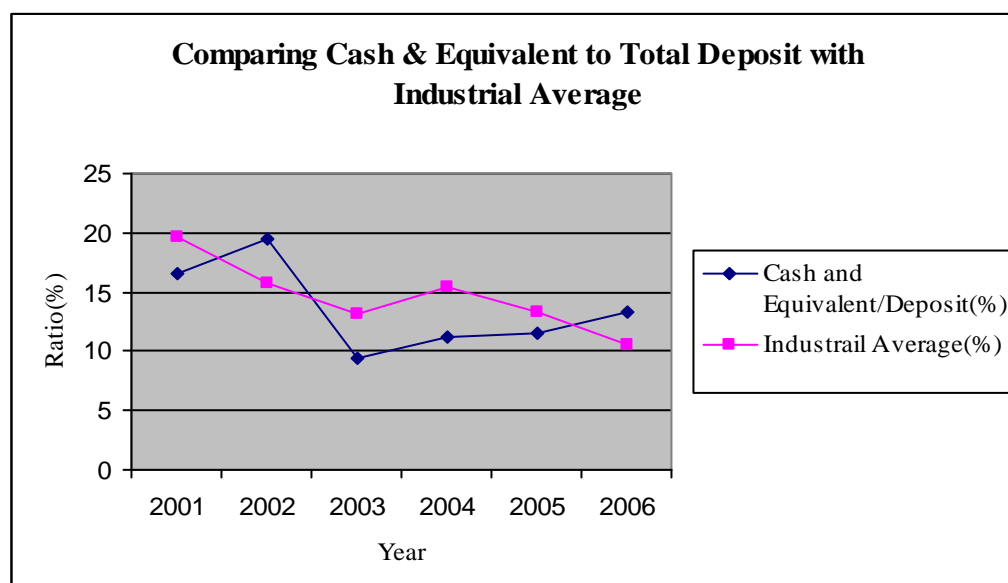
**Figure 4.15**

Figure 4.15 shows the comparison of cash and equivalent to deposit ratio with industrial average of the study period. In the above figure, the cash and equivalent to deposit curve of the bank is above the industrial average curve in the year 2002 and 2006. The ratios are in fluctuating trend both of NBBL and industrial average.

### 4.5.3 Cash and Equivalent to Total Assets Ratio

This is the ratio of cash and equivalent to total assets. It is the amount of cash and equivalent divided by amount of total assets. This is a measure of liquidity in banking sector. The following table shows the cash and equivalent to total assets ratio of NBBL with comparison to industrial average ratio.

**Table 4.16: Cash and Equivalent to Total Assets Ratio**

Fiscal Year(as at mid July)	2001	2002	2003	2004	2005	2006
Cash and Equivalent (in million Rs.)	1423.46	1859.31	999.51	1436.47	1401.77	1724.71
Total Assets (in million Rs.)	10593.91	11102.23	11918.52	14257.97	12480.85	11709.28
Cash and Equivalent /Assets (%)	13.44	16.75	8.37	10.07	11.23	14.73
Industrial Average (%)	15.20	11.92	10.15	11.92	10.00	9.00

Source: NBBL, Annual Reports, 2001-2006; NRB, Annual Bank Supervision Reports, 2002-2006

The above table 4.16 shows the cash and equivalent to total assets ratio of NBBL from the year 2001 to year 2006. The ratios are in fluctuating trend. Year 2002 shows the highest cash and equivalent to total asset ratio and in year 2003 it is showing decreasing trend and from year 2004 it is showing increasing trend. The industrial average is 15.20, 11.92, 10.15, 11.92, 10.00 and 9.00 in the year 2001 to year 2006. The industrial average ratios show that the ratios are decreasing in the later years of the study and are in fluctuating trend.

Figure 4.16

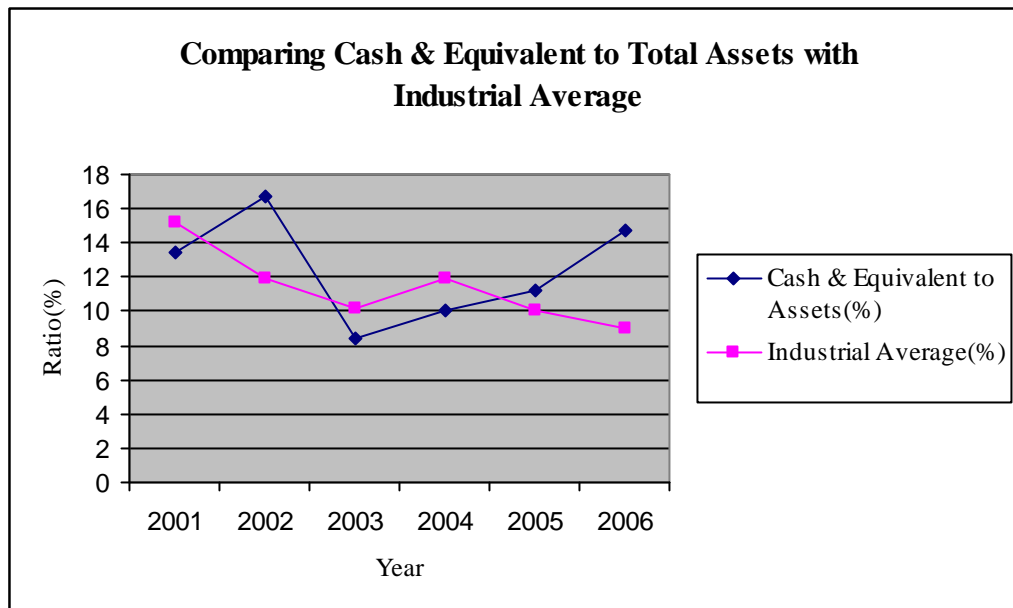


Figure 4.16 shows the comparison of cash and equivalent to total assets ratio with industrial average of the study period. In the above figure, the cash and equivalent to total assets curve of the bank is above the industrial average curve in the year 2002, 2005 and 2006. The ratios are in fluctuating trend both of NBBL and industrial average.

