CHAPTER I
INTRODUCTION

1.1 Background

Globalization, economic liberalization and free competition are essential factors for the development of the country. They create favourable environment for the financial sector to flourish. The size, growth and level of development of financial sector indicate the condition of the whole economy of the country. Financial sector fulfills the financing needs of private sector, industrial sector, tourism sector and many others. Strong financial sector holds the capacity in mobilizing the resources at optimum level ensuring economic growth of the country. Good performance and effective service delivery of financial sector depends on political stability, security, clear and transparent government policies, etc.

Finance refers to the managerial activity concerned with raising of fund/capital from various sources and their utilization in the productive sector. Finance is the main means for mobilization of the funds. It involves the method of acquiring, allocation and managing the funds. It converts the accumulated funds i.e. saving into productive uses. It is related with arrangement of cash and credits so that the firm may have means to carry out its objectives as satisfactorily as possible.

Proper management of finance is the integral part of financial sector for its strengthen. Financial Institutions (FIs) are the key players for the management of finance. FIs are the specialized firms that facilitate the transfer of funds from savers to borrowers with an objective to maximize the value of the firm. From last few years, Nepalese economy has to pass through instability, uncertainty and insecurity due to internal political conflict which results in slow down of financial, industrial, tourism and other service sectors. However, at present, the situation is changed with positive symptoms of reform in every sector of the economy. The above mentioned factors such as

globalization and economic liberalization have raised up the performance and operation of FIs establishing networks at national and international level along with imposing government to break up procedural complexities thereon. In addition to this, it is very essential for the FIs to adopt advanced technologies and techniques for easy, fast and effective service delivery resulting satisfaction to savers and borrowers. Otherwise, they will be in backward than their competitors. In this way, the open economy has laid down various opportunities in front of FIs. The question is how FIs can identify and utilize the opportunities? Actually, it depends on the individual FI's strategies, policies and management efficiencies. Where there are opportunities, there will definitely be threats and challenges. These threats and challenges can deteriorate the financial performance of FIs. As FIs are service motive as well as profit motive organization, the principle of high risk, high profit and low risk, low profit apply in this sector. Therefore, the challenge is to manage the risk identifying the type, size and influence of it which in turn generate quality service and profit. Another important thing regarding performance of Financial Institution (FI) is the appropriate mobilization of resources and loan investment. Formation of inappropriate investment portfolio can create problems in loan recovery, poor loan quality, increase of Non-Performing Assets (NPA), etc. resulting bankrupt of FI. Hence, to avoid such crisis, FI must carry out different analytical techniques from time to time.

The FIs in Nepal can broadly be classified into two parts: banking and non-banking FIs. Banking FI includes commercial banks and development banks. Non-banking FI includes finance company, cooperative institution, provident fund, insurance company and mutual fund (Adhikari and Shrestha, 2063).

Commercial banks are those FIs which collect the scattered passive financial resources for mobilizing them in the productive sectors. Banks perform various financial activities like deposit collection, loan investment, issue of shares and debentures, hire purchase financing, housing finance, leasing finance, investment in government securities, etc. Financial performance analysis refers to the examination of the financial condition of

banks by using different tools, techniques and indicators. The financial condition and performance of the bank are always the concern matter of the bank itself and other stakeholders such as shareholders, depositors, investors, etc. In order to operate the whole banking sector in right direction, bank itself has internal monitoring mechanism for maintaining sound financial health and at government level, central bank play the supervisory role for maintaining financial discipline in the banking sector. In Nepalese context, Nepal Rastra Bank (NRB) acts as the central bank which has authority to monitor, regulate and control the financial activities of the banks. Banks are obliged to follow the policies, rules and measures taken by NRB. NRB has adopted the CAMELS system to evaluate the financial performance of the banks.

CAMELS is one of the widely used bank rating system. It is a technique for ratings the banks by analyzing their financial performance in terms of six major components (Capital adequacy, Assets quality, Management quality, Earnings, Liquidity and Sensitivity to market risk). It identifies the problematic banks as well as critical areas within the bank. Based on the outcomes of CAMELS, individual banks can improve their performance.

Nepal Credit and Commerce Bank Limited (NCCBL) is one of the commercial bank of Nepal. NCCBL formally registered as Nepal-Bank of Cylon Limited, commenced its operation on Oct. 14, 1996 as a joint venture with Bank of Cylon, Sri Lanka. It was the first private sector bank with the largest authorized capital of Rs. 1,000 million. The Head Office (H.O.) of the bank is located at Siddhartha Nagar, Rupendehi while its corporate office is placed at Bagbazar, Kathmandu.

The name of the bank was changed to Nepal Credit and Commerce Bank Ltd. on Sept. 10, 2002, due to transfer of shares and management of the bank from Bank of Cylon, an undertaking of Government of Sri Lanka to Nepalese promoters.

At present, NCCBL provides banking facilities and services to rural and urban areas of the country via its 17 branches. The bank has developed

corresponding agency relationship with more than 150 international banks having worldwide network.

1.2 Focus of the Study

This research study is focused on assessing the financial condition of NCCBL. The financial performance of NCCBL is analyzed by using descriptive-cum analytical research design. Similarly, the study involves CAMELS system which is used by NRB to rate banks' performance. It analyze the financial condition and performance of NCCBL in terms of each component of CAMELS. In addition to this, the concentration of the study is found on financial ratio analysis which uses the financial data to judge the bank's performance. Various ratio analysis tools are applied under each component of CAMELS and the obtained results are compared with NRB standard and Industrial Average Ratio (IAR) to find out the financial condition of NCCBL.

1.3 Statement of the Problem

Nepalese financial sector is small. But it is smoothly growing. The financial performance of the banks was badly affected by the internal political conflict resulting highly increased in NPA and narrow down of investment sector. However, the huge remittance inflows supported a lot for the survival of the banks and the economy. At present, with the establishment of peace process, there arise opportunities in front of the banks along with high competition and risks. Every bank target to achieve financially strong position and concentrate its policies, strategies and performance on it. A bank with sound financial position can satisfy its clients, employees, government and other stakeholders and can attract additional depositors and investors. Thus, it is necessary to disclose the real financial position of the bank so that the bank can formulate strategies to extend its strong part and to correct its weak part ensuring its stakeholders about the financial soundness of the bank. On the other hand, the financial position drawn out releases supervisory information to verify the bank report accuracy and to maintain financial discipline of the bank.

Among various approaches for measuring the financial position of the bank, CAMELS is internationally used bank rating system and also followed by NRB.

The basic problem of this research is to present the financial performance of NCCBL in the framework of CAMELS. In addition to this, further problems are specified as follows.

i. What is the capital adequacy ratio of NCCBL?
ii. What is the quality of assets of NCCBL?
iii. What is the degree of management soundness of NCCBL?
iv. Is the earning sufficient to meet its financial obligation?
v. Does NCCBL able to maintain balanced liquidity level?
vi. What is the sensitivity of NCCBL's earnings to market risk in terms of interest rate change?

1.4 Objectives of the Study

The fundamental objectives of the study is to analyze the financial performance of NCCBL in the framework of CAMELS. Based on this financial objective, the following specific objectives have been set.

i. To evaluate the capital adequacy ratio of NCCBL.
ii. To examine the quality of assets of NCCBL.
iii. To assess the degree of management soundness of NCCBL.
iv. To determine whether or not the earning of NCCBL is sufficient to meet its financial obligation.
v. To measure the liquidity level of NCCBL.
vi. To analyze the sensitivity of NCCBL's earning to market risk in terms of interest rate change.

1.5 Significance of the Study

This study plays a significant role by providing valuable information regarding financial performance of NCCBL in the framework of CAMELS. First, this study adds new information in the literature of financial sectors. The academicians and researchers who are interested to study and conduct research

are benefited from this study. The findings of the study helps to solve the problems related to the FI which can provide direction to the management for appropriate decision making and policy formulation. This study helps the concerned stakeholders (shareholders, investors, government, etc.) in maintaining sound financial health of NCCBL from their respective side. Sound FI can contribute something to the national economy.

1.6 Delimitation of the Study

As the study is based on a case study, the study is limited within the boundary of one FI due to which the findings cannot be generalized. Similarly, the study is based on the secondary data. Hence, the study depends on the data provided by NCCBL regarding reliability and disclosure of the data. Besides this, the study covers five annual reports' data only.

1.7 Organization of the Study

The study is divided into five chapters and each chapter include different headings as per the requirement.

First chapter i.e. Introduction include background, focus of the study, statement of the problem, objectives, significance, delimitation and organization of the study.

Second chapter i.e. Review of Literature includes conceptual review and research review.

Third chapter i.e. Research Methodology covers the methodologies adopted for carrying out the study.

Fourth chapter i.e. Presentation and Analysis of Data comprises of presentation and analysis of data and major findings.

Finally, the fifth chapter i.e. Summary, Conclusion and Recommendations incorporates the summary, conclusions and recommendations.

CHAPTER II
REVIEW OF LITERATURE

This chapter deals with the literature regarding basic terms of the topic of the study and the studies on the subject area of the study conducted in the past. Besides these, it presents what to expect in the study. This chapter is divided into two parts: conceptual review and research review.

2.1 Conceptual Review

This sub-chapter presents the theoretical aspects of the study. It includes background, concepts and purposes of the basic terms used in the study.

2.1.1 Historical Background of Banking Industry

While reviewing the banking history, merchants, money lenders and goldsmiths are regarded as the ancestors of bank. They used to perform monetary transactions and lending of money to the people taking certain additional amount as interest.

There are mainly two saying about the origin of the word 'Bank'.

- **Italian word 'Banco'.**

  In Italy, the goldsmiths and money lenders used to perform monetary transactions by sitting on a bench where they keep different types of currencies for lending and exchanging purposes. In Italian language, people used to call bench as Banco which latter on became Bank.

- **United fund 'Monte'**

A serious economic crisis arose in front of the Italian government after the war broke out in the Venice state in 1171 A.D. In order to fulfill the fund requirement, the government had collected loan from each people that was equal to 1% of their property @ 5% interest rate. This united fund was called 'Monte' by Italian whereas the German people living in Italy called it as Banck.

Latter on, it was started to be called Banco. In French language, people used to call it Banque/Banke and Englishmen did Bank.

The concept of modern commercial bank started with the establishment of Bank of Barcelona in 1401 A.D. and Bank of England in 1694 A.D. whereas Nepal stepped to modern commercial banking only in 1937 A.D. (1994 B.S.) in which year Nepal Bank Ltd. (NBL) was established as the first commercial bank in the country. Prior to this, there was no organized FI in Nepal. After the arisen of democracy in 1951 A.D. (2007 B.S.), Nepal Rastra Bank Act 1955 A.D. (2012 B.S.) was enforced under which a central bank named as Nepal Rastra Bank (NRB) was established in April 26, 1956 A.D. (2013 B.S.) with the purpose to provide security of money and economic development of the country. Then, in 1959 A.D. (2016 B.S.) with an objective to provide both technical and financial assistance for the establishment of industries in private sector, the government established Nepal Industrial Development Corporation (NIDC) as industrial development bank.

In the government sector, another commercial bank was established in 1966 A.D. (2022 B.S.) under the Rastriya Banijya Bank Act 1965 A.D. (2021 B.S.) which was named as Rastriya Banijya Bank (RBB). Similarly, another development bank was established in the government sector in 1968 A.D. (2024 B.S.) in the name of Agriculture Development Bank (ADB) to provide financial assistance for agriculture sector. Before mid 1980's A.D., due to high government control and protective policies, the pace of growth of financial sector was very slow. In 1985 A.D., Nepal adopted Structural Adjustment Program (SAP) to reform the financial sector and to integrate the Nepalese economy into the world economic system. The adoption of economic liberalization policy and the amendment of Commercial Bank Act 1974 A.D. in 1984 A.D. broke up the entry barriers placed on commercial bank i.e. it allows the establishment of private sector bank as well as joint venture bank in collaboration with the foreign investment. As a result, joint venture commercial banks such as Nepal Arab Bank Ltd. (NABIL) and Nepal Indosuez Bank Ltd. (NIBL) and Nepal Grindlays Bank Ltd. (NGBL) came into operation in the

private sector. Nepal completely deregulated the interest rates both on deposits and loans from August 1989 A.D. with an objective to promote competition among commercial banks and other FIs. The restoration of democracy in 1990 A.D. (2046 B.S.) has resulted rapid growth of banking sector because in reality, Nepal began the liberalization process after this political change with the introduction of basic reform programs in banking and other sectors. Consequently, a number of commercial banks and other FIs came into existence in the private sector. However, most of them have been located at Kathmandu and major cities of the country. Then, gradually competition among FIs increased. As a result, bank extended their branches in other parts of the country in order to catch the opportunities thereon.

Although, the banking activities took rapid growth till the beginning years of the twenty-first century, but it slow down due to lack of political stability and security. In spite of the high competition in a limited investment opportunities, the potential remittance market have played an important role in the existence of banking industry. Whatever the political situation and investment environment in the country, the entry of new FIs in the banking industry have been increasing continuously. Till mid-June 2008, altogether 235 banks and non-banks FIs are in operation as licensed by NRB. Out of them, 25 are commercial banks, 58 development banks, 78 finance companies, 12 micro credit development banks, 16 saving and credit co-operatives (performing limited banking activities) and 46 NGOs.

2.1.2 Concept of Bank

Simply, bank is that FI which deals with transactions of money i.e. collection and security of money and its mobilization as credit or investment. It is a financial intermediary between the parties (individual or institution) with surplus funds and in need of funds. The transaction of money involve risk and the bank make profit by the management of risk. Bank creates financial network which attracts the idle or passive money and flow them into the productive sectors of the economy.

A bank is an organization whose principal operations are concerned with the accumulation of the temporarily idle money of the general public for the purpose of advancing to other for expenditure (Kolb and Rodrigeuz, 1996).

Ordinary banking business consists of changing cash for bank deposits and bank deposits for cash, transferring bank deposits from one person or corporation to another, giving bank deposits in exchange for bills of exchange, government bonds, the secured or unsecured promises of businessmen to repay and so forth (Hayes and Meerchuan, 1991).

Bank can exist under various ownership such as fully government owned bank, semi-government owned bank, private sector bank, joint venture bank, etc. Similarly, the types of bank are Central Bank, Commercial Bank, Agricultural Bank, Industrial Bank, Development Bank, Co-operative Bank, Rural Development Bank, Exchange Bank, Export Import Bank, Indigenous Bank, etc.

2.1.3 Concept of Commercial Bank

Among various types of bank, commercial bank is one. Commercial bank is that FI which deals in accepting deposits of individuals and institutions and in giving loans against securities. Commercial bank also provides technical and administrative assistance to industries, trade and business. The first bank of Nepal was established in the form of commercial bank named as Nepal Bank Ltd. in 1937 A.D. (1994 B.S.).

Commercial banks are those FIs which gather the scattered money from surplus sector and mobilized them to the needy sector with an objective to maximize the value of the firm. They accept deposits from individual and institutions which are repayable on demand or on short notice. Such deposits are invested to satisfy the short term financial requirement of the individual and other productive sectors. They are the specialized FIs which invest the collected fund to get maximum return.

2.1.4 Functions of Commercial Banks

Commercial banks perform the following functions.

2.1.4.1. Acceptance of Deposits

Commercial bank accepts deposits of money made by individual and institutions. Deposit is made under different accounts.

Current Deposit: The a/c under which the money deposited can be drawn in any sum a number of times a day is current deposit or demand deposit. Such a/c is mainly focused for individuals/firms involved in business as there is no limitation in issuing cheque for withdrawal of money during a day or for deposit . The bank doesn't pay interest on such a/c. This only provides security of the money.

Saving Deposit: The a/c under which money deposited can be drawn in a limited amount on a day is called saving deposit. The bank pay certain rate of interest on such a/c. This a/c develops the habit of saving on people and is one of the important source of fund for bank. In case of withdrawal beyond the restricted limit, prior information is required.

Fixed Deposit: The a/c under which money should be deposited for certain duration of time is fixed deposit. Fixed deposit is also known as time deposit or term deposit. Bank pays higher interest rate in such a/c than in saving a/c. The maturity period of the a/c may vary from four months to five years or above. Longer the maturity period, higher will be the rate of interest. If money is to be drawn before the maturity period, it is given in terms of loan at a provision of paying certain interest rate which is more than the rate paid by bank.

Recurring Deposit: The a/c under which fixed amount of money should be deposit on each installment for a certain period of time is called recurring deposit. Such a/c is targeted for people having fixed regular income with an objective to develop saving habit. The bank repays the total amount with interest at maturity.

Call Deposit: It is the combination of current (demand) deposit and saving deposit. It is current in the sense that the deposit can be withdrawn at call and saving in the sense that the deposit earns interest. It is normally opened by big depository customers.

2.1.4.2 Advancing of Loan

Another function of bank is to advance loan on demand of its customers. Depending on the needs of various economic activities, bank provides different types of loan which are as follows:

a. Short Term Loan

There are generally many types of short term loan extended as running capital for financing current assets of industrial and business establishment. These loans are extended in the form of annual limit which may be available as a revolving facility subject to renewal every year. The following are the common types of short term loan.

Cash Credit: The bank provide cash credit against the pledge of security of certain specified commodities, receivables and stock. Normally, it is used by businessmen. The amount of loan is credited to the current a/c of the borrower. In case of a new customer, a loan a/c for the sum is opened. The borrower can withdraw money through cheques according to his/her requirements, but pays interest on the full amount.

Overdraft: Bank overdraft is the facility given by a bank to its customers to draw money in excess to the deposit by issuing cheque. It is provided on the basis of creditworthiness and reputation of the customers. The bank allows the borrower to overdraw his/her a/c up to a sum equal to loan sanctioned.

Call loans: They are very short-term loans advanced to the bill brokers for not more than 15 days. They are advanced against first class bills or securities. Such loans can be recalled at a very short notice. In normal times, they can also be renewed.

b. Discounting/ Purchasing Bill of Exchange

If a creditor holding a bill/letter of exchange wants money immediately, the bank provides the money by discounting the bill of exchange. It deposits the amount of the bill in the current a/c of the bill holder after deducting its rate of interest for the period of loan, which is not more than 90 days. When bill of exchange matures, the bank gets it payment from the banker of the debtor who accepted the bill.

c. Term Loan

Term loan is generally extended towards fixed assets and initial working capital or for commencement in trial/commercial production of project. Bank provide such loan on demand of its customers and is repaid on installment basis. It is basically of long term nature and extended for more than one year.

2.1.4.3 Credit Creation

Creation of credit is one of the essential factor of present economy and commercial bank contributes a lot in credit creation. Bank invest the collected deposits in the form of loan at certain interest rate specially for short term period. In this process, bank develops the capacity to advance/grant loan more than the amount of deposit it has. Bank creates credit on the assumption that all the depositors do not withdraw cash at a time. For this, bank predict the amount of deposits and withdrawals from their experiences within particular period of time and maintain cash b/l which is enough to pay the predicted withdrawals and the remaining amount is invested. When the bank advances loan, it does not pay the amount in cash. It opens a current a/c in the name of borrower and allows him/her to withdraw the required sum by cheques. Thus, the granted loan again creates deposit in the bank. Out of the deposit in that a/c, the bank maintain small amount of cash in reserve and the remaining amount is again invested as a loan. This process goes on continuously. In this way, bank increases its loan investment capacity by many times than its normal capacity. Hence, deposit increases the loan and loan in turn increases the deposit. Similarly, bank creates credit by purchasing securities, bill of exchange and other assets. Instead of making cash payment, bank opens current a/c in the name of seller who can withdraw the amount by cheque when he/she requires.

2.1.4.4 Agency Services

A bank perform various agency services which are as follows:

a. Transfer of Funds

This is one of the ancillary function/service which banks provide to their customers. This service has assumed great importance with increasing trade

and tourism. Thus, efficiency and speed of fund transfer is one of the important parameters in judging the bank's performance in terms of service delivery to customers.

Various instruments are available for transferring of funds from one place to another. Their importance depends on speeds, cost, purpose, etc. They are:

Demand Draft (D.D.)/ Bank Draft: The written order issued by a bank to its own branch or other bank for the payment of a certain amount of money to a certain person (payee) is known as demand draft. This is a type of cheque. The person sending money should request the bank along with the amount of money for issuing a cheque in the name of a bank where the payment is to be sent. Then, the cheque is sent to the person whom the payment is to be made and the person after presenting the cheque to the bank gets payment. D.D. is cost efficient and no possibility of dishonour.

Telegraphic Transfer (T.T.): An order issued through telegraph/telex by a bank to its branch or correspondent bank on demand of customer for the payment of a certain amount of money to a beneficiary is called telegraphic transfer. T.T. is faster, but costlier mode of payment. It can be useful for both in home and foreign trade.

SWIFT: SWIFT stands for Society for Worldwide Interbank Financial Telecommunication. A group of banks came together to create common facilities for funds transfer and exchanging commercial information in a speedier and cheaper way. SWIFT could be called a modified version of T.T. Messages among subscribers are transmitted with standardized code. Normally, SWIFT code is in letter. e.g. NBOCNPKA, NSBINPKA, etc.

Traveller Cheque (T.C.): T.C. is a kind of cheque which is very widely used by tourists/business travellers. It is a very convenient mode of carrying money. Bank issues T.C. of different value and the customer buys it as per their requirement. The purchaser signs in presence of

issuing authority on one part of the T.C. and countersigns before the encashing authority.