#### 4.5.4 Cash Balance with NRB to Total Deposit Ratio

This is the ratio of NRB cash balance to total deposit. It measures the proportion of NRB cash balance to total deposit. It shows whether bank is holding the balance required by NRB. NRB through its directives has been directing banks to maintain certain percent of deposit amount in NRB. The following table shows the cash balance with NRB to total deposit ratio of NBBL with comparison to industrial average ratio.



**Table 4.17: Cash Balance with NRB to Total Deposit Ratio**

FY (as at mid July)	2001	2002	2003	2004	2005	2006
Cash Balance with NRB (in million Rs.)	624.29	1172.86	508.26	829.86	794.17	1157.84
Total Deposits (in million Rs.)	8600.81	9534.22	10580.10	12807.38	12125.58	13015.14
Cash Balance with NRB/ Total Deposits (%)	7.26	12.30	4.80	6.48	6.55	8.90
Industrial Average(%)	12.50	13.40	8.90	9.70	7.10	7.20

Source: NBBL, Annual Reports, 2001-2006; NRB, Annual Bank Supervision Reports, 2002-2006

The above table 4.17 shows the cash balance with NRB to total deposits ratio of NBBL from the year 2001 to year 2006. The ratios are in fluctuating trend. Year 2002 shows the highest cash and equivalent to total asset ratio and in year 2003 it is showing decreasing trend and from year 2004 it is showing increasing trend till year 2006. The industrial average is 12.50, 13.40, 8.90, 9.70, 7.10 and 7.20 in the year 2001 to year 2006. The industrial average ratios show that the ratios are decreasing in the later years of the study and are in fluctuating trend.

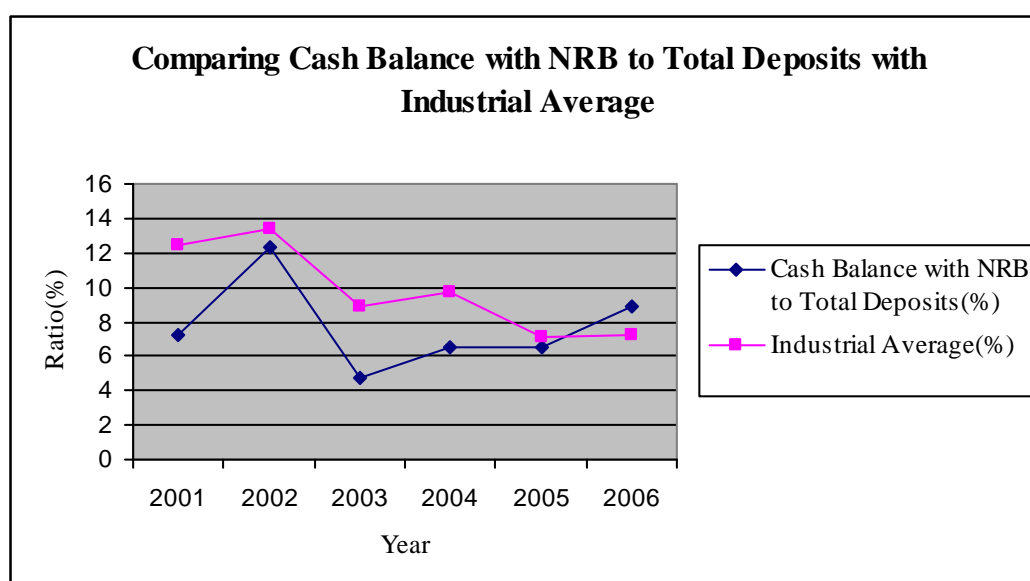
**Figure 4.17**

Figure 4.17 shows the comparison of cash balance with NRB to total deposits ratio with industrial average of the study period. In the above figure, the cash balance with NRB to total assets curve of the bank is below the industrial average curve in the year 2001, 2002, 2003, 2004 and 2005. In year 2006 only it is above the industrial average. This shows that the cash balance with NRB of the bank has been maintained less than the average balance. This depicts that the bank has not maintained the balance with NRB as per the directives in the last five years of the study period.

#### 4.5.5 Cash in Vault to Total Deposit Ratio

It measures the percentage of most liquid fund with the bank to meet the immediate payment. The ratio is calculated by dividing cash in vault by total deposit. Cash in vault includes local currency(including coins) and foreign currency. The following table shows the cash in vault to total deposit ratio of NBBL with compare to industrial average.

**Table 4.18: Cash in Vault to Total Deposit Ratio**

FY (as at mid July)	2001	2002	2003	2004	2005	2006
Cash in Vault(in million Rs.)	242.81	364.62	309.79	352.15	300.85	354.46
Total Deposits (in million Rs.)	8600.81	9534.22	10580.10	12807.38	12125.58	13015.14
Cash in Vault/ Total Deposits (%)	2.82	3.82	2.93	2.75	2.48	2.72
Industrial Average(%)	2.63	2.97	2.67	2.02	2.05	2.16

Source: NBBL, Annual Reports, 2001-2006; NRB, Banking and Financial Statistics, No.47, July, 2006

The above table 4.18 shows the cash in vault to total deposits ratio of NBBL from the year 2001 to year 2006. The ratios are in fluctuating trend. Year 2002 shows the highest cash in vault to total asset ratio and year 2005 shows the

minimum ratio. The industrial average is 12.50, 13.40, 8.90, 9.70, 7.10 and 7.20 in the year 2001 to year 2006. The industrial average ratios show that the ratios are decreasing in the later years of the study and are in fluctuating trend. The ratio of the bank is higher than the industrial average in every year which shows that the liquidity position of the bank is good.

**Figure 4.18**

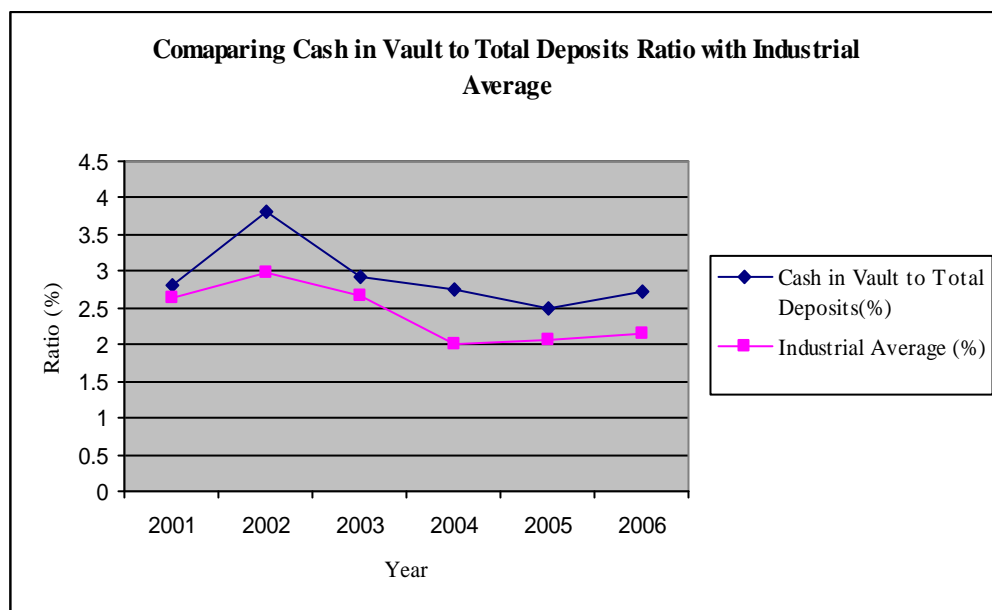


Figure 4.18 shows the comparison of cash in vault to total deposits ratio with industrial average of the study period. In the above figure, the cash in vault to total deposit curve of the bank is above the industrial average curve in all year. This depicts that the bank has maintained the most liquid assets during the study period.

## 4.6 Major Findings

The major findings of the study on financial performance analysis of Nepal Bangladesh Bank Ltd. in the framework of CAMEL are as follows:

4.6.1 In the six year of the study period the leverage ratio of NBBL is distributed as a minimum ratio of -14 percent in year 2006 and maximum ratio of 5.41 percent in year 2003. The leverage ratio is in decreasing trend and it is

heavily decreasing in year 2005 and 2006. The core capital is very low in year 2005 and it is negative with huge amount in year 2006. There is not enough shareholders fund to manage the shock in balance sheet.

- 4.6.2 In the six year of the study period, the capital adequacy ratio of NBBL is distributed as a minimum ratio of -13.48 percent in year 2006 and maximum ratio 9.92 percent in year 2002. Capital of NBBL is negative due to tremendous accumulated loss. So NBBL has not met the capital adequacy requirements required by NRB. Capital fund of NBBL is decreasing year by year and finally showing negative capital fund in year 2006. This shows that the NBBL is not properly capitalized and it has not complied with the directive of NRB on capital adequacy ratio.
- 4.6.3 The core capital adequacy of NBBL is allocated from the minimum of -13.48 percent in year 2006 to maximum of 6.22 percent in year 2003. NBBL core capital is negative due to heavy accumulated loss. So NBBL has not met the core capital adequacy requirements required by NRB. In the later years of the study period the ratio is deteriorating very badly. This shows the bank is very poorly capitalized and the capital base is very weak. While comparing to NRB standard the core capital adequacy ratio is above the NRB standard in year 2001, 2002, 2003 but it is below the standard in year 2004, 2005 with the worst negative capital base in year 2006.
- 4.6.4 The supplementary capital adequacy of NBBL is allocated from the minimum of 0 percent in year 2006 to maximum of 4.16 percent in year 2002. NBBL supplementary capital is higher than NRB standard (not more than core capital of bank) in year 2005 and 2006 due to heavy accumulated loss. The ratios of NBBL ranged from 3.36 to 0 percent from year 2001 to 2006 respectively. In the later years of the study period the ratio are higher than NRB standard. This shows the bank is very poorly capitalized and the capital base is very weak.

- 4.6.5 The percentage of cash and bank balance in the assets composition is showing fluctuating trend, increasing and decreasing during the study period. The situation of money at call is not good. It is nil during year 2004 and 2005. Investment is showing increasing trend during the study period. Loan and advances has covered 55 to 70 percent in the total assets composition. It can be seen from the composition of assets that major part of the assets is occupied by loan and advances and investment which are highly risky assets. The average mean percentage of cash and bank balance, money at call, investment, loan & advances, fixed assets and other assets were 11.47 percent, .96 percent, 15.80 percent, 63.16 percent, 1.12 percent and 7.49 percent during the study period.
- 4.6.6 The non performing loans to total loans and advances ratios were observed unsatisfactory during the study period. The ratio ranges from minimum of 8.02 percent in year 2001 and to maximum of 45.31 percent in year 2006. The ratios ranged from 8.02 percent to 45.31 percent from year 2001 to year 2006 respectively. The NPL ratio shows that the bank's quality of assets is in deteriorating trend and it has worsen more and more in the year 2005 and 2006. It shows the deteriorating quality of assets held by NBBL. It shows the very unsatisfactory level of nonperforming assets in the total assets of NBBL.
- 4.6.7 The loan loss provision to loans and advances for the study period has increasing trend. The ratio ranges of minimum of 1.77 percent in year 2001 to maximum of 27.37 percent in year 2006 with an average of 8.5 percent. The ratios ranged from 1.77 percent to 27.37 percent from year 2001 to 2006 respectively. The increasing ratio of the bank in comparison to industrial average shows that the bank's quality of assets is worsening in the later years of the study period.
- 4.6.8 The operating expenses ratio was showing increasing trend during the study period. The ratio was distributed from a minimum of 49.67 percent in year

2001 to maximum of 511.02 percent in year 2006 with average ratio of 182.45 percent. Due to rapid increase in operating expenses and decrease in operating income, the bank was in big loss in the later years of the study period. This shows the management quality of bank is very poor.