Letter of Credit (L.C.): The way of a bank's being guarantee for the amount of money to be paid by a local trader to a foreign trader is letter of credit. Opening L.C. means making a provision for the payment to exporter/seller in local currency through the bank. So, the importer/buyer deposits a marginal amount in the bank at the time of opening L.C. and obtains L.C. number which is sent to the exporter. Then, only the exporter dispatches goods. The bank giving L.C. takes money from the importer in local currency equal to the value of goods to be paid and issues T.T. to the bank of exporter. The exporter just presents the documents of export to his/her bank and receives payment in terms of his/ her own currency.

b. Collection of Funds

Another function of bank is to collect funds of its customer. A bank act as an agent of its customer as it collects bills/cheques from other banks in own country or foreign on behalf of its customers.

c. Trustee and Executor

Bank also acts as a trustee and executor of the property and will of its customer. In case of death of any customer, the bank protect the property of its customer and transfer it to the person as nominated by the customer as his/her heir. The bank does so as per the laws of the country.

d. Purchase and Sale of Share and Securities

Bank serves the function of purchasing and selling of share, securities, debentures, etc. issued by various organization and government on behalf of its customers.

Besides above, other agency functions are purchase and sale of foreign exchange, acts as a correspondent, etc.

2.1.4.5 Miscellaneous Services

Other services rendered by bank are:

a. Act as a consultant

Bank provide financial, technical and administrative advices to business and industries. It provide informations like feasibility of business, access to source of funds, processing of technological competition, structural and operational simplicity and complexity, etc.

b. Safekeeping of Valuables

Bank provides safety to the valuables as jewelries, precious stones, etc. of its customers. Customers can keep and withdraw their valuables and important documents in the locker as and when required.

c. Anywhere Branch Banking Service (ABBS)

Bank provide ABBS Facility for its customer by which a/c holder can conduct banking transactions such as depositing, withdrawing, transferring of fund, etc. from any branch of the bank as per his/her convenient.

d. Telebanking/SMS banking/Internet Banking

Customer can have easy access to banking services like b/l enquiry, alert via SMS on transaction, exchange rate enquiry, etc. via telephone, mobile SMS and internet.

e. Automated Teller Machine (ATM)

Use of plastic money like credit card, debit card, etc. have minimized the use of cheques/papers. Bank issue credit card on the basis of creditworthiness of the customer whereas for debit card, customer must have sufficient b/l on his/ her a/c. Such cards can be used to withdraw money via a machine named as ATM installed by bank at different places as per customer convenient.

Besides these, bank also serves underwriting function (merchant banking), collection of statistics about money market and trade cycle, bank guarantee, regulation, etc.

2.1.5 Financial Statements of Commercial Bank

FI has one year financial cycle i.e. all transactions carried out during that one year period are closed down with an objective to find out their financial

results. Therefore, financial statement is that statement which provides the profit or loss and financial position of the bank at a specific point in time. Financial statement reflects what exactly the financial condition of the bank is.

Financial statement is the report which shows whether the financial position of the bank is sound or not. It is the means to provide financial information about the bank to the shareholders, creditors and general public. It contains information about assets and liabilities, mobilization of financial sources and resources, reasons to changing financial position, etc. By viewing and analyzing the financial statements, the bank's management itself and stakeholders such as shareholders, creditors, regulators, etc. can find out the profitability, liquidity, sustainability, etc. of the bank enabling them to take decisions regarding investment, capital increment, performance improvement if required and so on.

Financial statement of bank comprises of balance sheet and income statement.

2.1.5.1 Balance Sheet (B/S)

B/S is the statement prepared to find out the financial position of the bank in a particular time. It includes systematic arrangement of the composition of assets, liabilities and capital. One side of B/S contains all commercial assets and the other side contains all equity capital and liabilities such that their total amounts are equal.

Assets = Equity + Liabilities

B/S is not only the means for reflecting the financial condition, but is also the important instrument for conducting financial analysis and disclosing necessary information such as increase or decrease in assets, position of fixed and current assets, composition of capital and liabilities, etc. are essential for taking major decisions. The B/S portrays the sources of funds and uses of the same.

Assets

Bank's assets are those resources on which bank holds its ownership. They are the means for generating earnings. They are created from the capital and liabilities of the bank.

Bank's assets are classified into four major subcategories: loans, investment securities, non-interest cash and due from other depository institutions, and other assets.

Loans: Loans form major part in a bank's B/S. They usually occupy greater portion among the asset items and are largest source in generating income. Creditworthiness of borrower, source of repayment, secured or unsecured, maturity period, terms and conditions, etc. are some important characteristics associated with loans and the degree of credit risk depends on them. The interest rate may be fixed over the life of the loan or vary with changes in market interest rates. Similarly, the loan principal may be repaid on installment basis or as a lump sum.

On the basis of purpose, loans can be commercial loans, real estate loans, individual or consumer loans, and other loans. Commercial loans are used to fulfill the commercial and industrial financial needs, such as financing on working capital, equipment purchases, and plant expansions. The rate of interest on commercial loan can be either fixed or floating. This rate remains in force over the loan contract period irrespective of change in market interest rates. The interest rate on revolving loans can be adjusted periodically so that the interest rate risk is transferred in large part from the bank to the borrower. Commercial loan can be secured or unsecured. Real estate loans are secured by real estate and generally consist either of property loans (such as housing loans, etc) secured by first mortgages or interim construction loans. Generally, they are of long term nature. Individual or consumer loans are provided for the purpose to fulfill household, family, and other personal needs. e.g. auto loan, educational loan, etc. Loans granted for the purchase of credit card items and durable goods comprise the largest volume of this consumer credit. Other loans include loans in domestic offices and foreign offices. Other loans in domestic

branches include all other loans and all lease-financing receivables in domestic branches. International loans, labeled loans and leases in foreign branches are essentially business loans and lease receivables made to foreign enterprises. Lease financing is an alternative to direct loans. Two adjustments are made to gross loans and leases to obtain a net loan figure. First, unearned income is deducted from gross interest received. Unearned income is income that has accrued but not yet been paid. Second, gross loans are reduced by a bank's loan and lease loss allowance (loan loss reserve), which exists in recognition that some loans will not be paid. The reserve's maximum size is determined by tax law but increases with the growth in problem loans and decreases with net loan charge-offs. A bank is permitted a tax deduction for net additions to the loss reserve, denoted as the provision for loan losses on the income statement (P/L a/c).

Investment securities: Bank invest on securities such as shares, bonds, debentures, T-Bills, etc. issued by corporate institutions and government on which they earn interest. The administration and transaction costs on investment securities are extremely low. Banks also concentrate their purchases on higher quality instruments so that defaults are rare. When interest rates fall, most investment securities increases in value because they eventually carry above average interest rates. Banks can either earn very attractive yields relative to their borrowing costs or sell the securities at a gain. On the contrary, when rates rise, investment securities decrease in value as they carry below market interest rates. In terms of liquidity, banks own a large amount of short-terms securities ─ those with a maturity of one year or less ─ that can be easily sold to obtain cash. Because of their lower risk, they generally earn less interest than what can be earned on longer term securities. These short-term investments include interest bearing bank balances at other FIs, securities purchased under agreement to resell (repurchase agreements or RPs), T-Bills, municipal tax warrants, etc. These investments are used for liquidity risk management purpose. They are highly liquid, have low default risk and can usually be traded in secondary markets. Besides investment on short-term

securities, bank invests its excess cash reserve in inter-bank dealing. In an inter-bank transaction, the bank with excess reserve sells fund for one day to the purchasing bank. The next day, the purchasing banks return the fund plus one day's interest reflecting the market rate. Long-term investment securities consist of notes and bonds issued by central bank and government that have a maturity of more than one year and generate taxable or tax-exempt interest. Such securities have zero default risk.

Non-interest cash and due from other depository institutions: Vault cash, deposits at central bank, deposits at other FIs, and cash items in the process of collection are included in this group. Vault cash indicates the currency and coin maintain by bank to meet customer withdrawals. Deposits at central bank are used to meet legal reserve requirements, assist in check clearing and wire transfers, or effect the purchase and sale of Treasury securities. Balances hold by bank at other FIs, called correspondent banks, are primarily used to purchase services from those institutions. Banks generally purchase services such as cheque collection, cheque processing, and investment advice from correspondent banks. Finally, cash items in the process of collection indicates those cheques written against other institutions and presented to the bank for payment for which credit has not been given.

Other assets: Other assets in the bank's B/S consists of items such as fixed assets, the depreciated value of bank premises and equipment, other real estate owned (collateral seized on defaulted loans), investment in unconsolidated subsidiaries, interest receivable, prepaid expenses, intangible assets (i.e. goodwill and mortgage servicing rights), valuables (gold, silver, etc.) and other (i.e. deferred taxes, mortgage servicing fees receivables, etc.). This accounts are generally a small part of the bank's overall assets.

Liabilities

Bank's liabilities are those funds collected by banks from various sources under an obligation to pay back in the future. Bank funding sources are classified according to the type of debt instrument and equity component.

Liabilities include different types of deposits and borrowings which are used to fund the investments and loans items in the assets side of the B/S. Liabilities vary in terms of their maturity, interest payments, check-writing capabilities/privileges, deposit insurance coverage, etc. Bank acquires funds by issuing (selling) liabilities. Such funds are used to fulfill capital requirement, loan demand and investment.

Current (demand) deposits are transactions accounts held by individuals, business firms, corporations and government that pay no interest. Saving deposits are interest-bearing liabilities. Such a/c requires minimum b/l before a depositor earns interest and impose service charges. Withdrawals are limited to certain amount per day, but this term vary among institutions. This restriction exempts banks from holding required reserves against deposits. The major categories of time deposits are fixed deposits. Fixed deposits are higher interest bearing liabilities. Withdrawals are permitted on maturity. Therefore, bank is benefited by the fixed depository characteristic as the fixed deposits provide permanent funding base. But in case of early withdrawal i.e. if depositor wants to withdraw fund prior to the stated maturity date, banks charge penalties or reduce effective interest rate or it is given in terms of loan by charging additional interest rate on the rate paid by bank. Although the size, maturity and rates on fixed deposits are negotiable, most banks issue standardized fixed deposits so that customers may not be confused.

Deposits held in foreign branches are separated from domestic deposits in the B/S, but it is not generally practiced in Nepal. Core deposits are stable deposit as they are not expected to be withdrawn over short periods of time and are therefore a permanent source of funding. Core deposit generally include demand deposit, saving deposit, Negotiable Orders of Withdrawal (NOW) and Automated Transfers from Savings (ATS) accounts, etc. The owners are not highly rate sensitive, such that the interest elasticity is low, and do not move their balances to another institution when it pays a higher rate.

Subordinated notes and debentures consists of notes and bonds with maturities in excess of one year. These sources of funds are stable with low

withdrawal risk. These notes are especially attractive because they are subject to neither reserve requirements nor deposit insurance premiums, and some can contribute to meet minimum capital requirement for regulatory purposes.

All common and preferred capital, or stockholders' equity is the ownership capital in the bank. Common and preferred stock are listed at their par values while the surplus a/c represents the amount of proceeds received by the bank in excess of par when it issued the stock. The authorized capital is the maximum amount of capital that a bank can issue under its memorandum of association. The issued capital is the capital issued to the public for subscription. Subscription capital may be the whole of issued capital or its part. Called up capital is the amount that the shareholders are required to pay. Paid up capital is the actual amount paid by the shareholders. The differences between the called up capital and paid up capital is known as uncalled capital. It acts as an additional margin of safety for the depositors and creditors of the bank in case of occurrence of capital crisis in the bank. Reserve fund is the apportion amount out of the profit to reserve for contingencies for the future. Generally, the amount of reserve fund is invested in first class securities such as government bond, development bond, T-Bills, etc. At the time of heavy losses, this fund is used. On the other hand, reserve serve as an additional security of the bank to its customers. The B.V. of equity equals the difference between the B.V. of assets and aggregate liabilities.

2.1.5.2 Income Statement

A bank's income statement reflects the financial position in terms of NI i.e. profit earned or loss beared at a specific point in time. It indicates the overall efficiency of the management to maximize revenue and minimize expense so as to produce good amount of profit. Excess of income over expenditure shows secured performance whereas excess of expenditure over income shows disappointing performance of the bank. Out of the interest-earning assets, interest earned on loan forms the largest source of income whereas out of the interest bearing liabilities, interest paid on deposits forms

largest expense for a bank. Thus, the earning capability of the bank i.e. gaining more (income) and losing less (expense) from the variation in the interest rate on loans and deposits over time is reflected in the income statement.

The income statement format starts with interest income, then interest expense is subtracted to obtain NII. Interest income is the sum of interest received on all interest-earning assets, including fees earned on all of a bank's assets plus loans, deposits held at other institutions, municipal and taxable securities, and trading a/c securities. It also include rental receipts from lease financing. All income is taxable, except for the interest on state and municipal securities and some loan and lease income.

Interest expense is the sum of interest paid on all interest-bearing liabilities, including transactions a/c (NOW, ATS, etc.), time and saving deposits and long-term debt.

The other major source of bank revenue is OI or non-interest income, which is composed of primarily of deposit service charges, fee and commission income, and profits or gains on trading and non-trading foreign transactions. After adding OI, banks subtract OE or non-interest expense. OE is comprised primarily of personnel expense, which includes salaries and fringe benefits paid to bank employees, occupancy expense and premises, and other OEs, including technology expenditures, utilities, and deposit insurance premiums. OE far exceeds OI at most banks, hence the label burden. Reducing this burden will improve profitability.

The next step is to subtract provisions for loan and lease losses to obtain operating profit. It represent a bank's periodic allocation to its loan and lease loss allowance(loan loss reserve) on the B/S. Conceptually, management is allocating a portion of income to a reserve to protect against potential loan losses. It is a non-cash expense, but indicates management's perception of the quality of the bank's loans.

Next, realized non-operating gains (or losses) from the sale of investment (securities), assets, dividend, etc. are added to the operating profit. Then, return from possible loss provisions such as loan loss provision, non-

banking assets loss provision, investment loss provision, etc. are subtracted. After this, gains (or losses) from abnormal transactions like recovery of write off loan, write off of irrecoverable loan, etc. are added. Finally, provision for employees' bonus and tax are deducted to obtain net profit or loss.

2.1.6 Financial Performance Analysis

A bank is a profit seeking business entity plus service motive FI. Therefore, there exists several stakeholders such as creditors, bond-holders, depositors, investors, shareholders, government, etc. holding own interest on the bank. Creditors are interested primarily in the liquidity position of the bank. Their claims are short term and the ability to meet short term debt obligation is evaluated through analysis of its liquidity. Suppliers of the long term debt are concerned with the bank's survival and solvency. They analyze the capital structure (composition of debt and equity capital), major sources and uses of funds, profitability, cash flow trend, ability to pay interest and principal, etc. Depositors seek security of their deposits and ability of the bank to service deposits as per its nature. Therefore, they are focused on cash flow ability and survival of the bank. Investors in common stock are concerned primarily with present and expected future earnings and the stability of these earnings about a trend. As a result, investors might concentrate their analysis on the bank's profitability. They would be concerned with its financial condition in so far as it affects the ability of the bank to pay dividends and to avoid bankruptcy. Similarly, government has regulatory interests. Management is interested to maintain internal control and better understanding with capital suppliers. Specially, it is concerned with profitability on investment in the various assets of the bank and in the efficiency of assets management. All these desires and concern of the stakeholders are fulfill by the financial performance analysis of the bank.

Financial performance analysis can be viewed as a judgmental approach that provide certain bases on the basis of which the concerned parties can take

decision. This analysis judge the financial soundness of a firm in terms of its past and present performance and project the future performance.

Financial performance analysis is a process of identifying the financial strength and weakness of the firm by properly establishing the relationship between the items of B/S and income statement (P/L a/c). It determines the financial position of the firm. The identified strength are used to increase the overall performance efficiency of the firm fulfilling and satisfying the expectations of the stakeholders whereas the identified weaknesses are required to be corrected in time. This analysis uses the data and information contained in the financial statements disclosed by the firm. The various items in the B/S and income statement have certain relation among each other. When they are brought together to establish relationship, then they conveys the performance efficiency of the firm. The outcomes from the analysis of financial performance serve as the basis for decision making. Financial performance analysis involves analytical and interpretation part to reach at meaningful conclusion.

Financial performance analysis measures the overall financial performance of the firm. It provide valuable information for financial decision making, identifies the deficiencies and weaknesses, facilitates self assessment of management effectiveness, assists in taking timely corrective actions and makes the financial statements more discipline and accountable.

Financial performance analysis can be conducted by using various analytical tools. Financial ratio analysis is one of the commonly used technique for evaluating the financial position and performance of the firm. It uses the data from the firm's B/S, income statement, statement of cash flows and certain market based data. The ratios are required to be analyzed and interpreted in order to draw out meaningful conclusion.

2.1.7 Bank Supervision

The performance of banking sector is concern matter of general public (savers and borrowers) to the government. The success of banking system

makes the economy strong to compete in the present globalization age. As banks are now involved in complex and innovative banking products, they are exposed to many risks such as credit risk, market risk, liquidity risk, operational risk, legal risk and reputational risk. Lack of proper management of risks can increase the failure rate of the banks. Thus, regular supervision of banks is essential to make the banking system stable, strong and responsible. In addition to this, bank itself should maintain good corporate governance. Corporate governance is defined as the distribution of rights and responsibilities among different participants in the organization, such as, the board, managers, shareholders and other stakeholders (SEBON, 2004).

Bank supervisory agencies are responsible for monitoring the financial performance of the banks and enforcing related legislation and regulatory policy. Such agencies hold the authority to take corrective actions for those banks not following the regulations or facing serious losses or default risk. Supervision prevents from frauds, abuses of power by management, careless in lending, etc. and avoids bankrupt.

In the Nepalese context, NRB act as the supervisory agency for monitoring the activities of commercial banks and other FIs. More specifically, Bank Supervision Department carry out on-site supervision and off-site supervision for maintaining banking soundness and transparency.

On-site Supervision: Supervisors make an overall assessment of the financial condition and performance of the bank by means of on-site examination. Under this approach, an examination team carried out a field visit to the bank. They inspect certain areas such as capital adequacy, loan portfolio management, treasury management, operational risks, MIS, information technology, etc. This manual provides guidelines to the examiners for preparing inspection report. This approach covers the assessment of qualitative factors such as management capabilities and internal control procedures that may not be reflected adequately in the regulatory reports. This examinations are important to verify report accuracy and to gather further supervisory

information. After completion of on-site supervision, CAMELS rating is done by the supervisors. Supervisors rely principally on regular on-site inspection.

Off-site Supervision: This supervision is based on an analysis of information obtained from statutory reports submitted by the bank than actual on-site field examination. Supervisory authorities, which do not have the mandate or resources to carry out periodic on-site examination, rely extensively on this method to monitor the financial condition and performance of the banks and to indentify those banks that may require close supervisory attention. This approach involves reviewing and analyzing periodic financial and other information received by the supervisor relating to the bank's activities. It deals with B/S, P/L a/c, loans, investments, capital, liquidity, etc. which can be quantified.

2.1.8 Concept of CAMELS as Bank Rating System

Success of a FI is based on its performance and performance is appraised by means of certain rating system which in turn provide feed back to strengthen the performance. Uniform rating system helps in assessment of overall strength of banking system as a whole as well as the safety and soundness of individual banks and FIs. By reviewing the rating of all banks in a financial system, it can be assessed that in which direction the financial system is moving as well as problematic FIs.

CAMELS is a common method for appraising the performance of FIs used by the worldwide supervisory authorities. This system was developed by regulatory authorities of the U.S. banks. The Federal Reserve Bank, the Office the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC), all use this system (McNally, 1996).

CAMELS is a technique for ratings the FIs by analyzing their financial performance in terms of six major components i.e. each component has its own meaning, procedures and stand for

C - Capital adequacy

A - Asset quality

M - Management quality

E - Earnings

L - Liquidity

S - Sensitivity to market risk

The Basel Committee on Banking Supervision (BCBS) of Bank for International Settlements (BIS) has recommended using CAMEL framework as criteria for assessing a FI in 1988 (ADB, 2002). The sixth component "S" was added to CAMEL in Jan. 1, 1997.

CAMELS ratings identifies the problematic areas within the FI which indicates requirement of additional supervisory attention. It helps the management in designing appropriate policies and strategies for raising the financial performance and thus maintaining safety and soundness of the FI.

Supervisory authority require regular assessment of the financial condition of each FI and specific risks faced via on-site examinations and periodic reports. Financial condition of the bank deteriorates due to poor performance resulting from lack of proper management of different types of risks such as credit risk, operational risk, market risk, liquidity risk, legal risk, reputational risk, interest rate risk, off-balance sheet risk, foreign exchange risk, sovereign risk, technology risk, insolvency risk, etc. The degree to which these risks affect the financial performance of the bank varies from one another depending upon their nature, size, available resources of bank, condition of economy, competitor's status, etc. Each component of the CAMELS framework is used to indentify the type of risk. Further, it indicates the problematic area and the extent to which the risk is threatening the financial performance. Based on the outcomes of each of the rating component, appropriate polices and strategies can be developed for minimizing the level of risk and thus strengthening the overall financial performance of the bank.

Rating Procedure

Under this, steps to be followed are as follows:

i. CAMELS framework include two types of rating.

a. Component ratings − 1-5 for each of the components of CAMELS.
b. Composite ratings − 1-5 for bank's overall performance (It is weighted average of component ratings).

In scale 1-5, rating 1 is used for best performance and rating 5 is for worst performance.

ii. Calculation of component rating uses ratios and questionnaire. Results of ratios and questionnaire are used for component rating in the ratio of 70:30 respectively.

iii. Ratios reflect the financial condition of FI whereas questionnaire requires decision making using supervisory discretion. The results of questionnaire may vary from supervisor to supervisor since it involves subjective decision.

iv. After calculation of the component ratings, composite CAMELS rating is calculated using weighted average of component ratings.