- 4.6.9 The earnings per employee were showing decreasing negative trend during the study period. The ratio was distributed from a minimum of -4,923,726 rupees in year 2006 to maximum of 549,033 rupees in year 2001. Due to huge losses in 2005 and 2006 earnings per employee were seen highly negative in year 2005 and 2006.
- 4.6.10 The return on equity ratio of the bank was minimum of -333.33 percent in year 2005 and maximum of 44.23 percent in year 2001. In year 2006 net profit is negative by 1797.16 million and shareholders equity is negative by 1562.58 million, therefore the return on equity is showing positive ratio of 115 percent. In the first two years of study period the ratios of the bank are higher than the industrial average but after that it is showing declining trend. In year 2005 it has sharply decline with negative ratio which shows that the bank has incurred great loss and in year 2006 the loss is more than double of the year 2005 but due to the high negative shareholders equity it is showing positive ratio and also more than 100 percent.
- 4.6.11 The return on asset ratio of the bank was minimum of -15.35 percent in year 2006 and maximum of 1.88 percent in year 2001. The ratio is in decreasing trend, positive till year 2004 and in year 2005 and 2006 it is negative due to huge net loss. The decreasing trend of the ratio of the bank shows that it is incurring more and more loss every year and there are huge losses in 2005 and 2006.
- 4.6.12 The profit margin ratio of the bank was minimum of -411.12 percent in year 2006 and maximum of 35.23 percent in year 2001. The ratio is in decreasing trend, positive till year 2004 and in year 2005 and 2006 it is negative due to huge net loss. The ratios ranged from 35.23 percent to -411.12 percent from

year 2001 to year 2006 respectively. In year 2001 only the bank's ratio is higher than the industrial average but in the rest of the study period the ratios are lower than the industrial average. The earning quality of the bank is very poor especially in the later years of the study period.

4.6.13 The net interest margin ratio of the bank was minimum of 2.63 percent in year 2006 and maximum of 4.42 percent in year 2003. The ratios are in both increasing decreasing trend, slightly decreasing in year 2002 and increasing till year 2004 and then decreasing again in year 2005 and 2006. In year 2006 the net interest margin is 2.63 percent which is not good ratio which indicates the decreasing interest spread of bank.

4.6.14 The earning per share of the bank were minimum of -249.61 percent in year 2006 and maximum of 82.81 percent in year 2001. The slope of the trend line was negative which indicates the earning per share was declining year by year. This shows that the NBBL was incurring huge losses in the later years of the study period which further proved the inefficiency of the management.

4.6.15 Year 2001 showed the highest loan to deposit ratio and from year 2002 it was showing decreasing trend due to more increasing trend of total deposit than increasing trend of total loan and advances. The ratios ranged from 85.56 percent to 75.27 percent from year 2001 to year 2006. The industrial average were 59.45 percent to 66.44 percent in each year respectively. In every year of the study period loan to deposit ratios were higher than the industrial average. This showed that the bank is lending more than the industrial average.

4.6.16 The ratios of cash and equivalent to deposit were in fluctuating trend. Year 2002 showed the highest cash and equivalent to deposit ratio and in year 2003 it was showing decreasing trend and from year 2004 it was showing increasing trend due to more increasing trend of total deposit than increasing trend of cash and equivalent. The ratios were minimum of 9.45 percent in

year 2003 and maximum of 19.50 percent in year 2002 and the industrial average ratio ranged from 16.55 percent to 13.25 percent from year 2001 to 2006. Comparing with the industrial average, the ratios were above in year 2002 and 2006 only. This showed that the bank was not serious in keeping the liquid fund according to the industrial average.

4.6.17 The cash and equivalent to total assets ratios were in fluctuating trend. Year 2002 showed the highest cash and equivalent to total asset ratio and in year 2003 it was showing decreasing trend and from year 2004 it was showing increasing trend. The ratios ranged from 13.44 percent to 14.73 percent from year 2001 to 2006 and the industrial average ratios ranged from 15.20 percent to 9.00 percent from year 2001 to year 2006. Comparing with the industrial average, the ratios were above in year 2002, 2005 and 2006 only. This showed that the bank was not serious in keeping the liquid fund according to the industrial average.

4.6.18 The ratios of cash balance with NRB to total deposits were in fluctuating trend. Year 2002 showed the highest cash and equivalent to total deposits ratio and in year 2003 it was showing decreasing trend and from year 2004 it was showing increasing trend till year 2006. The industrial average ratios were 12.50, 13.40, 8.90, 9.70, 7.10 and 7.20 percent from year 2001 to 2006. With comparing to industrial average, cash balance with NRB to total deposits of NBBL was below the industrial average ratio in each year except 2006. This showed that the bank was not strictly following the directives issued by NRB in respect to balance to be held in NRB.

4.6.19 Cash in vault to total deposit ratios ranged from 2.82 percent to 2.72 percent from year 2001 to 2006. The ratios were in fluctuating trend. Year 2002 showed the highest cash in vault to total asset ratio and year 2005 showed the minimum ratio. The industrial average ranged from 2.63 percent to 2.16 percent from year 2001 to year 2006. The ratio of the bank was higher than the industrial average in every year which showed that the liquidity position of the bank is good.



## CHAPTER V

### **SUMMARY, CONCLUSION & RECOMMENDATIONS**

This chapter comprises three aspects of the study i.e. summary, conclusion and recommendations. The first part summarizes the whole study, the second part illustrates the conclusion and the last part forwards the recommendations.

#### **5.1 Summary**

The study was carried out as a partial fulfillment of the requirement for the master's degree in business studies on the topic of "Financial Performance Analysis of Nepal Bangladesh Bank Limited in the Framework of CAMEL." The basic objective of the study was to analyze the financial performance and find the facts about the financial health of Nepal Bangladesh Bank Limited. The analysis of financial statement was carried out to obtain a better insight into a bank's position and performance. With the technique of CAMEL health check up of financial institutions can be done. Bank financial soundness was judged on the basis of capital adequacy, asset quality, management quality, earning quality, liquidity position and sensitivity to market risk. NRB, Annual Bank Supervision Reports from 2002 to 2006 have showed that almost all the government banks in Nepal were running in loss. Though in average private sector banks were earning profit but it will hard to call them sound if analyzed from CAMEL approach.

Thus the study was conducted with the general objective to analyze the financial soundness of Nepal Bangladesh Bank Ltd. in the framework of CAMEL. For the analysis of financial soundness, analysis of capital adequacy, non performing loan, loan loss provision, asset composition, management quality, earning quality

and liquidity of the bank was done for the period of year 2001 to 2006. Literatures were reviewed for the conceptual idea and find out the way to reach the objective. For the conceptual review meaning, functions, historical developments of commercial bank, supervision and monitoring system of Nepal Rastra Bank, concept of financial performance analysis, concept of CAMEL, capital adequacy, asset quality, management quality, earning quality, liquidity, sensitivity to market risk etc were reviewed. Review of articles and review of dissertation were also done in the literature review section.

It covered the study period of six years from year 2001 to 2006. Since it was all about financial performance analysis of commercial bank, so descriptive and analytical research design have been used in the study. The required data and information were collected from secondary sources. Financial ratios and mathematical and statistical tools have been used for the data analysis purpose.

The analysis have been done by comparing bank's ratio with industrial average and NRB standard. The capital adequacy ratios of bank were above the industrial average in year 2001 and 2002 only but the later years of the study period showed insufficient capital in comparison to NRB standard which concluded that bank's capital structure was worsening in later year of study period and it was worst in year 2006 with negative ratio. The capital adequacy of bank showed insecurity of funds of shareholders and depositors and showed that the bank was in financial crisis. The non performing loan to loan ratio was below the industrial average for the first four years of the study period but it was above in year 2005 and 2006 which showed that the bank's quality of assets is deteriorating in year 2005 and 2006 and bank was not serious about the increasing non performing loan of the bank. The management quality ratios, the total operating expenses to total operating incomes were in increasing trend which confirmed the increasing operating loss of NBBL whereas earnings per employee was in decreasing trend which reconfirmed about the operating loss of the bank. The earning quality ratios, return on equity, return on assets, profit margin, net interest margin, earning per share were in decreasing trend and were negative in later years which showed that the earning of bank was deteriorating year by year and incurring loss in year 2005 and 2006. The ratio of the

cash in vault was higher than the industrial average in every year which showed that the liquidity position of the bank was good. Cash balance with NRB to total deposits was below the industrial average ratio in each year except 2006. Cash and equivalent to deposit and cash and equivalent to total assets were in fluctuating trend and sometimes higher than the industrial average in some year and sometimes lower than the industrial average in some year during the study period.

## **5.2 Conclusions**

Following conclusions have been done on the study, financial performance analysis of Nepal Bangladesh Bank Ltd. in the framework of CAMEL;

5.2.1 Leverage ratio shows that bank in the first three years of the study period has succeed to maintain the leverage ratio at 5 percent and greater than 5 percent but in the last three years it has fail to maintain the 5 percent. The core capital of the bank is not only decreasing in high speed but also with huge negative amount from which it can be concluded very poor capital structure of bank i.e. poor financial condition of bank. There is no enough shareholders fund to manage the shock in balance sheet. The creditors and depositors funds are in high risk.

5.2.2 Capital adequacy ratio discloses that the bank is not running with the adequate capital and the capital fund of the bank is not sound and sufficient to meet the banking operation as per the NRB standard except for year 2001 and 2002. The financial strength and soundness of bank is very poor. From the trend of the ratio it can be concluded that the funds of depositors and creditors are in high risk. The bank is not following the directives in the last four years which shows the weak capital base and weak management of NBBL.

5.2.3 Core capital adequacy ratio shows that the bank is not running with adequate core capital and couldn't meet the NRB Standard except in year 2001, 2002 & 2003. The bank is not using the adequate amount of core capital in the last

three years of the study period. There is no adequate shareholders fund to support the banking activities and the financial strength and soundness of bank is very poor. The trend of ratio is showing that creditors and depositors funds are in risk.

- 5.2.4 Supplementary capital ratio of the bank discloses that the bank is not keeping stable supplementary capital and it has crossed the core capital in year 2005 and 2006. This means bank is not serious and not following the NRB standard.
- 5.2.5 The assets composition of the bank during the study period discloses that money at call was nil in year 2004 and 2005 and other years of the study period also it was very minimum. It shows the carelessness or more profit making intension of bank while making assets composition. This endangers the fund of shareholders and depositors. Loan and advances and investment occupy the major part of total assets, which falls under high risk category of assets.
- 5.2.6 The increasing trend of the non performing loan in the later years of the study period concludes that the banks quality of assets is deteriorating year by year and management is not giving eye on it. It shows the very unsatisfactory level of nonperforming assets in the total assets of the bank. Bank is careless towards the increasing non performing loan.
- 5.2.7 The increasing trend of loan loss reserve indicates that the quality of assets is deteriorating year by year. It is due to the increasing non performing loan and possibility of non-payment in future that the loan loss reserve is in increasing trend.
- 5.2.8 The increasing trend of operating expenses ratio indicates the decreasing operating revenue and increasing operating expenses of NBBL. It shows that revenue is not sufficient to cover the expenses of the bank and the bank is

incurring loss. Management quality of the bank is worsening to control the financial activities of bank.