Each of the rating indicates the following performance.

Rating 1 Indicates very strong performance i.e. a fundamentally sound bank.

Rating 2 Indicates above average performance that adequately provides for the safe and sound operations of the bank.

Rating 3 Indicates that the bank shows some underlying weakness that should be corrected.

Rating 4 Indicates unsatisfactory performances. If left unchecked, such performance can threaten solvency of the bank.

Rating 5 Indicates very unsatisfactory performance i.e. a problem bank with some near-term potential for failure. It requires immediate remedial action for survival of bank.

a. Component Rating (CAMELS components)

Capital Adequacy (C)

The capital component (C) signals the institution's ability to maintain capital commensurate with the nature and extent of all types of risk and the ability of management to identify, measure, monitor, and control these risks

(Koch and Macdonald, 2004). Capital adequacy assess the capability of the institution's capital to address different types of risks ensuring smooth operation of it.

Capital is the amount of money in terms of cash or kind invested to operate the bank. Capital is the main and the most important source of fund collected through various sources for the purpose of well functioning of the bank. Capital play the balancing role between risk and return ensuring safety and soundness of the bank. Capital prevent the bank from the threat of solvency in case of loss occur due to credit risk, interest rate risk, foreign exchange risk or any other cause and thus facilitate smooth operation of the bank. On the other hand, it makes the bank capable to meet its financial obligations and maintain public confidence. Capital helps to meet the minimum requirement as determined by the regulatory authority. Inadequacy of capital creates problem in daily operation and service delivery which threats the growth and sustainability of the bank. Hence, bank require to maintain adequate capital relative to risk profile that leads toward strong performance. The level at which to maintain capital depend on the types of risk followed by the expected and unexpected loss so as to address their influenced on time ensuring smooth operation of the institution.

For the purpose of capital adequacy measurement, leverage ratio, core capital ratio, supplementary ratio and total capital ratio can be used.

Rating Capital Component

Rating1 Indicates adequate capital level relative to the institution's risk profile.

Rating 2 Indicates a satisfactory capital relative to risk profile.

Rating 3 Indicates a less than satisfactory level of capital that does not fully support the institution's risk profile. This rating indicates a need for improvement, even if the institution's capital level exceeds minimum.

Rating 4 Indicates a deficient level of capital i.e. bank is inadequately capitalized.

Rating 5 Indicates a critically deficient level of capital threatening solvency of bank. Immediate assistance from shareholders or other external sources of financial support is required.

BASEL Capital Accord

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

Basel-I Capital Accord is an agreement for designing the capital adequacy framework held on July 1988. According to Basel-II, the minimum capital requirement for banks was set 8% and was focused on credit risk. An amendment was made in 1996 to include the market risk.

New Basel Capital Accord (Basel - II)

Basel - II is the revised form of capital adequacy framework held in June 1999. It aims to replace Basel - I with an objective to make the capital framework risk sensitive. After the successful implementation of 1988 capital accord in more than 100 countries, the BCBS reached an agreement on a number of important issues for promoting prudential and uniform banking practices as well as setting standards and guidelines for supervisory functions. Realizing the fact, it has developed a new comprehensive framework for capital requirements based on the various risk exposures of the banking business, which is also popularly known as Basel-II (www.bis.org).

The events of September 11, 2001 tragically demonstrated the need for banks to protect themselves against operational risk to their systems and

people. The new Basel Capital requirements will require them to make capital charges for operational risk. Starting in 2005, regulators will begin calculating bank capital according to the recently adopted Basel-II Accord for capital adequacy. The new focus of Basel-II is operational risk. The focus is on the optimum use of capital in the technology and business process operations areas of a FI.

The Basel Committee defines operational risk as "The risk of loss resulting from inadequate or failed internal processed, people, and systems, or from external events." From a capital adequacy point of view, this covers technology risks, management-and people-related operational risks, and legal risks. The new accord's focus on these areas in comprehensive.

The original Basel Accord's approach to capital requirements was primarily based on credit risk. Although, it set appropriate protections from a market-and credit-risk perspective, it did not address operational or other types of risk. Operational risk itself is not new to FIs. It's the first risk a bank must manage, even before making its first loan or executing its first trade.

The Basel-II has been introduced basically for the protection of depositor's interest by preserving the integrity of capital of banks. Only "A" class FIs, licensed to conduct banking business in Nepal are subject to this capital framework (www.nrb.org.np). NRB has adopted Basel Core Principles for Effective Supervision as guideline for supervision of commercial banks. There is no doubt that the new accord, though complex, carries a lot of virtues and will be a milestone in improving banks' internal mechanism and supervisory process. The New Accord consists of three re-enforceable pillars: Pillar 1 - Minimum capital requirements, Pillar 2 - Supervisory review process and Pillar 3 - Market discipline and it explicitly covers three types of risks in the definition of risk-weighted assets: (a) credit risk (b) market risk, and (c) operational risk. So, a major innovation of the proposed Basel-II is the introduction of three distinct options for the calculation of three types of risk.

a. Credit Risk

Credit risk results from the exposures in the normal course of lending with potential earnings volatility caused by borrowers' inability and/or

unwilling to fulfill their contractual debt obligations. Credit exposure includes current as well as potential credit exposure. Current credit exposure is represented by the national value of principal amount of on-balance sheet financial and off-balance sheet facilities.

Risk management tools or remedies exist for every exposure that the institution faces. These include:

- Risk Avoidance: eliminate the exposure completely.
- Risk Control: reduce chance or size of loss, or make the likelihood more certain.
- Risk Transfer: by way of insurance coverage or contractual language.
- Risk Retention: decide to bear the risk at an acceptable level after careful evaluation. Such credit exposures are adequately collateralized.

The credit exposure of the bank is monitored by Credit Control Department. The credit facilities approval has centralized mechanism. Credit committee further monitors the department.

Individual credit risks are analyzed and approved by experienced credit officers who consider a number of factors in the identification and assessment of credit risk. The analysis/appraisal is based on the assessment of all relevant factors including the borrower's financial condition and outlook, industry and economic conditions, market position, and management strength.

b. Market Risk

Market risk is the current and potential risk to earnings and stockholder's equity resulting from adverse movements in market rates or prices. The three areas of market risk are: interest rate or reinvestment rate risk, equity or security price risk, and foreign exchange risk. Market risk arises from changes in foreign exchange rates and interest rates. It arises in the course of banking business and investments specifically from mismatches in the interest rate profile of assets and liabilities and from the effect of exchange rate movement on the earnings.

Asset and liability management committees (ALCOs) comprising senior management personnel oversee non-trading market risk including the setting of operational limits and guidelines to refine risk management consistent with the Asset and Liability Management Policy. Treasury Department is responsible for managing the risks in respect of trading and investment remaining within the approved responsibility.

i. Interest rate risk

Interest rate risk is the potential adverse impact on the bank/non bank's earnings arising from changes in interest rates. Interest rate risk increases when rates become volatile.

ii. Equity or security price risk

Equity and security price risk examines how changes in market prices, interest rates, and foreign exchange rates affect the market values of any equities, fixed-income securities, foreign currency holdings, and associated derivative and other off-balance sheet contracts.

iii. Foreign exchange risk

Foreign exchange risk arises from changes in foreign exchange rates that affect the values of assets, liabilities, and off-balance sheet activities denominated in currencies different from the bank's domestic (home) currency. It exists because some banks hold assets and issue liabilities denominated in different currencies. When the amount of assets differs from the amount of liabilities in a currency, any change in exchange rates produces a gain or loss that affects the market value of the bank's stockholders' equity.

c. Operational Risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people or systems, or from external events. Operational risk arises from the breakdown in the internal control systems and corporate governance. These risks may arise in the form of incorrect processing of transactions and information due to frauds, human error, failure to comply with established systems and procedures, non-compliance with internal policies,

laws and regulations, conducting business in unethical manner, etc. Operational risk also includes risks resulting from inadequate physical safeguard of assets.

Capital Adequacy Norms by NRB

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

Core capital: Core (Tier I/Primary) capital includes paid-up capital, share premium, non-redeemable preference share, general reserve, accumulated profit and loss, capital redemption reserve, capital adjustment fund, and other free reserve. However, where the amount of goodwill exits, same shall be deducted for the purpose of calculation of the core capital.

Supplementary Capital: Supplementary (Tier II) capital comprises of general loan loss provision, assets revaluation reserve, hybrid capital instruments, unsecured subordinated term loan, exchange equalization reserve, additional loan loss provision, investment adjustment reserve and other free reserves not allocated for a specific purpose.

NRB Capital Adequacy Norms

Fiscal Year (Mid- July)	Minimum NRB standard for Total Capital (%)	Minimum NRB standard for Core Capital (%)	Maximum NRB standard for Supplementary Capital (%)
2003/04	11	5.50	Not
2004/05	11	5.50	more than
2005/06	11	5.50	100%
2006/07	11	5.50	of
2007/08	10	6.00	core capital

According to the Banks and Financial Institutions Act 2063, the minimum paid up capital requirement as determined in the licensing policy (after revision) for establishment of class 'A' commercial bank is as under:

i. New commercial banks set up at national level required to have a minimum paid up capital of Rs. 2.0 billion.
ii. Existing commercial banks and those banks already possessing operating license are required to extend their paid up capital to Rs. 2.0 billion by mid-July, 2013 (End of Ashadh, 2070) through minimum 10 percent paid up capital increment every year.

Assets Quality (A)

Assets quality determines the long term sustainability of the FI. Assets quality (A) reflects the amount of existing credit risk associated with the loan and investment portfolio as well as off-balance sheet activities (Koch and Macdonald, 2004). The extent of the credit risk depends on the quality of assets held by an individual FI. The quality of assets held by an individual FI depends on exposure to specific risks, trends in NPL, and the health and profitability of bank borrowers ─ especially the corporate sector (Baral, 2005). Loan usually occupy greater part among the asset items and thus, effective mobilization and timely collection of loans as per the contract increases the quality of asset ensuring sustainability of the FI. While assessing existence of risk, risk mitigation strategies namely effectiveness of credit administration i.e. timely identification and collection of problem loans or adequacy of security, effectiveness and adequacy of polices and procedures, extent of concentration, adequacy of provisioning, adequacy of MIS and internal control, etc. needs to be considered.

A number of measures can be used to indicate the quality of assets held by FIs. Asian Development Bank (ADB) suggests these measures ─ loan concentration by industry, region, borrower and portfolio quality; related party policies and exposure on outstanding loan; approval process of loan; check and

balance of loans; loan loss provision ratio; portfolio in arrear; loan loss ratio; and reserve ratio ─ of checking the quality of assets of the FI (ADB, 2002).

NRB uses composition of assets, NPL to total loan ratio, net NPL to total loan ratio as the indicators of the quality of assets of commercial banks (NRB, 2005).

Rating Assets Component

Rating 1 Indicates strong asset quality and credit administration practices.

Rating 2 Indicates satisfactory asset quality and credit administration practices. The level and severity of classifications of loan and other weaknesses warrant a limited level of supervisory attention. But have good capital protection and management ability.

Rating 3 Asset quality and credit administration practices are less than satisfactory. There is need to improve credit administration and risk management practices.

Rating 4 Indicates deficient asset quality and credit administration practices. The levels of risk and problem assets are significant and inadequately controlled.

Rating 5 Indicates critically deficient asset quality and credit administration practices threatening solvency of bank.

Non-Performing Assets (NPAs)

One of the measure to determine the quality of asset is to judge the assets in terms of performing and non-performing. Assets are said to be performing in the sense when the assets thus invested generate regular cash inflow whereas the assets failing to generate cash inflow are termed to be non-performing assets.

Being specific, loans and advances are those assets which the FI expect timely repayment of the loan from the borrowers as per the agreement. In case of the default in the repayment, the asset turn to non-performing and declare as NPA/NPL.

NRB unified directives E. Pra. Ni. No. 02/061/62 (Ashar 2062 B.S.) for Banks and Non-Bank FIs, defines NPLs as loans classified as Substandard, Doubtful and Loss or Loans which are past due by principal for more than 3 months.

FI with higher proportion of loan in the total assets will be more riskier as there is possibility of turning the performing loan into NPL in case of adverse effect by the internal and external factors. Rising level of NPA increases the loan loss provision ratio and higher loan loss provision has adverse effect on the profitability of the bank and sometime even results in bankruptcy. Higher level of NPA can be the cause for crisis in the financial sector. The financial crisis emerged from Thailand in 1997 A.D. was largely considered due to high level of NPAs. It has worstly effected the FIs mainly in South-East Asian countries with higher proportion of loan in the total assets whereas FIs such as in Nepal and India having lower proportion of loan in the total assets were less affected. Similarly, various scholars and analysts have concluded that the latest global financial crisis 2008 emerged from America was also largely due to high level of NPAs. Thus, banks need to be careful regarding the level of NPA so that the situation remain under control.

NRB Directives related to Assets quality

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

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

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

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

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

The directive further requires banks to provision for loan loss, on the basis of the outstanding loans and advances and bills purchased classified as above. Loan loss provision set aside for performing loans is defined as General Loan Loss Provision and that set aside for NPL as Specific Loan Loss Provision.

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

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

Management Quality (M)

Management quality is the overall capability of the management reflecting good corporate governance, comprehensive processes to identify, measure and minimize risk, sound assessments of capital adequacy relative to

risk profile and effective internal control mechanism ─ all these ensuring safety and soundness of the institution. The level and quality of management determine the overall performance of the institution.

The management component (M) reflects the adequacy of the board of directors and senior management systems and procedures to identify, measure, monitor, and control risk (Koch and Macdonald, 2004). The BOD is the ultimate authority for taking all decisions. However, various level of authorities function based on their duties and responsibilities are closely supervised by the higher level authority. Depending on the type, size and potentiality of risk, the BOD and senior management design policies and guidelines, risk management program, credit appraisal system, credit recovery policies, acceptable risk exposure level, internal control mechanism, etc. in compliance with applicable laws and regulations and lower level management are responsible for their implementation. The effectiveness and success of these policies and guidelines depend on the capability, vision, professionalism and competency of the management team. Management aspect of the bank is most important amongst the CAMELS components. Management's capability is the base for the performance of other components. Besides this, sometime the performance of other components may be strong, but if intent of management is not good and supportive, then overall performance of the FI will remain backward.

Sound management is key to bank performance, but is difficult to measure. It is primarily a qualitative factor applicable to individual institutions. Several indicators, however, can jointly serve as an indicator of management soundness. Expenses ratio, earning per employee, cost per loan, average loan size and cost per unit of money lent can be used as a proxy of the management quality.

Rating Management Component

Rating 1 Indicates strong management performance. All significant risks are adequately identified, measured, monitored and controlled.

Rating 2 Indicates satisfactory management performance.

Rating 3 Management performance is less than satisfactory. There is need to improve risk management practices.

Rating 4 Indicates deficient management performance. Significant risks are inadequately identified, measured, monitored and controlled.

Rating 5 Indicates critically deficient management performance. Significant risks are so inadequately identified, measured, monitored and controlled that may threaten the solvency of the FI.

Earning Quality (E)

Earning quality is the base for determining the overall financial condition of the FI. The quality, quantity and trend of earning indicate strong, weak or satisfactory performance of the institution. The capability to earn good earning shows the efficiency of management in mobilization of assets and liabilities to generate profit. Good earning i.e. profitability ensures smooth operation and high competitiveness of the FI by providing sufficient resources as and when required. Profitability provides financial support to maintain capital adequacy and hence, fulfills the internal capital need and avoid external capital fund requirement. The risks of loss can be provided out of the profit in the form of provisions. Earning capability is the base for increasing the value of the institution/ share holder's wealth. Good earning performance build up the confidence of depositors, investors, creditors, shareholders and public at large. Thus, earning capability provide stability, growth and long-term survival of the FI. Similarly, earning quality emphasize on stable and regular type of earning because it encourage and ensure the management not only to set future targets, but also to achieve them within the target time. On the other hand, unexpected profit and extraordinary income of non-repetitive nature are not treated as good earning source because it does not reflect management effort and lacks positive effect on working efficiency and planning. Earning capacity largely counts on the efficiency of management. Chronically, loss making banks reduce their

capital base, risks the solvency, and eventual bring down the wealth of their shareholders. Conversely, constantly profit making banks add equity to the total capital fund, reduce the risk of insolvency, and finally increase the wealth of their shareholders (Saunders and Cornett, 2004).

The earning component (E) reflects not only the quantity and trend in earnings, but also the factors that may affect the sustainability or quality or earnings (Koch and Macdonald, 2004). There are different indicators of profitability. ROA, ROE, interest-spread ratio, earning-spread ratio, gross margin, operating profit margin and net profit margin are commonly used profitability indicators. NRB uses return on assets as an indicator of profitability of a commercial bank. In addition, it uses the absolute measures such as interest income, NII, non-interest income, net non-interest income, non-operating income, net non-operating income and net profit, to evaluate the profitability of a commercial bank.

Rating Earning Component

Rating 1 Earnings are strong and sufficient to support operations and maintain adequacy of capital and provisioning.

Rating 2 Earnings are satisfactory and sufficient to support operations and are relatively stable or experience slight decline.

Rating 3 Earnings need improvement to support operations and to maintain adequacy of capital and provisioning.

Rating 4 Earnings are deficient. Erratic fluctuations in NI, intermittent losses or substantial drop in earnings. Earnings may not be sufficient to provide provisioning for classified loan needs and to support operations.

Rating 5 Earnings are critically deficient. Earnings characterized by chronic losses causing threat to solvency through erosion of capital.

Liquidity (L)

Liquidity refers to the position of the bank to meet short term financial obligation. It is the bank's ability to maintain or manage liquid asset which is adequate to fulfill cash demand for loan and deposit withdrawal or clearing obligations in a timely and cost effective manner. A firm should always keep adequate fund to meet depositors' and creditors' demand. Lack of adequate liquidity is often one of the first signs that a company is in serious financial trouble (Rose, 2002).

Liquid assets refer to money and assets that are readily convertible into money. The degree of liquidity vary from asset to asset. Money (cash) itself is the most liquid of assets; other assets have varying degrees of liquidity. Therefore, the time required to convert the asset into cash and the cost associate with conversion should be considered to minimize the liquidity risk. Keeping cash idle or maintaining high liquidity position has adverse effect on profitability of the bank. Return on highly liquid asset is almost zero. On the other hand, low liquidity position threats the solvency of the bank. Thus, a bank should always maintain optimal liquidity level by anticipating new loan demand or deposit withdrawals which is quite challenging for the bank. In case of lack of fund, the bank has to manage cash by selling the assets or borrowing additional funds in the money market. In such situation, liquidity is often judged as the ability to convert the asset to cash with minimal loss from price depreciation and within minimum time. Similarly, bank should be able to access money market so that new liabilities can be issued at reasonable cost.

The liquidity component (L) reflects the adequacy of institution's current and prospective sources of liquidity and fund management practices (Koch and Macdonald, 2004).

Liquidity risk threats the solvency of FIs. In the case of commercial banks, first type of liquidity risk arises when depositors of commercial banks seek to withdraw their money and the second type does when commitment holders want to exercise the commitments recorded off the B/S. Commercial banks have to borrow the additional funds or sell the assets at fire sale price to

pay off the deposit liabilities. They become insolvent if sale price of the assets are not enough to meet the liability withdrawals. The second type of liquidity risk arises when demand for unexpected loans cannot be met due to the lack of the funds. Commercial banks can raise the funds by running down their cash assets, borrowing additional funds in the money markets and selling off other assets at distressed price. Both liability side liquidity risk (first type risk) and asset side liquidity risk (second type risk) affect the health of commercial banks adversely (Baral, 2005).

In order to maintain optimal liquidity position and to minimize liquidity risk, the liquidity management practices of the bank should considered the trend of demand for loan or deposit withdrawal, compliance of directives, volatility of deposits, availability of cash convertible assets, money market access, interest sensitive funds, effectiveness of fund management strategies, MIS and liquidity policies.

Commercial bank's liquidity exposure can be measured by analyzing the sources and uses of liquidity. In this approach, total net liquidity is worked out by deducting the total uses of liquidity from the total sources of liquidity. Similarly, BIS maturity laddering model can be used to measure the liquidity of a commercial bank. In addition, different liquidity exposure ratios such as borrowed funds to total assets, core deposit to total assets, loans to deposits, and commitments to lend to total assets are used to measure the liquidity position of a commercial bank (Saunders and Cornett, 2004). NRB uses total loan to total deposit ratio, cash and equivalents to total assets ratio, cash and equivalents to total deposit ratio and NRB balance to total deposit ratio to measure the liquidity position of commercial banks in the course of the performance evaluation of commercial banks (NRB, 2005).

Rating Liquidity Component

Rating 1 Indicates strong liquidity position to meet financial obligations.

Rating 2 Indicates satisfactory liquidity level. Although minor weaknesses in fund management practices, but has accessibility to sufficient

sources of fund on acceptable terms to meet present and future liquidity needs.

Rating 3 Indicates liquidity level below than satisfactory level. Improvement in fund management practices is required.

Rating 4 Indicates deficient liquidity level. Significant weaknesses in fund management practices.

Rating 5 Indicates critically deficient liquidity level that can threaten the solvency of the bank.

NRB Directives related to Liquidity

Commercial banks are required to keep certain percent of their deposits as Cash Reserve Ratio (CRR) in NRB's a/c to ensure adequate liquidity. NRB can changed this CRR as per the requirement. Taking consideration the global financial crisis occurred in Oct. 2008, NRB has increased the CRR from 5% to 5.5%. The increment was made with effect from Oct. 17, 2008 (Kartik 1, 2065) to overcome from the possible crisis that might come by the excessive flow of loan due to high liquidity. As per NRB directives, banks have to maintain CRR on a weekly basis.

Sensitivity to Market Risk (S)

Commercial banks are increasingly involved in diversified operations such as lending and borrowing, transaction in foreign exchange, selling off assets pledged for securities and so on. All these are subject to market risk like interest rate risk, foreign exchange rate risk, and financial asset and commodity price risk. FI with more sensitive to market risk is more hazardous than that of less sensitive (Baral, 2005). Sensitivity to market risk (S) reflects the degree to which change in interest rates, foreign exchange rates, commodity prices, and equity prices can adversely affect earnings or economic capital. Most bank's earnings are sensitive to interest rate risk. Interest rate risk refers to the volatility in NII attributable to change in the level of interest rates and shift in the composition and volume of bank assets and liabilities. It arises in the course of banking business and investments, specifically from mismatches in the

interest rate profile of assets and liabilities. Foreign exchange risks occur in larger size banks with involvement in foreign operation. This risk arises from changes in foreign exchange rates that affect the values of assets, liabilities, and off balance sheet activities denominated in currencies different from the bank's domestic (home) currency.

Equity and security price risk examines how changes in market prices, interest rates, and foreign exchange rates affect the market values of any equities, fixed-income securities, foreign currency holdings, and associated derivative and other off-balance sheet contracts. A bank's ALCO, or alternatively its risk management committee, is responsible for measuring and monitoring interest rate risk. ALCOs comprising senior management personnel oversee non-trading market risk including the setting of operational limits and guidelines to refine risk management, consistent with the Asset and Liability Management Policy. Management's ability to identify and control market risks and the adequacy of its capital and earnings in relation to its level of market risk exposure should be considered to strengthen the judgment quality of this component.

Rating Sensitivity to Market Risk Component

Rating 1 Earning performance and capital are unlikely to be adversely affected by market risk.

Rating 2 Market risk is adequately controlled and there is only a very small possibility that earnings and capital will be adversely affected.

Rating 3 Control over market risk need improvement and there is significant possibility that earnings and capital will be adversely affected.

Rating 4 Control over market risk is inadequate and there is strong possibility that earnings and capital will be adversely affected. Earning and capital are not sufficient for risk taken by bank. Risk management practices are deficient.

Rating 5 Control over market risk is very poor. Possibility of threats to solvency of the bank.

NRB unified directive (2062 B.S.) number E.Pra.Ni.No. 05/061/62 requires the banks to classify the assets and liabilities on the basis of repayment maturity and conduct Gap Analysis of the maturity mismatch.

GAP Analysis

This model focuses on GAP as a static measure of risk and NII as the target measure of bank performance. It modifies GAP analysis to focus on the sensitivity of bank earning across different interest rate environments. This model attempts to measure how much IRR a bank evidences at a fixed point in time by comparing the rate sensitivity of assets with the rate sensitivity of liabilities. This model focuses on managing NII in the short run. The objective is typically to measure expected NII and then identify strategies to stabilize or improve it. IRR is measured by calculating GAPs over different time intervals based on aggregate B/S data at a fixed point in time. These GAP values are then examined to determine how much NII will change if rates change.

Steps to be followed to conduct GAP analysis are as follows:

i. Management develops an interest rate forecast.
ii. Management selects a series of sequential time intervals for determining what amount of assets and liabilities are rate sensitive within each time interval.
iii. Assets and liabilities are grouped into these time intervals, or "buckets," according to the time until the first repricing. The principal portion of the asset or liability that management expects to reprice is classified as rate sensitive. A bank's GAP is then equal to rate-sensitive assets (RSAs) minus rate-sensitive liabilities (RSLs) for each time interval.
iv. Management forecasts NII given the interest rate environment and assumed repricing characteristics of the underlying instruments.

The most commonly used formula to measure GAP is

$$GAP = \frac{RSAs - RSLs}{AEA}$$

Where,

rate sensitive assets and liabilities are those identified within each time bucket. There is a periodic GAP and a cumulative GAP for each time bucket. The cumulative GAP compares RSAs with RSLs over all time buckets from the present through the last day in each successive time bucket.

AEA = Average Earning Assets

Strengths of GAP Analysis

- It is easy to understand.
- It may be relatively simple to develop and use.
- It does not require sophisticated technology.

Weaknesses of GAP Analysis.

- It include serious ex post measurement errors.
- It ignores time value of money.
- It essentially ignores the cumulative impact of interest rate changes on a bank's risk position.
- Those liabilities (demand deposits) which pay no interest are often ignored in rate sensitivity comparisions.
- It does not capture risk associated with options embedded in the loans, securities, and deposits that bank deal with.
- It may be ineffective for larger banks with complex structures and sophisticated activities.

As prescribed by NRB, GAP analysis model is used to measure the IRR exposure. This model compares the impact of change in the value of a bank's assets that reprice within an interval and liabilities that reprice within the same time frame on net interest margin (NIM). The sign of a bank's GAP further indicates whether interest income or interest expense will likely change more

when interest rate change. A negative GAP indicates that the bank has more RSLs than RSAs (RSA<RSL). When interest rates rise during the time interval, the bank pays higher rates on all repriceable liabilities and earns higher yields on all repriceable assets. If interest rates rise on both RSAs and RSLs by equal amounts at the same time , both interest income and interest expense rise, but interest expense rises more because more liabilities are repriced. NII thus declines, as does the bank's NIM. When interest rates fall during the interval , more liabilities than assets are repriced at the lower rates such that interest expense falls more than interest income falls. In this case, both NII and NIM increase. Such a bank is said to be liability sensitive.

A positive GAP indicates that a bank has more RSAs than RSLs (RSA > RSL) across sometime interval. When rates rise, interest income increases more than interest expense because more assets are repriced . As a result, NII increases. Rates decrease have the opposite effect because interest income falls more than interest expense which results in decrease in NII. Such a bank is said to be asset sensitive.

If a bank has a zero GAP, RSAs equal RSLs (RSA = RSL) and equal interest rate changes do not alter NII because changes in interest income and interest expense are equal.

The above description is shown in table 2.1.

Table 2.1: GAP, IR Change and NII

GAP	Change in IR	Change in NII
Positive (RSA>RSL)	Increase	Increase
Positive (RSA>RSL)	Decrease	Decrease
Negative (RSA <RSL)	Increase	Decrease
Negative (RSA <RSL)	Decrease	Increase
Zero (RSA=RSL)	Increase	No change
Zero (RSA=RSL)	Decrease	No change

Source : Commercial Banking, 2005.

b. Composite Ratings

After calculation of the component ratings, composite CAMELS rating is carried out. Composite rating is calculated by using weighted average of component ratings. According to the FFIEC press release USA (1996), composite ratings are based on a careful evaluation of an institution's managerial, operational, financial, and compliance performance. The FFIEC press release has describes the composite rating as follows:

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

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

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

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

Composite 5: FIs in this group exhibit extremely unsafe and unsound practices or conditions; exhibit a critically deficient performance; often contain inadequate risk management practices relative to the institution's size, complexity, and risk profile; and are of the greatest supervisory concern. The volume and severity of problems are beyond management's ability or willingness to control or correct. Immediate outside financial or other assistance is needed for the FI to be viable. Ongoing supervisory attention is necessary. Institutions in this group pose a significant risk to the deposit insurance fund and failure is highly probable.

2.2 Research Review

This sub-chapter presents the research studies done in the proposed area of the study conducted by different scholars. It includes national and international research papers, journals, master dissertations, etc. that are relevant for the study.

2.2.1 Review of Research Papers

Among several research works, some of them are presented below. Barker and Holdsworth (1993) have concluded in their paper that CAMEL

rating system can be used as early warning system to detect bank failure even after controlling for a wide range of publicly available information about the condition and performance of banks.

Berger and Davies (1994) analyze the impact of CAMEL rating changes on the parent holing company's stock price. They separate stock price changes into two components: a 'private information' effect (which identifies the public's awareness of new information discovered by examiners), and a 'regulatory discipline' effect (which values the regulators' presumed ability to force a bank to change its behavior). Their empirical results provide only weak evidence of regulatory discipline effect, but they find a strong private information effect.

Cole and Gunther (1998) found that a statistical model using publicly available financial data is a better indicator of bank failure than CAMEL ratings that are more than two quarters old because the information contained in CAMEL decays quickly reflecting the period from 1988 to 1992.

Hirtle and Lopez (1999) found that, over the period from 1989 to 1995, the private supervisory information gather during the last on-site exam remains useful with respect to the current condition of a bank for up to 6 to 12 quarters (or 1.5 to 3 years). The overall conclusion drawn is that private supervisory information, as summarized by CAMELS ratings, is clearly useful in the supervisory monitoring of bank conditions.

Berger, Davies, and Flannery (2000) found in their research paper that assessments by supervisors and rating agencies are complementary but different from those by the stock market. In contrast, supervisory assessments and equity market indicators are not strongly interrelated. Furthermore, supervisory assessments are generally less accurate than either stock or bond market indicators in predicting future change in performance.

Dziobek, Hobbs, and Marston (2000) have carried out a work paper on systematic liquidity policy. Liquidity is the ability to meet its obligations under normal business conditions. Volatility in the depositor (and creditor) base depends on the type of depositor, insurance coverage, and maturity.

Household deposits are typically more stable than the deposits of institutional investors or corporate entities. Deposit concentration (i.e. fewer, larger-size deposits) can also be indicative of volatility. Deposit insurance increases the stability of the deposits it covers. The funding is found to be stable for those liabilities with larger maturity period.

Derviz and Podpiera (2004) investigated the determinants of the movements in the long term S & P and CAMELS bank ratings in the Czech Republic during the period of 1998 to 2001. An ordered response logic model to analyze the monthly long-run S & P rating and a panel data framework to analyze the quarterly CAMELS rating were used. The significant predictors for S & P rating are Credit Spread, Capital Adequacy, and Total loans to Total Assets ratio whereas for CAMELS rating, Capital Adequacy, Total Loans to Total Assets and Total Asset Value at Risk are found to be significant predictors. Besides these, the verified determinants can predict the S & P rating one month in advance.

Baral (2005) has conducted a research study on "Health Check – up of Commercial Banks in the Framework of CAMEL: A Case Study of Joint Venture Banks in Nepal." The paper examines the financial health of joint venture banks in the CAMEL framework taking three joint venture commercial banks as samples and data published in their annual reports of FY 2001 to FY 2004. The finding of the study shows that the financial health of joint venture banks is better than that of the other commercial banks. However, it also shows that the financial health of joint venture banks is not so strong to manage the possible large scale shocks to their balance sheet and their health is fair.

2.2.2 Review of Dissertations

Some of the thesis works relevant for the study are as follows:

Bohara (1992) with an objective to analyse the functions and policies of joint venture banks conducted a comparative study on financial performance of Nepal Arab Bank Ltd. (NABIL) and Nepal Indosuez Bank Ltd. (NIBL). The study has covered the five fiscal years (FY 1986/87 to FY 1990/91). The ratios

used such as liquidity, activity, coverage, leverage, etc. as a whole shows both banks are strong competitors of one another, but NABIL is better than NIBL in terms of profitability. The study further concluded that bank performance cannot be judged solely in terms of profit, bank earn profit by maintaining adequate liquidity and safety position.

Adhikari (1993) with an objective to evaluate the financial performance of Nepal Bank Ltd. carried out a research covering data of FY 2038/39 B.S. to FY 2046/47 B.S. The results obtained from the financial ratios used such as current, loan to deposit, return on capital, return in net worth, return on total assets, earning per share, dividend per share, etc. show lack of management efficiency and weakness in investment and loan recovery policies. Bank has maintained required liquidity position.

Joshi (1993) carried out a study on commercial banks of Nepal with references to financial analysis of Rastriya Banijya Bank (RBB) taking the financial data of FY 2042 B.S. to FY 2046 B.S. The objective of this study was to provide conceptual framework of commercial banks, and to analyse and intercept these financial variables of RBB on qualitative and quantitative performance basis. After analyzing the financial data through current, liquidity, funded debt to total capitalization, and funded debt to equity ratios, the researcher reached to the conclusion that performance of RBB is not satisfactory during the study period. Further, the researcher concluded that bank had not been managed in true professional approach, but had managed in bureaucratic approach to sustain with political environment rather than commercial environment.

Gurung (1995) conducted a research on "A Financial Study of Joint Venture Banks in Nepal" with an objective to analyze the financial strengths and weaknesses of Nepal Grindlays Bank Ltd. (NGBL) and Nepal Indosuez Bank Ltd. (NIBL). The researcher found that the performance of NGBL is better than that of NIBL during the study period of FY 1986/87 to FY 1992/93. The financial ratios such as current, activity, profitability, and statistical tool such as Karl Pearson's correlation coefficient were used to analyze the data.

Shakya (1995) carried out "A Study on Financial Analysis of Joint Venture Banks in Nepal" to measure the financial performance of Nepal Arab Bank Ltd. (NABIL) and Nepal Grindlays Bank Ltd. (NGBL). The financial data of FY 1988/89 to FY 1993/94 has been processed through financial ratios like liquidity, leverage, activity, profitability, and statistical tools like Karl Pearson's correlation coefficient, student t-test, simple average, etc. on the basis of which the researcher concluded that financial performance of NABIL is better than that of NGBL.

Kaini (1996) conducted "A comparative study of Financial Performance of Nepal Arab Bank Ltd. (NABIL) and Nepal Grindlays Bank Ltd. (NGBL)." The study shows NABIL has utilized its assets more efficiently on income generating purpose than NGBL. The profitability position of NABIL is much higher than that of NGBL. The researcher has recommended that NGBL must initiate proper policy to utilize the outsiders funds in extending credit which in turn generate more profit.

Ranabhat (1997) carried out the research study entitled, "An Analysis of Financial Performance of Finance Companies in Context of Nepal" with an objective to examine the financial performance of finance companies. The result obtained from the analytical tools like percentage change, index, and comparative study show that the performance of finance companies with regard to hire purchase and housing loan is not satisfactory during the study period from 1991 to 1996. Further, the researcher point out that the finance companies lack professional practice.

Deoja (2001) conducted "A Comparative Study of the Financial Performance between Nepal State Bank of India Ltd. (NSBIL) and Nepal Bangladesh Bank Ltd. (NBBL)." The objective of the study was to analyze the trend of deposits, loan and advances, liquidity, profitability, capital structure, turnover and capital adequacy position of NSBIL and NBBL. The researcher found that the cash and bank balance to current assets, saving deposit to total deposit, etc. of NSBIL are higher. On the other hand, fixed deposit to total deposits, loan 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 deposits ratio.

Bhandari (2006) conducted the research study entitled "Financial Performance Analysis of Himalayan Bank Ltd. in the framework of CAMEL" with an objective to examine the financial performance of Himalayan Bank Ltd. (HBL). The financial data of 1999 to 2004 extracted from the secondary source was analyzed through descriptive approach. Financial tools like capital adequacy ratio, NPL ratio, loan loss ratio, ROE, net interest margin, NRB balance to total deposit ratio, etc. were used by the researcher. The major findings of the study are that bank has maintained adequate capital, NPL though in decreasing trend is still a matter of concern, satisfactory ROE, however in decreasing trend, decreasing trend of net interest margin shows management slack monitoring over the bank's earning assets, liquid funds to total deposit ratio is above the IAR whereas NRB balance and cash in vault to total deposit ratios are below the IAR.

Chand (2006) has followed descriptive-cum analytical research design to conduct a study on "Financial Performance Analysis of Nabil Bank Ltd. (NABIL) in the framework of CAMEL to achieve the objective of presenting the financial condition of NABIL. The study was based on secondary data. During the study period of FY 2000/01 to FY 2004/05, the bank has maintained adequate capital to meet NRB standard. The NPL to total loan ratios are all below the IAR and the international standard. The researcher found that the investment and loan recovery policy are effective due to which default loan has been forecasted to decrease in future. The management has been able to control the interest spread and cost effective sources of funds. The liquid assets to total deposit ratio is above the IAR. The bank has able to match RSAs to RSLs in the long term maturity bucket and therefore interest rate changes has no effect on them, but highly sensitive to interest change risk in short term maturity bucket.

Sharma (2007) with an objective to analyze the financial performance of Nepal SBI Bank Ltd. (NSBL) conducted research on "Financial Performance

Analysis of Nepal SBI Bank Ltd. in the Framework of CAMEL." The study was based on secondary data. During the study period starting from 2001 to 2006, the researcher found that NSBL has maintained adequate capital prescribed by NRB and satisfactory level of past due loan on total loan except in 2001. He has recommended to increase income and control high level of expense. Earning per employee is quite high though the number of staff is found relatively less. The liquidity position of the bank is found sound.

Gurung (2007) carried out the research study entitled "Financial Performance Analysis of Annapurna Finance Company Ltd. in the framework of CAMEL" with the objective to examine the financial condition of Annapurna Finance Company Ltd. (AFCL). The study was based on secondary data covering the period of five years from FY 2001/02 to FY 2005/06. The researcher has concluded that AFCL has maintained adequate capital reflecting sound and strong financial position. The NPL ratio is found fluctuating and below international standard. The total expenses to total incomes ratios and ROE are also in fluctuating trend. Further, the researcher found that the liquidity position of AFCL is not satisfactory.

While reviewing the relevant past studies, it was found that the studies focused on financial performance analysis of commercial bank have been carried out by many international and national research scholars. Profitability, liquidity and leverage were taken as the main indicators to measure the financial performance of the bank by most of the researchers. But it seems inadequate to disclose the real financial condition of the bank. Therefore, the mechanism which can analyze the overall financial performance of the bank appropriately, effectively, and uniformly can be regarded as CAMELS because it rates the bank in break up form i.e. from every aspect such as capital adequacy, asset quality, management quality, earning, liquidity, and sensitivity to market risk. Similarly, it address risks associated with credit, market, and operation, which if neglected cause to bank failure as stated in Basel II in a micro prudential manner. Taking CAMELS as evaluating factors, very few studies have been conducted. Thus, this study attempts to analyze the financial performance of Nepal Credit and Commerce Bank Ltd. in the CAMELS framework.

CHAPTER III

RESEARCH METHODOLOGY

Research methodology provides the way to systematically and scientifically respond to the issues raised in the problem. It covers various steps to be followed for conducting the research. It presents the methods and procedures applied in the study for collecting, analysis , and presentation of data. It specifies the data, tools, techniques, logics, criteria, etc. that are relevant for the study. It includes the following methodologies.

3.1 Research Design

Research design is a procedural plan for the collection, analysis, and presentation of data in a structured form. The preparation of a research plan for a study aids in establishing direction to the study and in knowing exactly what has to be done and how and when it has to be done at every stage (Sharma, 2064).

The study is based on descriptive-cum analytical research design. Descriptive-cum analytical research design involves the process of describing the characteristics of particular problem using analytical tools to find out the fact. In the research, adequate information are gathered and conclusions are drawn after analysis. Case study approach is followed as the study is based on one single FI i.e. NCCBL.

3.2 Population and Sample

The population of the study consists of all the commercial banks i.e. 25 (registered till mid - June 2008) of Nepal. But being case study, only one commercial bank i.e. Nepal Credit and Commerce Bank Ltd. (NCCBL) is taken as a sample for the study. For the sample purpose , convenience sampling method is used.

3.3 Nature and Sources of data

The study is based mainly on the secondary data. The annual reports published by NCCBL are the major source of data. Similarly, NRB reports, directives, and publications have been consulted. Besides these, other required information are obtained from journals, bulletins, newspapers, websites, etc.

3.4 Data Collection Procedure

Field visit to concern places was made in order to gather various information relevant for the study. The annual reports of NCCBL were collected from its Pokhara branch and additional information was extracted from its official website. Similarly, information related to directives, reports, statistics, etc. published by NRB was obtained from the office library of NRB at Pokhara branch and its website. Relevant journals, work papers, publications, dissertations, etc. by various national and international scholars and researchers were consulted from Western Regional Library, Pokhara and Central Library (T.U.) as well as internet facility thereon.

3.5 Data Processing

The financial data from the annual reports of the bank were compiled in a master sheet. Then, they were entered into the spreadsheet to work out the CAMELS financial ratios using computer program like Microsoft Excel .

3.6 Data Analysis Tools

As already mentioned that descriptive-cum analytical research design has been applied, therefore, the collected financial data were analyzed using various analytical tools such as financial tools, simple statistical tools, etc.

3.6.1 Financial Tools

Financial ratio analysis tool, one of the choice of wide range of stakeholders, has been used for the rational interpretation of the data and to reach at meaningful conclusion. Various types of financial ratios have been categorized under each component of CAMELS and the data has been analyzed on a comparative (standard) basis in order to determine the present and future changes and trends in the bank's financial condition and performance efficiency.