- 5.2.9 The decreasing trend of earning per employee and the negative ratios in 2005 and 2006 shows the management quality of the bank is very poor and worsening very badly. The decreasing trend line is very sharp which shows that the NBBL is incurring huge losses in the later years of the study period which further proves the inefficiency of the management.
- 5.2.10 The decreasing trend of return on equity and negative ratio in 2005 and negative net profit and negative shareholders equity in 2006 shows that bank has incurred big losses in year 2005 and 2006. Even the shareholders equity is negative in 2006. This shows the very poor and worst earning quality of the bank.
- 5.2.11 The decreasing trend of return on assets and negative ratio in 2005 and 2006 shows that bank has incurred big losses in year 2005 and 2006. The capability of management to convert bank's assets to net profit is worsening. Due to very poor earning quality, return on assets is below 1 percent in all year except year 2001.
- 5.2.12 The decreasing trend and negative ratios of profit margin shows the inefficiencies of the management to control the financial activities of bank. The huge net loss of year 2005 and 2006 shows the worst earning quality of the bank.
- 5.2.13 The decreasing trend of net interest margin shows the decreasing gap between interest incomes and interest expenses. Management has not been able to utilize to its fullest and control over the earning assets and find the cheapest funding sources.
- 5.2.14 The decreasing trend of earning per share and negative ratio in year 2005 and 2006 shows that flow of return to the shareholders is not only declining

but the return is negative in year 2005 and 2006. The reason is heavy losses in year 2005 & 2006 that led to sharp decline of earning per share.

5.2.15 The loan to deposit ratio is above the industrial average ratio during the study period. This shows the overall liquidity position of the bank is not good due to more investment in loan.

5.2.16 The cash & equivalent to total deposit is more or less equal to the industrial average during the study period but the liquid funds are mostly utilized in loan so the liquidity position is not so good.

5.2.17 The cash & equivalent to total asset is also more or less equal to the industrial average during the study period but the ratios are in minimum range because the funds are mostly utilize in loan so the liquidity position is not so good.

5.2.18 The NRB balance to total deposits ratios are below the industrial average during the study period expect in year 2006. This shows the bank has not maintained sufficient amount of balance to be held in NRB.

5.2.19 The cash in vault to total deposit ratio is above the industrial average during the study period. This shows that bank has maintained the most liquid fund to make immediate payment to depositors. Bank is running with adequate liquidity to meet its short term obligation.

## 5.2 **Recommendations**

On the basis of analysis and conclusions of the study, following recommendations have been made to overcome the weakness of Nepal Bangladesh Bank Ltd.

5.3.1 Leverage ratio is in decreasing trend and negative by 14 percent in year 2006. So the recommendation is to maintain stable leverage ratio and bring the negative percentage to positive and maintain around 5 percent or more.

- 5.3.2 Capital adequacy ratios of the bank are not sufficient as per the NRB standard except in year 2001 and 2002 and the ratios are in decreasing trend over the study period. The negative ratio in year 2006 shows that bank has incurred tremendous accumulated loss during the period and the capital base of the bank is very weak. So the recommendation is to maintain stable capital adequacy ratios in the bank and strictly follow the NRB directives.
- 5.3.3 Core capital adequacy ratios of the bank are not sufficient as per the NRB standard in year 2004, 2005 & 2006. So the bank is recommended to maintain stable capital adequacy ratios according to NRB directives.
- 5.3.4 Supplementary capital adequacy ratio of the bank is more than core capital adequacy ratio in year 2005 & 2006. So bank is recommended not to exceed core capital adequacy ratio and follow NRB directives.
- 5.3.5 Non performing loans to total loans and advances ratio is seen increasing in later years of the study period therefore bank is suggested to decrease increasing ratio of non performing loan. Management of bank should be serious in recovery of loan and for this management of bank is recommended to formulate a effective loan recovery committee.
- 5.3.6 The ratio of loan loss provision to loans and advances is seen increasing during the study period which shows the loan default in present and future period. So the bank is recommended to increase the quality of assets by strengthening the credit assessment and follow-up procedures which helps to lower the loan loss provision.
- 5.3.7 The ratio of operating expenses is showing increasing trend and earnings per employee is showing decreasing trend which is not favorable indication of management quality. So management must be serious in increasing the operating revenue of the bank by seriously utilizing the assets of the bank and finding alternate way of income generating sources.

- 5.3.8 The earning quality ratios that are return on equity, return on assets, net interest margin, profit margin, earning per share are in decreasing trend and negative with huge ratios is year 2005 and 2006. Because of huge amount of provision for possible losses, losses were seen in year 2005 and 2006. The main reason for this is huge amount of non-performing loan. So bank should be serious in strengthening the credit assessment and follow up procedures for reducing non performing loan . For the time being bank should formulate the effective loan recovery committee for recovery of the loan and bank is also recommended to decrease operating expenses and increase the operating efficiency of employees.
- 5.3.9 All the liquidity ratios except cash in vault to total deposit are unsatisfactory and are in fluctuating trend. So bank is recommended to keep the stable ratios according to NRB directives. In case of loan to deposit ratio, it was found above the industrial average during the study period which shows the bank is utilizing more of its fund in loan & advances. So bank is recommended to provide loan after proper credit assessment to the appropriate person/company only.