3.6.1.1 Capital Adequacy

Core Capital Adequacy Ratio: Core capital adequacy ratio is used to judge the bank's adequacy of core capital to address different types of risks . This ratio shows the relationship between the total core capital and total risk adjusted assets (total risk weighted assets). It is calculated by using the following model.

$$\text{CCAR} = \frac{\text{Core Capital}}{\text{Total Risk Adjusted Assets}} \times 100$$

Where,

CCAR = Core Capital Adequacy Ratio

Core Capital = Paid up Capital + Share Premium+Non-Redeemable Preference Share + General Reserve + Accumulated Profit + Capital Redemption Reserve + Capital Adjustment Fund + Other Free Reserve - Goodwill if any

Total Risk Adjusted Assets = On - Balance Sheet Risk Adjusted Assets + Off - Balance Sheet Risk Adjusted Assets

Supplementary Capital Adequacy Ratio : This ratio indicates the contribution of supplementary capital in capital adequacy. This ratio shows the relationship between total supplementary capital and total risk

weighted assets . The formula to calculate supplementary capital adequacy ratio is given by

$$\text{SCAR} = \frac{\text{Supplementary Capital}}{\text{Total Risk Adjusted Assets}} \times 100$$

Where,

SCAR = Supplementary Capital Adequacy Ratio

Supplementary Capital = Loan Loss Provision for Pass Loan + Assets Revaluation Reserve + Hybrid Capital Instrument + Unsecured Subordinated Term Debt + Exchange Equalization Reserve + Additional Loan Loss Provision + Investment Adjustment Reserve + Provision for Loss in Investment

Capital Adequacy Ratio: This ratio is used to judge the adequacy of capital in the bank by means of the proportionate relationship between total capital fund and total risk weighted assets. It is expressed as:

$$\text{CAR} = \frac{\text{Total Capital Fund}}{\text{Total Risk Adjusted Assets}} \times 100$$

Where,

CAR = Capital Adequacy Ratio

Total Capital Fund = Core Capital + Supplementary Capital

3.6.1.2 Assets Quality

Past Due Loans to Total Loans Ratio: This ratio measures the proportion of past due loans in total loans . A higher past due loan ratio above IAR indicate better quality of assets and vice - versa . It is determined by the following formula .

$$\text{Past Due Loans to Total Loans Ratio} = \frac{\text{Past Due Loans}}{\text{Total Loan and Advances}} \times 100$$

Non - performing Loan Ratio: This ratio shows the relationship between non - performing loan and total loans . It measures the quality of asset as to what extent the assets are non performing out of the total loan and

advances . A low or decreasing ratio of NPL below IAR indicate better quality of assets and vice-versa. It is calculated by using the following model.

$$\text{NPLR} = \frac{\text{Non-Performing Loan}}{\text{Total Loan and Advance}} \times 100$$

Where,

NPLR = Non - Performing Loan Ratio

Non - Performing Loan = Loan not recovered within the given timeframe either in the form of interest servicing or principal repayment .

Loans classified as Substandard, Doubtful or Loss to Total Loans Ratio : This ratio indicates the proportion of substandard, doubtful and loss loans in the total loans. It is calculated as follows:

$$\text{Loans classified as Substandard, Doubtful or Loss to Total Loans Ratio} = \frac{\text{Total Substandard, Doubtful or Loss Loan}}{\text{Total Loan and Advances}} \times 100$$

Loan Loss Provision to Total Loans Ratio: This ratio implies the percentage of loan loss provision in the total loans. It is determined as follows:

$$\text{LLPR} = \frac{\text{Loan Loss Provision}}{\text{Total Loan and Advances}} \times 100$$

Where,

LLPR = Loan Loss Provision Ratio

3.6.1.3 Management Efficiency

Total Expenses to Total Income Ratio: This ratio is used to judge the proportion of total expenses in total revenues . A low or decreasing ratio of expenses to total revenues indicate efficiency of management in the operation of the bank as it has positive effect on profitability. It is determined by the following model .

$$\text{Total expenses to Total Income Ratio} = \frac{\text{Total Expenses}}{\text{Total Income}} \times 100$$

Where,

Total Expenses = Interest Expenses + Staff Expenses + Other Operating Expenses + Foreign Exchange Loss + Provision for Possible Losses + Non Operating Expenses + Provision for Staff Bonus + Provision for Taxation

Total Incomes = Interest Income + Commission and Discount + Other Operating Income + Foreign Exchange Gain + Non - Operating Income + Write Back of Provision for Possible Loss

Earning Per Employee: This ratio is the relationship between NPAT and total number of employees. Low or decreasing earnings per employee can reflect inefficiencies as a result of overstaffing, with similar repercussions in terms of profitability (IMF, 2000). It is determined by using the following model.

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

Where,

NPAT= Net Profit After Tax

3.6.1.4 Earning Performance

Return on Equity (ROE): This ratio shows the relationship between net profit and capital . It provide information about the rate of return to be received by the shareholders as to the proportion. Higher the return on investment, better will be the health of the bank. It is expressed as follows:

$$\text{ROE} = \frac{\text{NPAT}}{\text{SE}}$$

Where,

ROE = Return on Equity

SE = Shareholders' Equity = Paid up Capital + Reserve and Funds

Return on Asset (ROA): ROA is the expression of numerical relationship between NPAT and total assets. This ratio measures the return from the total asset invested. Therefore , higher profit return on total assets is considered good . It shows optimum utilization of the resources. The formula to calculate ROA is given by:

$$ROA = \frac{NPAT}{Total\ Assets}$$

Where,

ROA = Return on Asset

Net Interest Margin (NIM): This ratio express the relationship between the difference of interest incomes and interest expenses to earning assets . Earning assets are those generating interest or fee income , principally the loans and investment on securities, the company has made . The following model is used to determine net interest margin.

$$NIM = \frac{Net\ Interest\ Income}{Earning\ Assets} \times 100$$

Where ,

NIM = Net Interest Margin = Interest Incomes - Interest Expenses

Earning Assets = Loan and Advances + Investment on Securities + Bills Purchased and Discounted

Earning Per Share (EPS): EPS measures how much return can be earned from each share by the common stockholders . Higher the EPS , better will be the market position of the bank . It is calculated as follows:

$$EPS = \frac{NPAT}{\text{Number of Share of Common Stock}}$$

Where,

EPS = Earning Per Share

3.6.1.5 Liquidity Position

Cash Reserve Ratio (CRR): Banks are required to keep certain percentage of their total deposit as CRR in NRB . This percentage of CRR is determined by the NRB and can be changed as per the requirement in order to control the credit expansion capacity of the bank .

NRB Balance to Total Deposit Ratio: This ratio shows the relationship between NRB balance and total deposit of a bank and is calculated as follows :

$$\text{NRB Balance to Total Deposit Ratio} = \frac{\text{NRB Balance}}{\text{Total Deposits}} \times 100$$

Where,

NRB Balance = Balance with Nepal Rastra Bank

Cash in Vault to Total Deposit Ratio : This ratio measures the proportion of cash in vault to total deposit and is expressed as follows :

$$\text{Cash in Vault to Total Deposit Ratio} = \frac{\text{Cash in Vault}}{\text{Total Depostits}} \times 100$$

Where,

Cash in Vault = Cash in Hand + Foreign Currency in Hand

Liquid Assets to Total Deposit Ratio: Liquid assets to total deposit ratio is the expression of numerical relationship between liquid assets and total deposits. It is used to judge the short - term liquidity position of the bank. Higher the ratio, better will be the liquidity position and vice versa. It is determined by using the following model:

$$\text{Liquid Assets to Total Deposit Ratio} = \frac{\text{Total Liquid Assets}}{\text{Total Deposit}} \times 100$$

Where,

Total Liquid Assets = Cash in Hand + Balance with NRB + Balance with Domestic Banks/FIs + Balance with Foreign Banks + Money at Call or Short Notice + Investment in Government Securities

3.6.1.6 Sensitivity to Market Risk

Interest Rate Sensitivity: Interest rate risk is one of the major risk as the change in interest rate can significantly alter the NII of the bank. Interest rate sensitivity can be measured by GAP Analysis. Gap analysis is essentially a balance sheet concept . If ζ Ri is the average interest rate change affecting assets and liabilities that can be repriced with i^{th} maturity bucket, the effect on the bank's NII in the i^{th} maturity bucket is calculated by (Sauders and Cornett , 2004):

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

$$= GAP_i \times \zeta R_i$$

Where ,

ζNII_i = the expected change in net interest income in the i^{th} maturity bucket

RSA = rate sensitive assets

RSL = rate sensitive liabilities

GAP_i = rupee size of gap between book value of rate sensitive assets and rate sensitive liabilities in the i^{th} maturity bucket

Similarly, Cumulative GAP (CGAP) of interest is the repricing gap over all time buckets from the present through the last day in each successive time bucket.

$$\zeta NII_i = CGAP_i \times \zeta R_i$$

Where,

$$CGAPi = \left(\sum_{i=1\ Days}^{i\ =\ 90\ Days} RSA_i - \sum_{i=\ 1Days}^{i\ =\ 90\ Days} RSL_i\right) + \left(\sum_{i=\ 91Days}^{i\ =\ 180\ Days} RSA_i - \sum_{i=\ 91Days}^{i\ =\ 180\ Days} RSL_i\right)$$
$$+ \left(\sum_{i=181\ Days}^{i\ =\ 270\ Days} RSA_i - \sum_{i=\ 181Days}^{i\ =\ 270\ Days} RSL_i\right) = \left(\sum_{i=\ 271Days}^{i\ =\ 365\ Days} RSA_i - \sum_{i=\ 271Days}^{i\ =\ 365\ Days} RSL_i\right)$$

Interest rate sensitivity is expressed as the proportion of Cumulative GAP in total risk sensitive assets (A):

$$\text{Interest Rate Sensitivity Ratio} = \frac{CGAP}{A} \times 100$$

3.6.2 Statistical Tools

The collected statistical data i.e. numerical facts and figures as well as their relationship can be analyzed by using the following statistical tools .

Average: A single value which is representative of the whole data is called an average . A simple arithmetic average is usually called the mean . A simple arithmetic average is a value obtained by dividing the sum of the values by their numbers (Kothari , 2004) . Average can be calculated as follows :

$$\overline{x} = \frac{\sum x}{n}$$

Where,

$\overline{X}$ = simple arithmetic mean

X = individual value

$\sum$ = symbol for summation

n = number of observations

During the analysis of data, mean is calculated by using the statistical formula 'AVERAGE' on excels data sheet on computer .

Standard Deviation: Standard deviation is considered as the best method for measuring dispersion . Standard deviation is the positive

square root of the variance. It is an absolute measure of variability . Higher value of standard deviation denotes higher variability or less consistent and vice versa . It is determined in the following way :

$$\exists = \sqrt{\frac{\int x \, Z \bar{x} \AA}{n}}$$

Where ,

$\exists$ (sigma) = standard deviation

x = individual value

$\overline{x}$ = simple arithmetic mean

n = number of observations

During the analysis of data, standard deviation is calculated by using the statistical formula 'STDEV' on excels data sheet on computer .

Coefficient of Variation: Coefficient of variation is the ratio of the standard deviation to the mean. It is a relative measure of variability. It is more useful while comparing two sets of data. As the coefficient of variation increases , so does the variability and vice versa . Coefficient of variation is obtained as follow:

$$CV = \frac{\exists}{\overline{X}}$$

Where ,

CV = coefficient of variation

$\exists$ = standard deviation

$\overline{X}$ = simple arithmetic mean

Least Square Trend Analysis : It is a statistical method that fits a trend line to a set of data obtained from past observation and project the line for the future trend. This method results in a straight line that minimizes the sum of squares of the vertical difference or distance from the line to each of the actual observations. The general equation used for trend is given below:

$$Y = a + bX$$

Where,

Y = dependent variable

a = Y - intercept

b = slope of the trend line

X = independent variable (coded time in year)

Using least square principles , the value of 'a' and 'b' can be computed as follows:

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

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

Where ,

n = number of observations

$\overline{X}$ = mean of X values , i.e. $\frac{\sum X}{n}$

$\overline{Y}$ = mean of Y values , i. e. $\frac{\sum Y}{n}$

3.7 Limitations of the Methodology

The analysis depends on annual based data, but effectiveness of CAMELS assessment requires quarterly financial reports. The outcomes obtained from the study of financial performance analysis of NCCBL may not represent the overall condition of all the commercial banks or the whole banking industry. Despite the management component is a qualitative factor, the proxy financial tools are used to measure the management quality. Regarding reliability of the data, the bank's audited annual reports are treated as authentic.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Keeping in view the objective and nature of the problem, this chapter describes how the collected data has been presented and analyzed using various financial and statistical tools so as to reach at the meaningful findings.

4.1 Data Presentation and Analysis

In order to achieve the objective of finding out the financial performance of NCCBL in the CAMELS framework, the data (extracted from annual reports as well as worked out) presented in the table and figure are analyzed under each component of CAMELS. Then, the findings are drawn out on the basis of analysis.

4.1.1 Capital Adequacy

Capital adequacy reflects the capability of the bank to maintain required level of capital so as to address the risks as well as to meet legal requirement which in turn facilitate smooth operation of the bank and build confidence of its stakeholders. Capital adequacy indicates the effect of capital on functioning of the bank. Capital plays the balancing role between risk and return of the bank. In case of inadequate capital, the tendency of risk increases causing interruption in the operation and taking towards bank failure. On the contrary, the adequacy of capital relative to risk profile strengthen the capability of the bank to absorb risk of losses and prevent from bank failure.

4.1.1.1 Core Capital Adequacy Ratio

Core capital is also known as primary capital or Tier I capital. Core capital is the sum of paid up capital, share premium, non-redeemable preference share, general reserve, accumulated profit (loss), capital redemption reserve, capital adjustment fund and other free reserve in which goodwill if any

is deducted. Core capital adequacy ratio (CCAR) measures the proportion of core capital in the total risk weighted assets in order to determine its adequacy. The adequacy of core capital indicates that the shareholder's fund is sufficient to manage risks and to maintain financial soundness of the bank. CCAR higher than minimum standard specified by NRB indicates better capital maintenance by the bank and vice versa.

The table given below provides information regarding CCAR of NCCBL during the study period and minimum core capital standard set by NRB.

Table 4.1: Core Capital Adequacy Ratio

Rs. in Million

Fiscal Year (Mid-July)	Core Capital(Rs.)	RWA (Rs.)	CCAR (%)	Min. NRB std. (%)	Excess/Short (%)
2003/04	185.86	5597.32	3.32	5.50	(2.18)
2004/05	255.84	7343.94	3.48	5.50	(2.02)
2005/06	(373.61)	7392.53	(5.05)	5.50	(10.55)
2006/07	(574.91)	6296.55	(9.13)	5.50	(14.63)
2007/08	634.89	6608.97	9.61	6.00	3.61

Source: NCCBL, Annual Reports.

Table 4.1 shows the observed values of core capital adequacy ratio i.e. core capital to total risk weighted assets. During the study period, the ratios are negative in FY 2005/06 and FY 2006/07 due to negative core capital as a result of high accumulated losses whereas in the remaining fiscal years, the ratios are positive with maximum 9.61% in the concluding year (FY 2007/08). As compared to NRB standard, the ratios are short in FY 2003/04 to FY 2006/07 i.e. bank fails to follow the NRB directive regarding fulfilment of core capital requirement. But in the concluding year (FY 2007/08), the bank is able to meet the minimum NRB standard with an excess of 3.61%. It is because of the

reduction in the accumulated losses in the reserve as a result of profit earned by the bank and increased in the paid up capital through issue of right shares.

Fig. 4.1: Comparing Core Capital Adequacy Ratio with NRB Standard

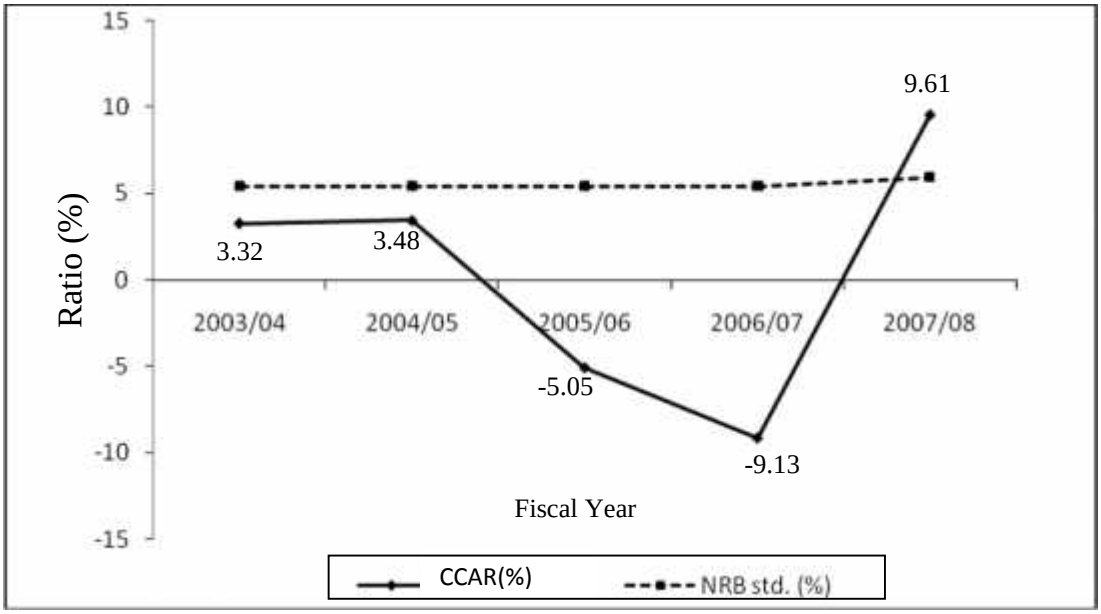


Fig. 4.1 shows the comparison of core capital adequacy ratio with NRB standard. During the review period, the core capital adequacy ratio curve slightly rised up in FY 2004/05 and then declined down with negative ratio in FY 2005/06 and FY 2006/07. Till FY 2006/07, the CCAR curve is below the NRB standard curve. In the concluding year (FY 2007/08), the CCAR curve rised up at the maximum point during the study period and is above the NRB standard curve.

4.1.1.2 Supplementary Capital Adequacy Ratio

Supplementary capital is also known as Tier II capital. Supplementary capital includes loan loss provision for pass loan, assets revaluation reserve, hybrid capital instrument, unsecured subordinated term debt, exchange equalization reserve, additional loan loss provision, investment adjustment reserve, and provision for loss in investment. Supplementary capital measures the proportion of supplementary capital in total RWA. The adequacy of supplementary capital shows greater support of supplementary capital in capital adequacy ratio. Higher SCAR not exceeding NRB standard indicates adequacy

of supplementary capital to support maintaining minimum risk based total capital standard and vice versa.

Table 4.2 shows SCAR of the bank during the study period.

Table 4.2: Supplementary Capital Adequacy Ratio

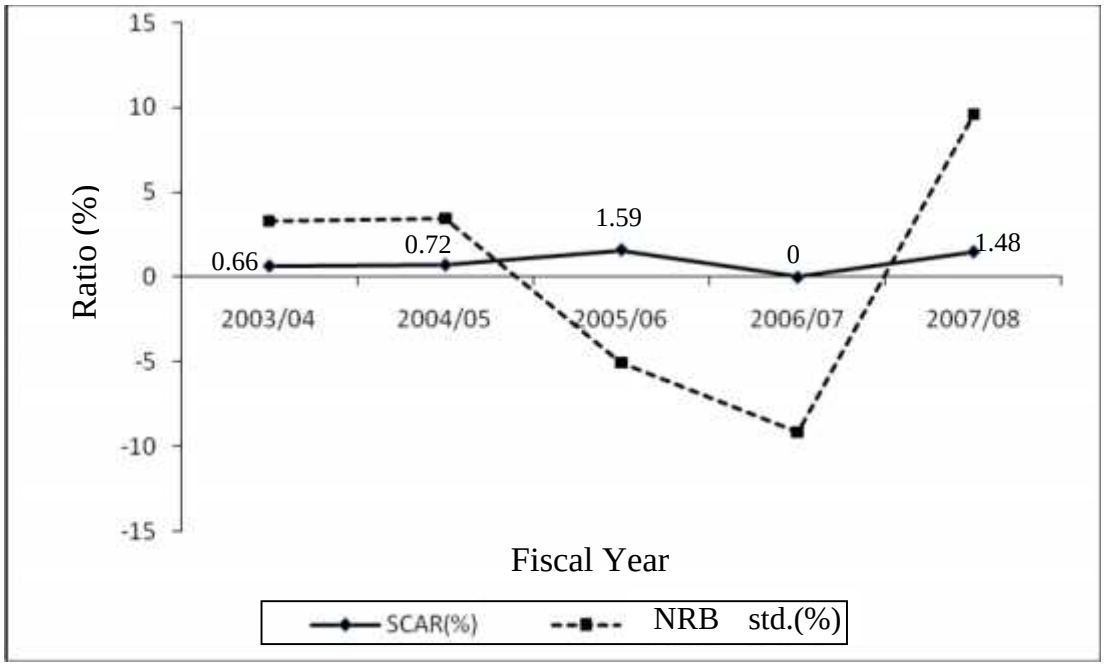
Rs. in Million

Fiscal year (Mid-July)	Supplementary Capital(Rs.)	RWA (Rs.)	SCAR (%)	Max. NRB std. (%)	Excess/Short (%)
2003/04	37.37	5597.32	0.66	3.32	(2.66)
2004/05	52.95	7343.94	0.72	3.48	(2.76)
2005/06	117.68	7392.53	1.59	(5.05)	6.64
2006/07	0	6296.55	0	(9.13)	9.13
2007/08	97.99	6608.97	1.48	9.61	(8.13)

Source: NCCBL, Annual Reports.

While reviewing the data given in table 4.2, it is found that the supplementary capital adequacy ratio is 0.66%, 0.72%, 1.59%, 0% and 1.48% in FY 2003/04 to FY 2007/08 respectively. During the study period, the ratio increases till the third fiscal year and then declined down to zero and again increases in the concluding fiscal year. According to the NRB directive, the supplementary capital should not be in excess to the amount of core capital. Therefore, the obtained value of core capital adequacy ratio forms the maximum NRB std. to be maintained. Thus, in comparison to NRB standard, the ratio is within the limit of NRB standard in FY 2003/04, FY 2004/05 and FY 2007/08. In FY 2005/06 and FY 2006/08, the ratio is in excess to the NRB standard by 6.64% and 9.13% respectively which implies that the bank is unable to maintain the level (within the limit) of supplementary capital in the total capital. Here, the excess arose because of the negative core capital adequacy ratio of the bank.

Fig. 4.2: Comparing Supplementary Capital Adequacy Ratio with NRB Standard



In fig. 4.2, the supplementary capital adequacy ratio curve shows the fluctuating trend. As compared to NRB standard, the SCAR curve is below the NRB standard curve in FY 2003/04, FY 2004/05 and FY 2007/08 and above the NRB standard curve in FY 2005/06 and FY 2006/07.

4.1.1.3 Capital Adequacy Ratio

Core capital and supplementary capital form the capital of the bank. Capital adequacy ratio measures the proportion of total capital in the total RWA. It shows the capability of the bank to maintain required level of capital that can address risk of losses and facilitate smooth financial operation of the bank. CAR above NRB standard indicates strong capital base to manage risk of losses and operational smoothness. On the contrary, lower CAR indicates weak capital base to manage risk of losses and operational smoothness.

Table 4.3: Capital Adequacy Ratio

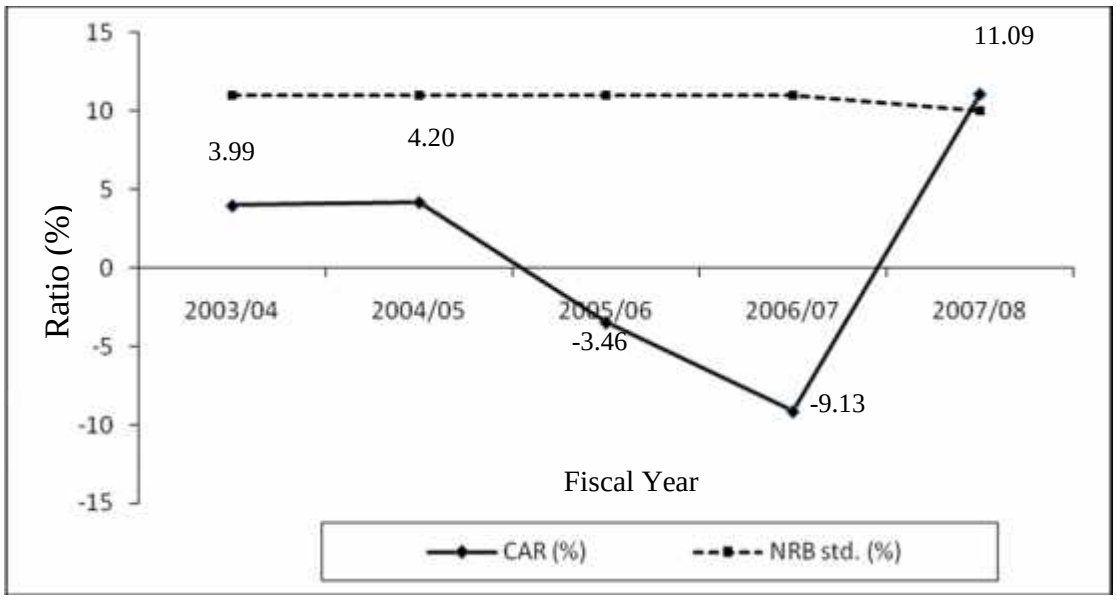
Rs. in Million

Fiscal Year (Mid-July)	Total Capital (Rs.)	RWA (Rs.)	CAR (%)	Min. NRB std. (%)	Excess/Short (%)
2003/04	223.23	5597.32	3.99	11	(7.01)
2004/05	308.80	7343.94	4.20	11	(6.80)
2005/06	(255.93)	7392.53	(3.46)	11	(14.46)
2006/07	(574.91)	6296.55	(9.13)	11	(20.13)
2007/08	732.89	6608.97	11.09	10	1.09

Source: NCCBL, Annual Reports.

Table 4.3 exhibits the ratio of capital adequacy. The ratio is maximum in the concluding year (FY 2007/08) with 11.09% whereas in FY 2005/06 and 2006/07, it is negative due to the negative capital as a result of high accumulated losses. As compared to NRB standard, the bank is unable to meet the capital adequacy requirement as prescribed by NRB in all the fiscal years except in the concluding year (FY 2007/08). The reduction of accumulated losses in the reserve due to profit earned by the bank and issue of right shares have resulted in to increase capital adequacy ratio to 11.09% i.e. above NRB standard.

Fig.4.3: Comparing Capital Adequacy Ratio with NRB Standard



In fig 4.3, the capital adequacy ratio curve exhibits the fluctuating trend . The ratio curve is below the NRB standard curve in FY 2003/04 to FY 2006/07 which implies weak capital base of the bank whereas in the concluding year (FY 2007/08), it is above the NRB standard curve which indicates symptom of improvement on achieving strong capital base.

4.1.2 Asset Quality

Asset quality determines the long term sustainability of the bank . Loan usually occupy greater part among the asset items. Asset quality deteriorates due to the various risks associated with loan default. These risks need to be managed on the basis of size, exposure, and sensitive to bank's performance.

4.1.2.1 Classification of Loan

Credit risk results from the exposures in the normal course of lending with potential earnings volatility caused by borrowers' inability or unwillingness to fulfill their contractual debt obligations. This inability to pay back the interest or principal within the stipulated time frame caused turnover of performing loan into NPL.

Past due loan to total loan ratio measures the proportion of past due loan in total loan and advances. Higher past due loan ratio above IAR shows better asset quality and vice - versa. The ratio of NPL to total loan and advances presents the percentage of NPL in total loan and advances. Lower NPL ratio implies better quality of assets or performance of loans and vice - versa. NPL includes sub-standard, doubtful and loss (bad) loans. The ratio of loans classified as sub-standard, doubtful and loss to total loan indicates the proportion of sub - standard, doubtful and loss to total loans indicates the proportion of sub-standard, doubtful and loss loans in the total loan.

Table 4.4 presents the classification of loan portfolio into pass, sub-standard, doubtful and bad loans with their percentage in the total loan and comparison with IAR during the study period. The non - performing loan should be less than 5 percent (IMF, 2000). In general, 5 percent to 10 percent of NPL is considered as satisfactory level of quality of bank assets.

Table 4.4: Comparing Ratio of Classified Loan of NCCBL with Industrial Average

FY	2003/04		2004/05		2005/06		2006/07		2007/08	
Loan	**Amount (Rs.)**	**Ratio (%)**	**Amount (Rs.)**	**Ratio (%)**	**Amount (Rs.)**	**Ratio (%)**	**Amount (Rs.)**	**Ratio (%)**	**Amount (Rs.)**	**Ratio (%)**
Pass	4,117,253,348	87.28	5,399,192,243	91.34	4,107,084,889	76.31	3,152,970,173	66.35	4,020,470,432	82.27
IAR*		77.23		81.21		86.84		87.98		90.30
NPL	600,047,282	12.72	511,999,527	8.66	1,274,923,574	23.69	1,599,414,346	33.65	866,616,105	17.73
IAR*		22.77		18.79		13.16		12.02		9.70
Substandard	139,464,155	2.69	47,205,225	0.80	89,847,032	1.67	855,815,558	1.08	24,769,303	0.51
Doubtful	278,671,323	5.91	65,289,589	1.10	147,100,548	2.73	388,064,330	8.16	110,061,717	2.25
Bad	181,911,804	3.86	399,504,713	6.76	1,037,975,994	19.29	1,125,768,458	23.69	731,785,085	14.97
Total	**4,717,300,630**	**100**	**5,911,191,770**	**100**	**5,382,008,463**	**100**	**4,752,384,519**	**100**	**4,887,086,537**	**100**

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

In table 4.4, the trend of past due loan to total loan ratio is fluctuating over the review period. The ratios are 87.28%, 91.34%, 76.31%, 66.35% and 82.27% in FY 2003/04 to FY 2007/08 respectively. Out of the total loans, the portion of past due loan (performing loans or assets) is maximum in FY 2004/5 with 91.34% and minimum in FY 2006/07 with 66.35%. In comparison to aggregate performing loans relative to total loans of the commercial banks, the ratio is above the IAR in FY 2003/04 and FY 2004/05 whereas in the latter fiscal years of the review period, it is below than the IAR which shows the decreasing quality of the bank assets. The ratio of NPL varies from the lowest 8.66% in FY 2004/05 to the highest 33.65% in FY 2006/07. As the NPL ratios are quite higher than the 5% international benchmark, it shows degrading assets quality. In FY 2003/04 and FY 2004/05, the quality of the bank assets can be considered satisfactory as the percentage of the NPL is below the IAR. In the latter fiscal years, the NPL ratio is above the IAR which indicates deteriorating assets (credit) quality of the bank due to weakness in timely collection of outstanding loans and increasing credit risks resulted from narrow down of loan investment sectors. On the contrary, the bank has been able to decrease the NPL ratio by 15.92% in the concluding year (FY 2007/08). This is possible due to the recovery of the NPL of Rs. 732.80 million approximately. It indicates improving recovery efforts of the bank. Regarding industrial average for NPL, it is in the decreasing trend which is as a result of decrease in the NPL of two public sector banks|ZNepal Bank Ltd. and Rastriya Banijya Bank. In the first fiscal year of the review period, the weight of doubtful loan is high in the NPL whereas in the remaining fiscal years, bad loan, doubtful loan and sub-standard loan exist in higher to lower proportions respectively in the NPL. However, it was also observed from the annual reports that the bank has written off Rs. 72.14 million , Rs. 44.30 million and Rs. 233.35 million of bad loans in FY 2005/06, FY 2006/07 and FY 2007/08 respectively.

4.1.2.2 Loan Loss Provision Ratio

In principle, loan and advances extended by banks are repayable on demand. On the other hand, borrowers are subjects to repay the loan on time as mentioned in the agreement. But in practice, all loans are not recovered within the expiry of repayment period granted in normal course . Therefore, on the basis of outstanding loan and advances , bank maintain provision to loan default in future. The LLP ratio shows the adequacy of provision maintain by bank and effectiveness of loan recovery policies. Higher ratio of LLP implies higher portion of NPL in total loan and advances and vice versa. Similarly, increasing trend of LLP ratio indicates more delays in collection of loan and weakness in loan recovery policies. On the contrary, decreasing trend of LLP ratio shows efficiency of loan recovery policies.

Table 4.5: Loan Loss Provision Ratio (%)

Particulars	NRB std.	2003/04	2004/05	2005/06	2006/07	2007/08
LLP to Pass Loan	1	2.33	2.74	1.23	0.99	1.15
LLP to Sub-standard Loan	25	22.77	23.96	25	25	25
LLP to Doubtful Loan	50	49.14	48.02	49	50	50
LLP to Bad Loan	100	99.46	98.45	99.29	99.29	100
Total LLP to Total Loan		**9.45**	**9.88**	**21.84**	**28.72**	**17.12**

Source: NCCBL, Annual Reports.

Table 4.5 shows the loan loss provision ratio of NCCBL. The provision maintained by the bank for pass loans is above 1% NRB standard in all the fiscal years except in FY 2006/07 which is slightly less than that of the norm. Regarding sub-standard loan and doubtful loans, the provision is less than 25% and 50% NRB standard respectively in the former fiscal years whereas the bank is able to meet the norms in the latter fiscal years. The bad loans have provision slightly less than the stipulated norm of 100% except in the concluding fiscal year. The loan loss provision ratio from

FY 2003/04 to FY 2006/07 is in increasing trend which indicates the increasing probability on NPL and risky assets in the volume of total loan and advances . However in the concluding fiscal year, the LLP ratio falls to 17.12% which indicates improvement in the loan recovery . The ratio of LLP ranges from 9.45% to 17.12% with an average of 17.40% . The C.V. between them is 47.01% which implies that the ratios are variable and not consistent with the increasing trend.

Fig. 4.4: Trend of Loan Loss Provision Ratio

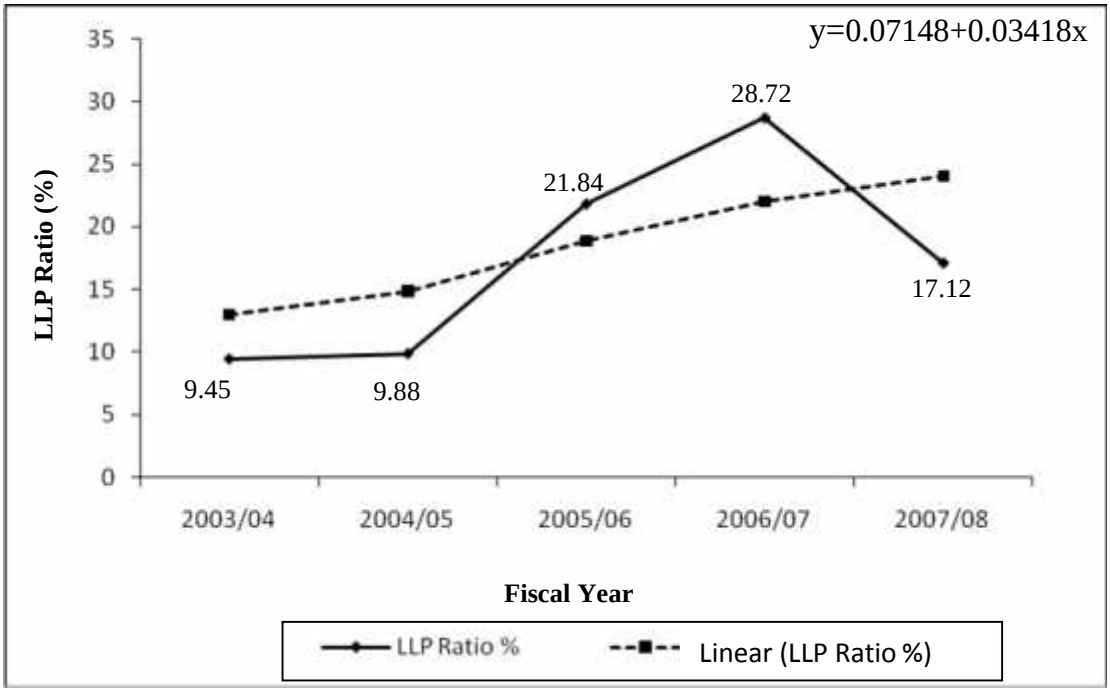


Fig. 4.4 shows the observed value of loan loss provision ratio along with trend (linear) line obtained by least square method . The slope of the trend line is positive which indicates the trend of loan loss provision ratio is increasing over the study period.

4.1.3 Management Efficiency

Management aspect of the bank is most important among the CAMELS components. Management quality is the overall capability of the management reflecting good corporate governance, comprehensive process to identify, measure and minimize risk and transformation of human

resource into effective and productive service deliveryZall these ensuring safety and soundness of the bank.

It is difficult to measure the management quality. However, if bank is poor in capital adequacy, income-expense portfolio, and earnings, then it indicates management's weakness and inability to control the deteriorating financial position of bank. On the contrary, strong performance indicates good management quality. Among various measures, expenses ratio and earning per employee are used as proxy of the management quality.

4.1.3.1 Total Expense to Total Income Ratio

Expenses used for productive purpose, creation and generation of economic values, enhancement of managerial and performance skills, etc. should be encouraged. Otherwise, unnecessary expenses must be strictly controlled. On the other hand, management efficiency can be evaluated on the basis of quantity and quality of revenues. Expenses of bank comprises of interest expense, staff expense, other operating expense, foreign exchange loss, provision for possible losses, non-operating expense, provision for staff bonus and provision for tax whereas income include interest income, commission and discount, other operating income, foreign exchange gain, non- operating income and write back of provision for possible loss. The ratio of total expense to total income gives the percentage of total expense in total income.

Table 4.6: Total Expense to Total Income Ratio

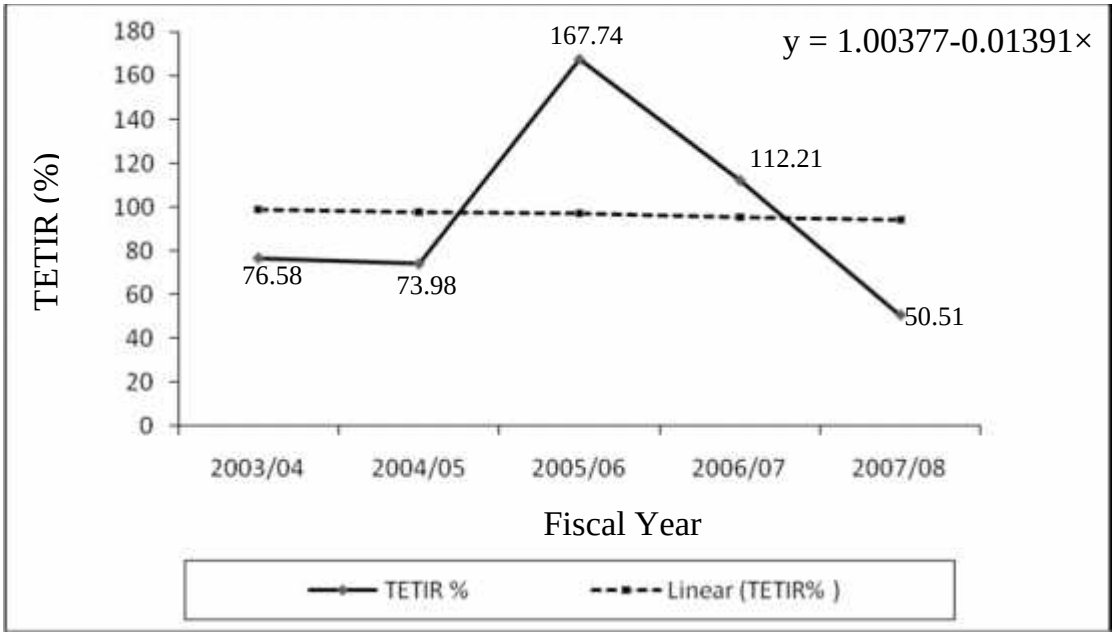
Rs. in Million

Fiscal Year (Mid - July)	2003/04	2004/05	2005/06	2006/07	2007/08
Total Expenses (Rs.)	418.58	456.03	1232.19	675.70	747.35
Total Incomes (Rs.)	546.58	616.46	734.59	602.19	1468.12
TETIR (%)	76.58	73.98	167.74	112.21	50.51

Source: NCCBL, Annual Reports.

Table 4.6 shows the ratio of total expense to total income of NCCBL. During the study period , the ratio is in fluctuating trend. The ratio is maximum with 167.74% in FY 2005/06 due to highly increase in the loan loss provision and unproductive expenses and minimum with 50.51% in the concluding FY 2007/08 due to write back of loan loss provision as a result of recovery of certain outstanding loans. The mean ratio for the study period is 96.20% and C.V. is 47.47 % which indicates the variable characteristic of the ratios.

Fig. 4.5: Trend of Total Expense to Total Income Ratio



In fig.4.5, the observed value of total expense to total income ratio and it's trend line are shown . The slope of the trend line determined by the least square method is negative which reveals the decreasing trend of ratio. However, the bank is able to decrease the ratio at satisfactory point in the concluding fiscal year only .

4.1.3.2 Earning Per Employee

Contribution of an employee on earning is measured by earning per employee. It is obtained by dividing net profit after tax by number of employees. Low or decreasing earning per employee indicates inefficiencies

as a result of overstaffing which negatively affect the profitability of the bank.

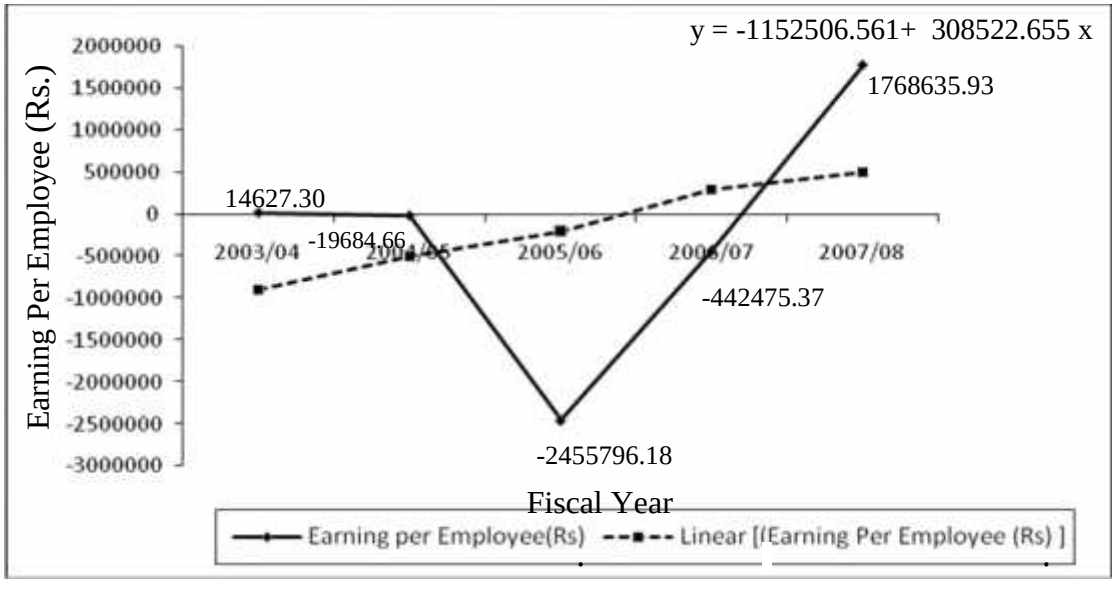
Table 4.7: Earning per Employee

Fiscal Year (Mid - July)	2003/04	2004/05	2005/06	2006/07	2007/08
NPAT (Rs.)	3,408,162	(5,157,382)	(569,744,713)	(115,928,547)	498,755,331
No. of Employees	233	262	232	262	282
Earning per Employee (Rs.)	14,627.30	(19,684.66)	(2,455,796.18)	(442,475.37)	1,768,635.93

Source: NCCBL, Annual Reports.