## BIBLIOGRAPHY

- A. D., Wirnkar and Dr. Muhammad Tanko. "CAMEL(S) and Banks Performance Evaluation: The Way Forward." (June 2008). September 6, 2007 < <http://ssrn.com/abstract=1150968>>.
- Amatya, Nagendra B. "An Appraisal of Financial Position of NBL." Master diss., Tribhuvan University, 2003.
- Asian Development Bank. Asian Development Bank & Nepal: A Fact Sheet, Manila, 2008. December 4, 2008 <[http://www.adb.org/Documents/Fact\\_Sheets/NEP.pdf](http://www.adb.org/Documents/Fact_Sheets/NEP.pdf)>.
- Acharya, Gyanendra. "A Comparative Study on Financial Performance of Joint Venture Banks in Nepal, especially Nepal SBI Bank Ltd. and Nepal Indosuez Bank Ltd." Master diss., Tribhuvan University, 1997.
- Bajracharya Bhavana, "An Evaluative Study on the Mobilization of Commercial Bank's Resources." Master diss., Tribhuvan University, 2036.
- Bhandari, Krishna Ram. "Financial Performance Analysis of Himalyan Bank Limited in the Framework of CAMEL." Master diss., Tribhuvan University, 2005.
- Bist, Chattra Bahadur. "Financial Performance of Nepal Bangladesh Bank and Nepal SBI Bank: A Comparative Study." Master diss., Tribhuvan University, 2004.
- Baral, Keshar J. "Health Check-up of Commercial Banks in the Framework of CAMEL: A Case Study of Joint Venture Banks in Nepal." *The Journal of Nepalese Business Studies* 2, no.1 (2005): 41-55.
- Banks on CAMEL: Rating of Commercial Banks based on the Q4 results for FY 2006-07. *New Business Age*, (August 2007). September 6, 2007 < <http://www.nepalnews.com/contents/2007/englishmonthly/businessage/aug/cover.php>>.
- Benston, George et al./and others. "Bank Capital Structure, Regulatory Capital, and Securities Innovations." Working Paper 2000-18, Federal Reserve Bank of Atlanta, 2000. May 12, 2008 < <http://www.frbatlanta.org/filelegacydocs/wp0018.pdf>>.
- Basel Committee on Banking Supervision. Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework-Comprehensive Version. Basel: Bank for International Settlements, June, 2006. May 4, 2008 < <http://www.bis.org/publ/bcbs128.pdf>>.

- -- --. Basel II: An Introduction to the Capital Adequacy Accord and the Capital Requirements Directive. Bank for International Settlements, 2006. May 4, 2008 < <http://www.out-law.com/page-7096> >.
- -- --. Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework. Basel: Bank for International Settlements, November, 2005. May 4, 2008 < <http://www.bis.org/publ/bcbs118.pdf>>.
- Bellovary, Jodi L., Don E. Giacomino, and Michael D. Akers. "Earnings Quality: It's Time to Measure and Report." *The CPA Journal* (November, 2005): May 2, 2008 < <http://www.nysscpa.org/cpajournal/2005/1105/essentials/p32.htm> - 50k - >.
- Bauer, Wolfgang and Marc Ryser. "Risk Management Strategies for Banks." *Journal of Banking & Finance* 28, no.2 (February, 2004): 331-352: May 3, 2008 < [http:// ideas.repec.org/a/eee/jbfina/v28y2004i2p331-352.html](http://ideas.repec.org/a/eee/jbfina/v28y2004i2p331-352.html) - 7k - >
- Cole, Rebel A. and Jeffery W. Gunther. "Predicting Bank Failures: A Comparison of On- and Off- Site Monitoring Systems." *Journal of Financial Services Research* 13 no.2. Boston: Kluwer Academic Publishers, 1998:103-117.
- Chordia, Tarun, Richard Roll and Avanidhar Subrahmanyam. Liquidity and Market Efficiency, August 29, 2005. September 13, 2008 < [http://www.fep.up.pt/investigacao/cempre/actividades/sem\\_fin/sem\\_fin\\_01\\_05/PAPERS\\_PDF/paper\\_sem\\_fin\\_24nov05.pdf](http://www.fep.up.pt/investigacao/cempre/actividades/sem_fin/sem_fin_01_05/PAPERS_PDF/paper_sem_fin_24nov05.pdf) >.
- Cargill, Thomas F. "CAMEL Ratings and the CD Market." *Journal of Financial Services Research* 3, no.4 (December, 1989): 347-358: May 3, 2008 < <http://www.springerlink.com/index/U33751V14067K875.pdf> - >
- Cornell, Bradford and Wayne R. Landsman. "Accounting Valuation: Is Earnings Quality an Issue?" *Financial Analysts Journal* 59, no.6 ( Nov/Dec 2003): 20-28: May 4, 2008 <[http://intra.som.umass.edu/mannino/SOM%20630/Chapter %205/Cornell%20and%20Landsman.pdf](http://intra.som.umass.edu/mannino/SOM%20630/Chapter%205/Cornell%20and%20Landsman.pdf) - >
- Dahal, Subodh Kumar. "A Comparative Analysis of Capital Structure Management between Nepal Bangladesh Bank Ltd. and Himalayan Bank Ltd." Master diss., Tribhuvan University, 2004.
- Demerjian, Peter, Barukh Lev and Sarah McVay. Managerial Ability and Earnings Quality, November 20, 2006. July 6, 2008 < <http://pages.stern.nyu.edu/~blev/docs/ManagerialAbilityandEarningsQuality.pdf> >.
- Deoja, S. "A Comparative Study of the Financial Performance between Nepal State Bank of India Ltd. and Nepal Bangladesh Bank Ltd." Master diss., Tribhuvan University, 2001.

- Eichberger, Jurgen and Martin Summer. Bank Capital, Liquidity and Systematic Risk, April 27, 2004. June 19, 2008 < <http://cep.lse.ac.uk/seminarpapers/03-06-04-SUM.pdf> >.
- Gilbert, R. Alton, Andrew P. Meyer and Mark D. Vaughan. "The Role of a CAMEL Downgrade Model in Bank Surveillance." Working Paper 2000-021A, The Federal Reserve Bank of St. Louis, 2000. Oct.10, 2007 <http://research.stlouisfed.org/wp/2000/2000-021.pdf>.
- Gurung, Vikram Chandra. "A Financial Study of Joint Venture Banks in Nepal- Nepal Grindlays and Nepal Indosuez Bank Ltd." Master diss., Tribhuvan University, 1995.
- Hawtrey, Kim. "Banks' Non-interest Income: an International Study." Research Report, Macquarie University, October 2003. March 20, 2005 <<http://www.bankers.asn.au/ArticleDocuments/Non%20income%20report%20final1.doc>>
- Joshi, Archana. "A Comparative Study on Financial Performance of Nepal SBI Bank Ltd. and Everest Bank Ltd." Master diss., Tribhuvan University, 2002.
- Joshi, Keshav Raj. "A Study of Financial Performance of Commercial Banks." Master diss., Tribhuvan University, 1989.
- Jackson, William. "Commercial Banking Performance and Structure: A Factor Analysis Approach." Working Paper 74-5, Federal Reserve Bank of Richmond, 1974. May 15, 2008 <[http://www.richmondfed.org/publications/research/working\\_papers/1974/pdf/wp74-5.pdf](http://www.richmondfed.org/publications/research/working_papers/1974/pdf/wp74-5.pdf) >.
- Kaini, Bachchu Kailash. "A Comparative Study of Financial Performance of Nepal Arab Bank Ltd. and Nepal Grindlays Bank Ltd." Master diss., Tribhuvan University, 1997.
- Llanto, Gilberto. M. and Aniceto C. Orbeta, Jr. "Identification and Classification of Problem Banks." *Journal of Philippine Development* 34, no.1 (1992): 123-138.
- Lopez, Jose A. and Marc R. Saidenberg. The Development of Internal Models Approaches to Bank Regulation & Supervision: Lessons from the Market Risk Amendment, August 31, 2001. June 18, 2007 < <http://www.frbsf.org/economics/economists/saidenberg.pdf> >.
- Nepal Rastra Bank, Annual Bank Supervision Report, 2003-2004. Kathmandu: NRB, Bank Supervision Department, Central Office, 2005.
- -- --. Directive Number 1/2061/62. Kathmandu: Banking Supervision Division, NRB, 2005.