While reviewing the data given in table 4.7, it is found that earning per employee of the bank in the first fiscal year of the review period is Rs. 14,627.30 and thereafter, it is continuously negative till the fourth fiscal year due to the losses. The number of employees decreases in the mid-year of the review period, otherwise, it is in increasing trend. Earning per employee is maximum in the concluding year (FY 2007/08) with Rs. 1,768,635.93. The mean earning per employee of the review period is negative i.e. -Rs. 226,938.60. Thus, the overall contribution of the employees on earning is poor due to lack of efficient performance of the employees.

Fig. 4.6: Trend of Earning Per Employee



In fig. 4.6, the observed value of earning per employee and it's trend line are shown. The slope of the trend line determined by the least square method is positive which indicates the increasing trend of earning per employee, though bank has suffered from negative earnings in the three fiscal years of the review period .

4.1.4 Earning Performance

Good earning i.e. profitability ensure smooth operation and high competitiveness of the bank by providing sufficient resources and financial support to maintain adequate internal capital. Low earning i.e. unable to earn required level of profit indicates low performance and such bank has weak operations and inadequate capital provisions. Therefore, it can be concluded that earning capability is the key to strong performance, sustainable growth, and sound financial health of the bank and the bank is required to focus its efforts on achieving high earning.

4.1.4.1 Return on Equity (ROE)

Shareholder expects higher return from their investment. But the return depend on how efficiently and safely that the investment has been invested. ROE measures the rate of return on equity capital of shareholders. Higher ratio implies higher satisfaction to shareholders and better performance of the bank and vice versa. The return on equity should be 15 percent and higher as prescribed by the World Bank (McNally, 1996).

Table 4.8 :**Return on Equity**

Rs. in Million

Fiscal Year (Mid-July)	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**
NPAT (Rs.)	3.41	(5.16)	(569.74)	(115.93)	498.76
SE (Rs.)	187.23	255.85	(309.04)	(510.34)	685.08
ROE (%)	1.82	(2.02)	(184.36)	(22.72)	72.80

Source: NCCBL, Annual Reports.

Table 4.8 shows the return on equity ratio over the study period. In FY 2003/04, the return is 1.82% and then, the bank has negative return i.e. -2.02% in

FY 2004/05. Again, in FY 2005/06 and FY 2006/07, the bank incurred losses of Rs. 569.74 million and Rs. 115.93 million respectively. In addition to this, shareholders' equity are negative by Rs. 309.04 million and Rs. 510. 34 million due to high negative reserves which result in critical performance of the bank as indicated by the negative returns of 184.36% and 22.72%. However, in the concluding year (FY 2007/08), bank has earned a maximum return of 72.80%. In this fiscal year, the bank has reduced loan loss provision, earned maximum profit and raised up equity capital through issue of right shares. The average return of the bank is negative i.e.-26.90% which is below than the 15% benchmark. The highly negative C.V. (i.e. 353.62%) reflects higher inconsistency and more risk with the increasing trend during the review period.

Fig. 4.7: Trend of Return on Equity

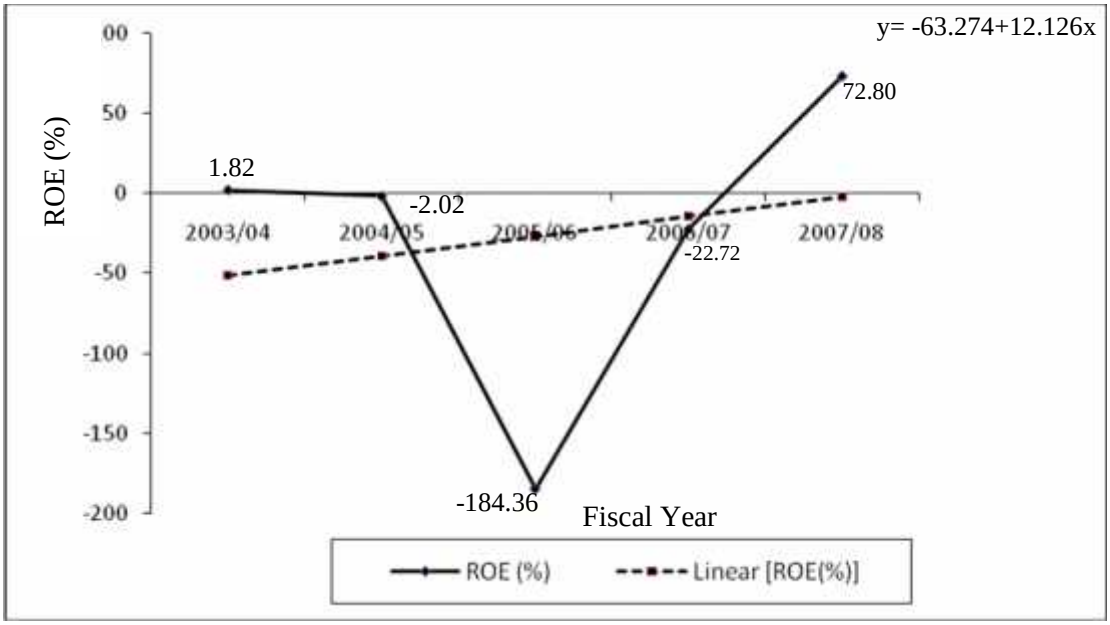


Fig. 4.7 exhibits the trend line of return on equity. Despite the negative average return, the slope of the trend line determined by the least square method is positive and shows the increasing trend of the ratio. But the increasing trend lies within the negative range over the study period.

4.1.4.2 Return on Assets (ROA)

This ratio seeks to measure the effectiveness with which the bank has employed its total resources. It is also applicable in measuring the performance

of individual divisions of a bank (Western and Copeland, 1992). ROA measures the rate of return from the assets. It evaluates how efficiently the available resources i.e. assets are utilized to generate profit. When the management shows capability to circulate its assets up to maximum limit and minimize risk during circulation of assets, then maximum return can be obtained. Higher ROA indicates efficient utilization of assets and vice versa. The return on assets should be 1.5 percent and higher as prescribed by the World Bank (McNally, 1996).

Table 4.9: Return on Assets

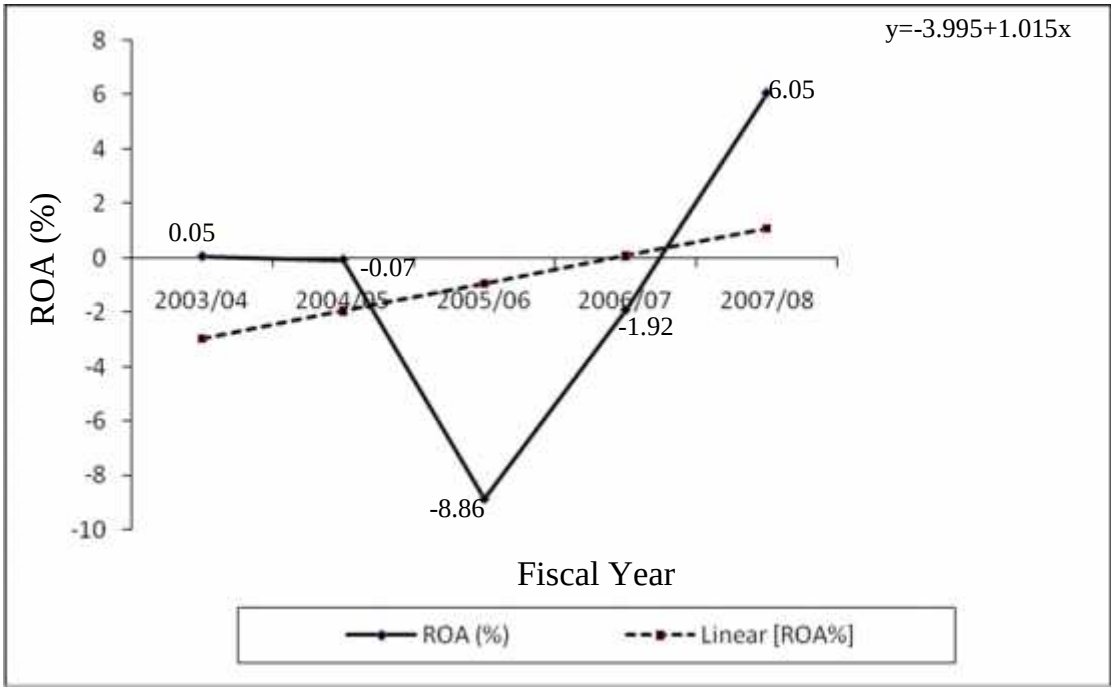
Rs. in Million

Fiscal Year (Mid-July)	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**
NPAT (Rs.)	3.41	(5.16)	(569.74)	(115.93)	498.76
Total Assets (Rs.)	6,598.51	7,485.29	6,427.70	6,036.68	8,241.33
ROA (%)	0.05	(0.07)	(8.86)	(1.92)	6.05

Source: NCCBL, Annual Reports.

During the review period, the return on assets ratio of the bank for the first fiscal year is 0.05% and then, it deteriorates into negative ratio (-0.07%, -8.86% and -1.92% in FY 2004/05 to FY 2006/07) due to the continuous loss incurred by the bank. In the concluding year (FY 2007/08), the bank is success to achieve the highest return of 6.05 % over the review period. The mean ratio of the bank is negative i.e. -0.95% which is below than the 1.5% benchmark. It indicates that the overall capability to mobilize assets is weak. As the C.V. is highly negative i.e. -562.65%, it can be concluded that the ratios are much more volatile and riskier with the increasing trend over the study period.

Fig. 4.8: Trend of Return on Assets



In the fig. 4.8, the observed value of return on assets ratio and its trend line are shown. Despite the negative mean ratio, the slope of the trend line determined by the least square method is positive and shows the increasing trend of the ratio.

4.1.4.3 Net Interest Margin (NIM)

NIM measures the earning capability of the bank in terms of interest rate spread. This ratio shows the relationship between the difference of interest income and interest expense to earning assets. It evaluates the effectiveness of earning assets mobilization so as to earn more interest and on the other hand, management of liabilities portfolio bearing less interest costs and risk. Higher and consistent NIM implies strong earning capability of the bank and vice versa. The NIM ratio should be 3 to 4 percent and higher as prescribed by the World Bank (McNally, 1996).

Table 4.10: Net Interest Margin

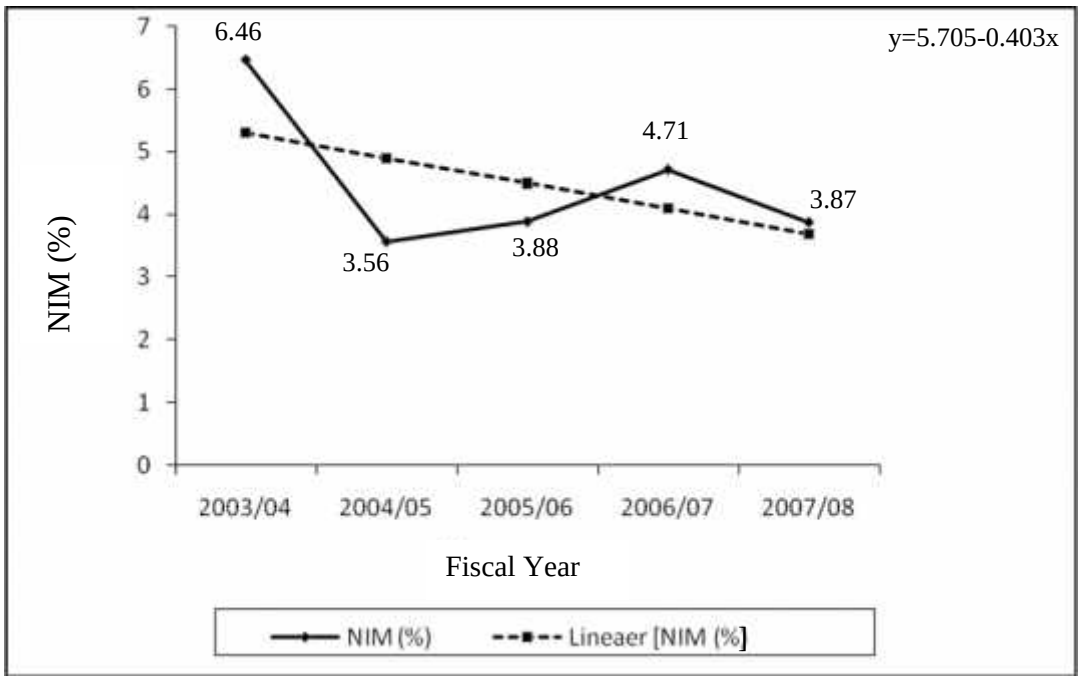
Rs. in Million

Fiscal Year (Mid-July)	2003/04	2004/05	2005/06	2006/07	2007/08
NII (Rs.)	297.89	172.55	226.05	246.79	191.40
Earning Assets (Rs.)	4,608.62	4,845.62	5,820.07	5,234.91	4,944.26
NIM(%)	6.46	3.56	3.88	4.71	3.87

Source: NCCBL, Annual Reports.

While reviewing the ratio of net interest margin given in table 4.10, the ratios are found in fluctuating trend with maximum 6.46% in FY 2003/04 and minimum 3.56 % in FY 2004/05. During the study period, the mean ratio is 4.50% and C.V. is 26.20%. On the basis of C.V., it can be concluded that the ratios are variable. In FY 2004/05, FY 2005/06 and FY 2007/08, the NIM ratio lies in between the benchmark of 3% to 4% whereas the bank is able to cross above the prescribed benchmark in FY 2003/04 and FY 2006/07.

Fig. 4.9: Trend of Net Interest Margin



From fig. 4.9, it can be observed that the ratio of net interest margin is in fluctuating trend in which the ratio shows downward movement in the second fiscal year and then upward movement in the third fiscal year and fourth fiscal year and again downward movement in the concluding fiscal year of the review period. As the slope of trend line obtained by least square method is negative i.e. -0.403, it indicates the decreasing trend of net interest margin, although the bank is able to maintain the generally accepted benchmark.

4.1.4.4 Earning Per Share (EPS)

EPS measures how much return can be earned from each share by the common stockholders (ordinary shareholders). Higher EPS indicates better performance and strong market position of the bank whereas lower EPS indicates worse performance and weak market position of the bank. The earning per share of a bank measures the profit available to the equity shareholders on per share basis. It reflects the earning power of a bank (Pandey, 2005).

Table 4.11: **Earning Per Share**

Rs. in Million

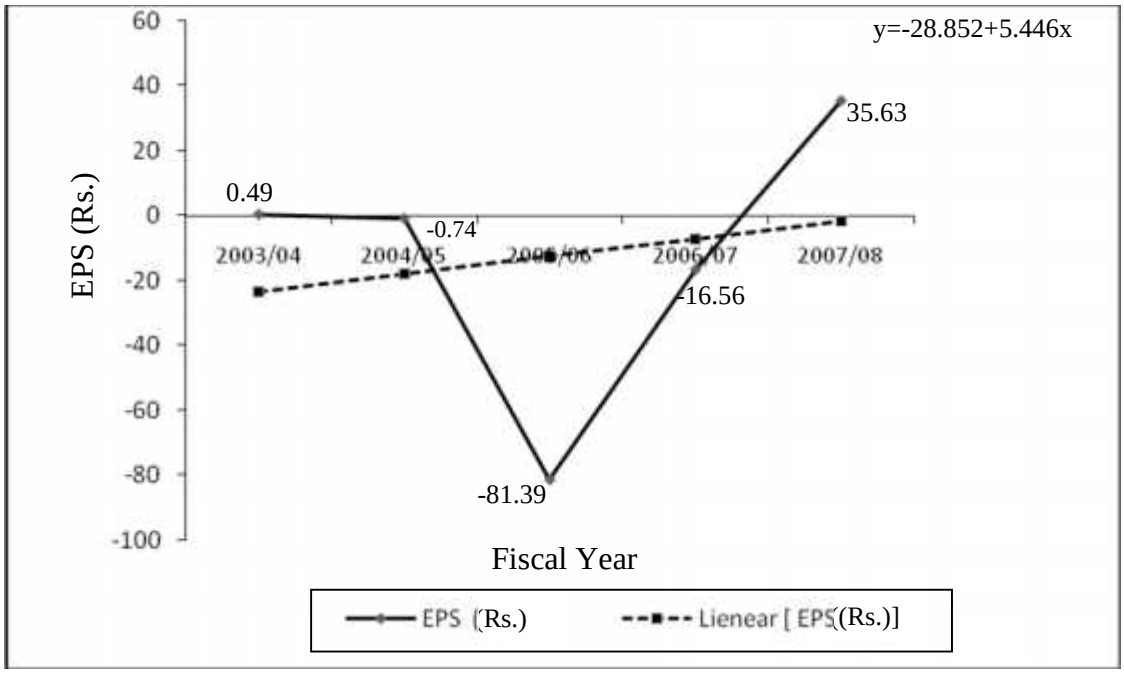
Fiscal Year (Mid-July)	2003/04	2004/05	2005/06	2006/07	2007/08
NPAT (Rs.)	3,408162	(5,157,382)	(569,744,713)	(115,928,547)	498,755,331
No. of Shares	7000000	7000000	7000000	7000000	14000000
EPS (Rs.)	0.49	(0.74)	(81.39)	(16.56)	35.63

Source: NCCBL, Annual Reports.

Table 4.11 exhibits the earning per share of the bank. In the first fiscal year (FY 2003/04) of review period, the earning per share is Rs. 0.49. Then, it is -Rs.0.74, -Rs.81.39 and -Rs.16.56 in FY 2004/05 to FY 2006/07 respectively. The continuous loss incurred by the bank has resulted in negative earning which indicate worse performance and weak market position of the bank. In the concluding year (FY 2007/08), the performance of the bank is improved as the earning per share reach to Rs. 35.63 which is the maximum over the review period. The average earning per share is -Rs. 12.51 which shows deteriorating

performance of the bank. The C.V. is -343. 38% which is highly negative. It shows much more volatility and higher risk during the study period.

Fig. 4.10 Trend of Earning Per Share



In fig. 4.10, the observed value of earning per share and its trend line are shown. The slope of the trend line determined by the least square method is positive which reveals the increasing trend of earning per share. But the increasing trend lies within the negative range over the study period.

4.1.5 Liquidity Position

Liquidity is the bank's ability to maintain cash which is adequate to fulfill cash demand for loan and deposit withdrawal. Keeping cash idle or maintaining high liquidity position has adverse effect on profitability of the bank. On the other hand, low liquidity position cannot support bank to meet expected and unexpected financial demand which result in higher liquidity cost, lowering trust of depositors and creditors and negative impact on goodwill of the bank. Against the benefits associated with maintaining liquidity, one must balance the cost. Liquid assets, like all other assets, have to be financed. Accordingly, the cost of liquidity may be thought of as the differential in interest earned on the

investment of funds in liquid assets and the cost of financing. If the bank could both borrow and lend at the same interest rate, there would be no "cost" to maintaining whatever level of liquidity was desired to reduce the probability of technical insolvency. If imperfections in the capital markets result in the borrowing rate exceeding the lending rate, there is a "cost" to maintaining liquidity. Under these conditions, a trade-off exists between the benefits associated with liquidity and the cost of maintaining it (Van Horne, 2006).

4.1.5.1 Liquid Assets to Total Deposit Ratio

This ratio evaluates whether the bank is in a position to fulfill cash demand of its depositors and creditors or not. In short, it measures the overall short-term liquidity position of the bank. It shows the percentage of liquid assets in total deposit. The higher ratio implies the better liquidity position and lower ratio shows weak liquidity position of the bank. Liquid assets include cash in hand, b/l with NRB, b/l with domestic banks/FIs, b/l with foreign banks, money at call or short notice and investment in government securities. As per the NRB directives, commercial banks are required to maintain liquidity of at least 20% of the total deposit.

Table 4.12: Liquid Assets to Total Deposit Ratio

Rs. in Million

Fiscal Year (Mid-July)	2003/04	2004/05	2005/06	2006/07	2007/08
Liquid Assets (Rs.)	1,536.77	1,035.38	1,326.65	1,993.80	3,367.83
Total Deposit (Rs.)	5,987.70	6,630.94	6,619.58	6,500.34	7,320.24
Liquid Assets / Total Deposit (%)	25.67	15.61	20.04	30.67	46
* IAR (%)	21.66	20.05	21.32	19.41	18.74
Diff. from IAR (%)	4.01	(4.44)	(1.28)	11.26	27.26

Source: NCCBL, Annual Reports.