- -- --. Banking Supervision Annual Report, 2001/02. Bank Supervision Department, NRB, 2003.
- -- --. Annual Bank Supervision Report, 2005-2006. Kathmandu: NRB, Bank Supervision Department, Central Office, 2007.
- -- --. Banking and Financial Statistics, Mid-July 2006. Kathmandu: NRB, Banks & Financial Institutions Regulation Department: Policy Planning, Statistics and Banking Promotion Division, no.47, 2006.
- -- --. Annual Report, 2005/2006. Kathmandu: NRB, 2007.
- -- --. Basel II: FAQ in Nepalese Perspective. Kathmandu, NRB. September 11, 2007 < <http://www.nrb.org.np/aboutus/faq.php> >.
- Parajuli, Prakash Chandra. "A Comparative Study of the Financial Performance of Joint Venture Banks with Special Reference to Nepal Grindlays Bank Ltd. and Nepal Arab Bank Ltd." Master diss., Tribhuvan University, 1990.
- Poudel, Ramji. "A Comparative Analysis of Financial Performance between Nepal Bank Ltd. and Nepal Grindlays Bank Ltd." Master diss., Tribhuvan University, 1997.
- Poudel, R. "A Case Study on Capital and Assets Structure of Nepal Bank Ltd." Master diss., Tribhuvan University, 1985.
- Paradi, C. Joseph and Claire Schaffnit. "Commercial Branch Performance Evaluation and Results Communication in a Canadian Bank—a DEA Application." *European Journal of Operational Research* 156, no.9 (August 1, 2004): 719-735. March 2, 2008 <[http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B6VCT48CNR5J4&\\_user=10&\\_rdoc=1&\\_fmt=&\\_orig=search&\\_sort=d&view=c&\\_acct=C000050221&\\_version=1&\\_urlVersion=0&\\_userid=10&md5=9377975dce0d1bec64f32b582de3797e](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VCT48CNR5J4&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=9377975dce0d1bec64f32b582de3797e) >.
- Rose, Peter S. *Commercial Bank Management*, 4<sup>th</sup> ed. Boston: Irwin McGraw-Hill, 1999.
- Saunders, Anthony and Marcia Millon Cornett. *Financial Markets and Institutions*. New Delhi: Tata McGraw-Hill Publishing Company Limited, 2004.
- Shakya, D. R. "Financial Analysis of Joint Venture Banks in Nepal." Master diss., Tribhuvan University, 1995.
- Singh, Jagroop. *Bank Management*. New Delhi: Kalyani Publishers, 2005.
- Shrestha, Sunity. "A Portfolio Behavior for Commercial Banks in Nepal." Ph. D. diss., University of Delhi, 1990.

- Shanling, Li. "Comparative Performance of Chinese Commercial Banks: Analysis, Findings and Policy Implications." *Review of Quantitative Finance and Accounting* 16, no.2 (2001): 149-70. May 9, 2008 <<http://journals.kluweronline.com/issn/0924-865X/contents> >.
- Tarawneh, Medhat. "A Comparison of Financial Performance in the Banking Sector: Some Evidence from Omani Commercial Banks." *International Research Journal of Finance and Economics*, no. 3 (2006): 101-112. May 6, 2008 <<http://www.Eurojournals.com/finance.htm>>.
- Tai, Chu-Sheng. "Can Bank be a Source of Contagion during the 1997 Asian Crisis?" *Journal of Banking & Finance* 28, no.2 (February 2004): 399-421: May 3, 2008 <<http://ideas.repec.org/a/eee/jbfina/v28y2004i2p399-421.html> - 7k - >
- Thapa, S. "A Comparative Study on Investment Policy of Nepal Bangladesh Bank Ltd. and Other Joint Venture Banks." Master diss., Tribhuvan University, 2001.
- Van Horne, James C. *Financial Management & Policy*. 12<sup>th</sup> ed. New Delhi: Prentice-Hall of India Private Limited, 2003.
- Weston, J.F., and Copeland, T.E. *Managerial Finance*. 9<sup>th</sup> ed. New York: The Dryden Press, 1992.
- Wolf, H. K. and P. R. Pant. *Social Science Research and Thesis Writing*. 4<sup>th</sup> ed. Kathmandu: Buddha Academic Enterprises Pvt. Ltd., 2005.
- Yue, Piyu. "Data Envelopment Analysis and Commercial Bank Performance: A Primer to Missouri Banks." Federal Reserve Bank of St. Louis Review (January, 1992): May 16, 2008 <[http://research.stlouisfed.org/publications/review/92/01/Data\\_Jan\\_Feb1992.pdf](http://research.stlouisfed.org/publications/review/92/01/Data_Jan_Feb1992.pdf) >.