** Worked out from Appendix 6.*

While reviewing the ratio of liquid assets to total deposit in table 4.12, it is found that the ratio decreases in the second fiscal year of the study period and thereafter, it continuously increases. The ratio is minimum in FY 2004/05 with 15.61% and maximum in FY 2007/08 with 46%. Similarly, while comparing the

liquid assets to total deposit ratio with industrial average ratio, it is short by 4.44% and 1.28% in FY 2004/05 and FY 2005/06 whereas in FY 2003/04, FY 2006/07 and FY 2007/08, it is above the IAR by 4.01 % , 11.26% and 27.26 % respectively. The bank has maintained liquidity above the NRB standard in all the fiscal years except in FY 2004/05.

Fig. 4.11 : Comparing Liquid Assets to Total Deposit Ratio with Industrial Average

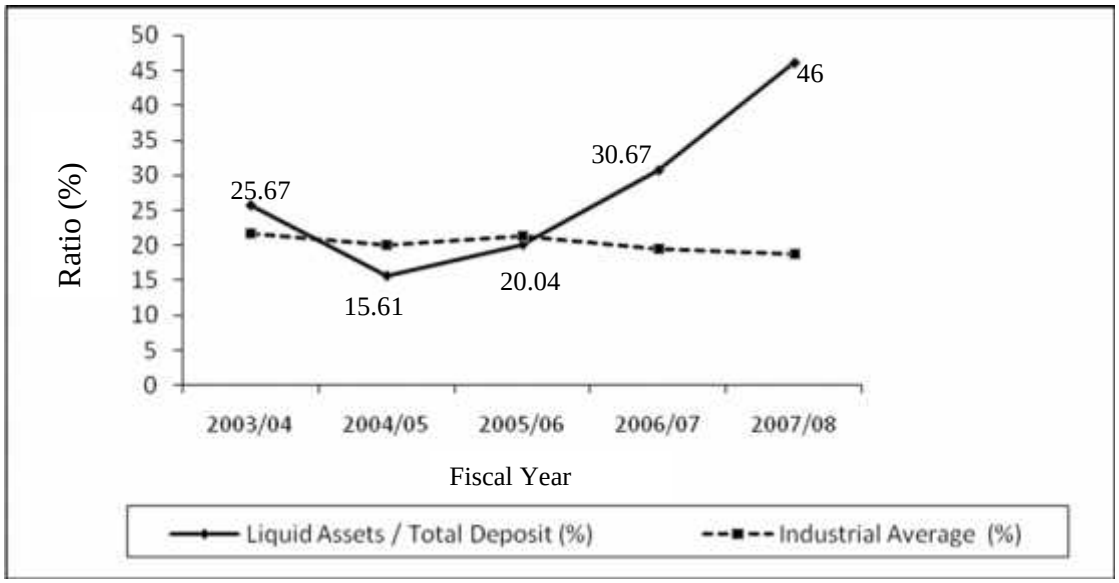


Fig. 4.11 exhibits the comparison of liquid assets to total deposit ratio with industrial average ratio. From the figure, it can be observed that the ratio curve of liquid assets to total deposit is above the industrial average in FY 2003/04, FY 206/07 and 2007/08 whereas in FY 2004/05 and FY 2005/06, it is below the industrial average curve.

4.1.5.2 NRB Balance to Total Deposit Ratio

Banks are required to keep certain percentage of their total deposit in NRB in order to maintain adequate liquidity and control credit expansion capacity of the bank. Thus, this ratio judges whether the bank has maintain b/l as prescribed by NRB or not. Commercial banks are required to maintain 5% of their deposit as CRR in NRB.

Table 4.13 : NRB Balance to Total Deposit Ratio

Rs. in Million

Fiscal Year (Mid-July)	2003/04	2004/05	2005/06	2006/07	2007/08
NRB Balance (Rs.)	550.56	441.01	478.01	255.57	762.44
Total Deposit (Rs.)	5,987.70	6,630.94	6,619.58	6,500.34	7,320.24
NRB Balance / Total Deposit (%)	9.19	6.65	7.22	3.93	10.42
* IAR (%)	10.42	8.08	7.90	6.76	5.66
Diff. from IAR (%)	(1.23)	(1.43)	(0.68)	(2.83)	4.76

Source: NCCBL, Annual Reports.

** Worked out from Appendix 6.*

Table 4.13 shows the ratio of NRB balance to total deposit which falls under cash reserve ratio (CRR) requirement category as prescribed by NRB. From the tabulated data, it is found that the ratio is minimum in FY 2006/07 with 3.93% and maximum in FY 2007/08 with 10.42%. Overall, the ratio demonstrate fluctuating character. Regarding comparison with industrial average, the bank has NRB balance to total deposit ratio above the IAR only in the concluding year (FY 2007/08), otherwise the ratios are with negative difference in all the previous fiscal years of the study period. The bank has maintained CRR above the 5% NRB std. in all the years except in the FY 2006/07.

Fig. 4.12: Comparing NRB Balance to Total Deposit Ratio with Industrial Average

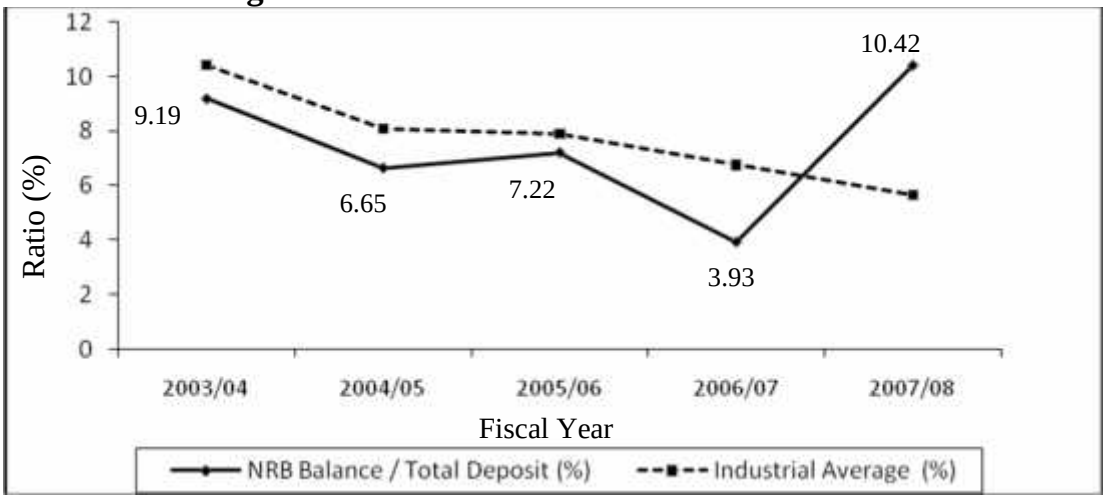


Fig. 4.12 shows the comparison of NRB balance to total deposit ratio with industrial average. From the figure, it can be observed that the ratio curve is below than the industrial average curve in all the years except in the concluding year (FY 2007/08). The bank has increase its balance held at NRB in the concluding year due to which the ratio is maximum and above the industrial average than that of the previous years of the review period.

4.1.5.3 Cash in Vault to Total Deposit Ratio

This ratio measures the proportion of cash in vault to total deposit. Cash in vault include cash in hand and foreign currency in hand. This ratio measures the position of the bank to fulfill cash demand of its depositors and creditors. Lower ratio implies weak position and higher ratio implies strong position to meet short term cash obligations.

Table 4.14: Cash in Vault to Total Deposit Ratio

Rs. in Million

Fiscal Year (Mid-July)	2003/04	2004/05	2005/06	2006/07	2007/08
Cash in Vault(Rs.)	209.69	151.35	230.56	265.78	592.63
Total Deposit (Rs.)	5,987.70	6,630.94	6,619.58	6,500.34	7,320.24
Cash in Vault/Total Deposit (%)	3.50	2.28	3.48	4.09	8.10
* IAR (%)	2.03	2.06	2.23	2.34	3.09
Diff. from IAR (%)	1.47	0.22	1.25	1.75	5.01

Source: NCCBL, Annual Reports.

** Worked out in Appendix 6.*

The data given in table 4.14 shows the cash in vault to total deposit ratio. During the review period, the ratio decreases in the second year to 2.28% which is the minimum ratio and thereafter, it continuously increases. The ratio is maximum in the concluding year (FY 2007/08) with 8.10%. The ratio is above the industrial average in all the years of the review period.

Fig. 4.13: Comparing Cash in Vault to Total Deposit Ratio with Industrial Average

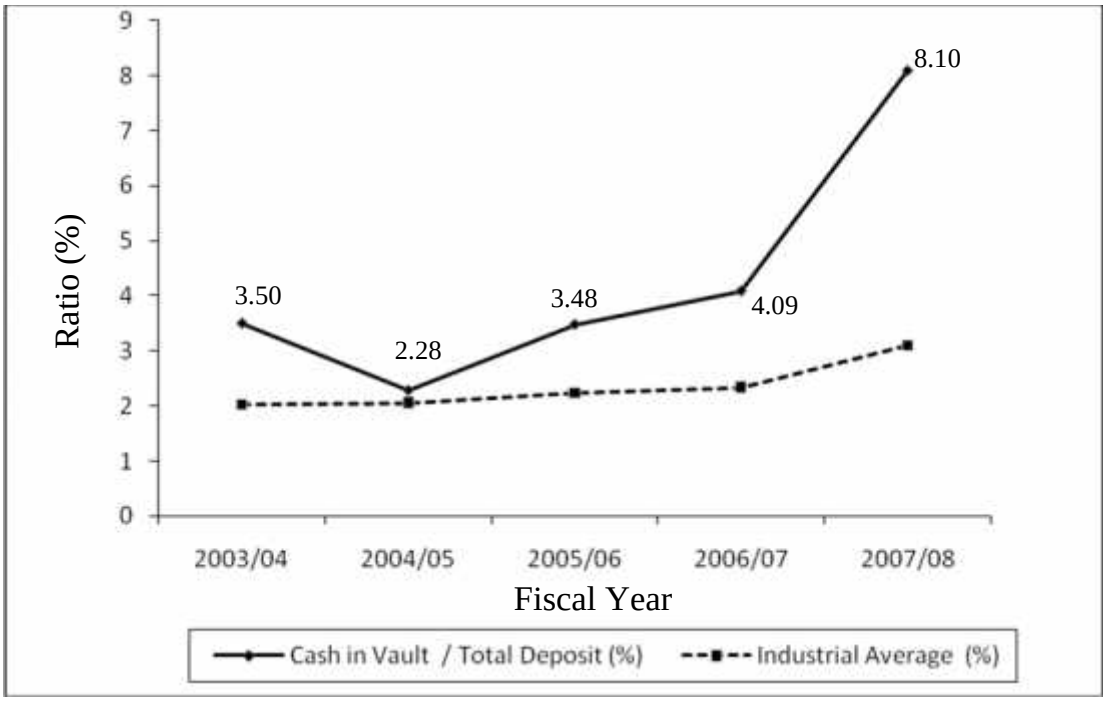


Fig. 4.13 exhibits the comparison of cash in vault to total deposit ratio with industrial average. From the figure, it can be observed that the ratio curve is above the industrial average curve in all the fiscal years of the review period. It indicates that the bank has maintained adequate level of cash in vault to fulfill immediate cash demand of its clients.

4.1.6 Sensitivity to Market Risk

Sensitivity to market risk measures to what extent the change in the market risk components can affect the earning performance of the bank. Market risk components include interest rates, foreign exchange rates, commodity prices, and equity prices and they have varying degree of relation with the assets and liabilities of the bank. As interest rate risk (IRR) is common to many FIs, this section targets to expose IRR on earning of the bank.

Table 4.15 exhibits the GAP analysis to measure the sensitivity of NCCBL's earning to IRR for the period FY 2003/04 to FY 2007/08.

Table 4.15: GAP Analysis

FY 2003/04

Rs. in Million

Maturity Time (Day)	1-90	91-180	181-270	271-365	>365	Total
RSA (Rs.)	2,148.30	-	61.10	2,102.20	2,349.20	6,660.80
RSL (Rs.)	3,390.00	2.20	-	722.20	2,546.40	6,660.80
GAP_i [RSA-RSL] (Rs.)	(1,241.70)	(2.20)	61.10	1,380.00	(197.20)	-
$CGAP_i$ [RSA- RSL](Rs.)	(1,241.70)	(1,243.90)	(1,182.80)	197.20	-	-
GAP Ratio (RSA/RSL)	0.63	0.00	∞	2.91	0.92	1.00
CGAP Ratio [CGAP/Total RSAs](%)	(18.64)	(18.76)	(17.76)	2.96	0.00	0.00
Δ R(%)				1.00	1.00	
ΔNII [CGAP × Δ R] (Rs.)				1.97	-	
% Change in NII [CGAP Ratio × Δ R](%)				0.03	0.00	

FY 2004/05

Rs. in Million

Maturity Time (Day)	1-90	91-180	181-270	271-365	>365	Total
RSA (Rs.)	1,728.45	23.11	2.04	2,110.94	3,620.74	7,485.28
RSL (Rs.)	1,453.23	-	-	290.37	5,741.68	7,485.28
GAP_i [RSA-RSL] (Rs.)	275.22	23.11	2.04	1,820.57	(2,120.94)	-
$CGAP_i$ [RSA-RSL] (Rs.)	275.22	298.33	300.37	2,120.94	-	-
GAP Ratio (RSA/RSL)	1.19	∞	∞	7.27	0.63	1.00
CGAP Ratio [CGAP/Total RSAs](%)	3.68	3.99	4.01	28.33	0.00	0.00
Δ R(%)				1.00	1.00	
ΔNII [CGAP × Δ R] (Rs.)				21.21	-	
% Change in NII [CGAP Ratio × Δ R] (%)				0.28	0.00	

FY 2005/06

Rs. in Million

Maturity Time (Day)	1-90	91-180	181-270	271-365	>365	Total
RSA (Rs.)	1,865.56	1,67.34	72.12	2,449.19	3,563. 62	8,117.83
RSL (Rs.)	1,360.57	-	-	337.86	6,419.40	8,117.83
GAP_i [RSA-RSL] (Rs.)	504.99	167.34	72.12	2,111.33	(2,855.78)	-
$CGAP_i$ [RSA-RSL] (Rs.)	504.99	672.33	744.45	2,855.78	-	-
GAP Ratio (RSA/RSL)	1.37	∞	∞	7.25	0.56	1.00
CGAP Ratio [CGAP/ Total RSAs](%)	6.22	8.28	9.17	35.18	0.00	0.00
Δ R(%)				1.00	1.00	
ΔNII [CGAP × Δ R] (Rs.)				28.56	-	
% Change in NII [CGAP Ratio × Δ R] (%)				0.35	0.00	

FY 2006/07

Rs. in Million

Maturity Time (Day)	1-90	91-180	181-270	271-365	>365	Total
RSA (Rs.)	2,294.97	104.39	45.02	2,334.56	3,205.09	7,984.03
RSL (Rs.)	1,424.21	-	-	443.01	6,116.81	7,984.03
GAP_i [RSA-RSL] (Rs.)	870.76	104.39	45.02	1,891.55	(2911.72)	-
$CGAP_i$ [RSA-RSL] (Rs.)	870.76	975.15	1,020.17	2,911.72	-	-
GAP Ratio (RSA/RSL)	1.61	∞	∞	5.27	0.52	1.00
CGAP Ratio [CGAP/ Total RSAs](%)	10.91	12.21	12.78	36.47	0.00	0.00
Δ R(%)				1.00	1.00	
ΔNII [CGAP × Δ R] (Rs.)				29.11	-	
% Change in NII [CGAP Ratio × Δ R] (%)				0.36	0.00	

FY 2007/08

Rs. in Million

Maturity Time (Day)	1-90	91-180	181-270	271-365	>365	Total
RSA (Rs.)	3,431.22	3,82.89	38.07	2,217.03	2,679.67	8,748.88
RSL (Rs.)	2254.46	-	-	-	5065.78	7,320.24
GAP_i [RSA-RSL] (Rs.)	1,176.76	382.89	38.07	2,217.03	(2,386.11)	1,428.64
$CGAP_i$ [RSA-RSL] (Rs.)	1,176.76	1,559.65	1,597.72	3,814.75	1,428.64	-
GAP Ratio (RSA/RSL)	1.52	∞	∞	∞	0.53	1.19
CGAP Ratio [CGAP/ Total RSAs](%)	13.45	17.83	18.26	43.60	16.33	0.00
Δ R(%)				1.00	1.00	
ΔNII [CGAP × Δ R] (Rs.)				38.15	14.29	
% Change in NII [CGAP Ratio × Δ R] (%)				0.44	0.16	

Note: Δ R= change in interest rate

Δ NII = change in net interest income

In table 4.15, it is assumed that interest rate changes by 1%. In the short term maturity bucket ranging from 0-90 days to 271-365 days, net financial assets (RSA – RSL) is positive in almost all the years except in FY 2003/04 in which rate sensitive liabilities are more than that of assets by Rs. 1,241.70 million and Rs. 2.20 million repriced in 0-90 and 91-180 days time buckets respectively indicating negative GAP. Whereas the assets and liabilities repriced in the long term maturity bucket (>365 days) indicate negative GAP in all the years by Rs. 197.20 million, Rs. 2,120.94 million, Rs. 2855.78 million, Rs. 2911.72 million and Rs. 2386.11 million respectively.

Fig.4.14: Level of Risk Sensitive Assets (Liabilities) and CGAP Ratio over time

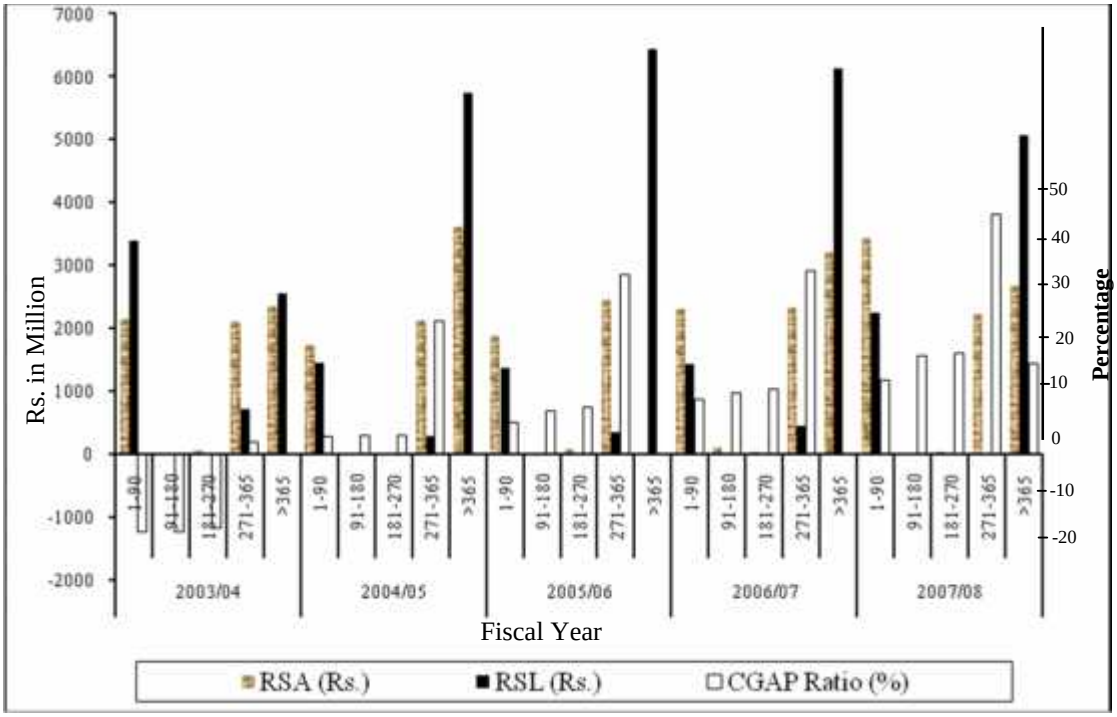


Fig. 4.14 shows the level of RSAs, RSLs and CGAP ratio of the bank under different sequential time intervals (0-90/91-180/181-270/271-365/>365 days). In FY 2003/04, the level of RSLs are higher than that of RSAs in the time buckets 0-90 and 91-180 days due to which the GAP, cumulative gap (CGAP) and CGAP ratio are less than zero i.e. negative. In such case, if interest rates rise on both RSAs and RSLs by equal amounts, then the bank pays more than what it earns because more liabilities are repriced. On the contrary, when interest rates fall, then interest expense decreases more than interest income. Similarly, same case is found in the time bucket 181-270 days as the ratio of the bank is below than the NRB standard in FY 2003/04 and FY 2004/05. In FY 2005/06 and FY 2006/07, the NRB standard. In the concluding year (FY 2007/08), the ratio is above the NRB standard it has CGAP < 0 (negative). Whereas, in the time bucket 271-365 days, the level of RSAs are higher than that of RSLs. All GAP, CGAP and CGAP ratio are positive. In such case, in a rising interest environment, bank earns more than what it pays because more

assets are repriced. On the contrary, rates decrease have opposite effect because interest income falls more than interest expense. The situation of RSAs and RSLs repricing in the short run of latter years are all positive. The CGAP ratio is in continuous increasing trend. Overall, it indicates that the RSAs and RSLs are highly sensitive to interest change risk. In the long run time bucket (>365 days), the CGAP ratio is zero in all the fiscal years except in the concluding year (FY 2007/08), this means that the RSAs and RSLs remain unaffected by the fall or rise of the interest rates whereas in FY 2007/08, the bank is low sensitive to interest rate risk because CGAP ratio is above zero i.e. 16.33%.

4.2 Major Findings

The major findings of the study obtained from the analysis of data regarding financial performance of NCCBL in the CAMELS framework are as follows:

4.2.1 During the five fiscal years of the study period, the ratio of core capital adequacy relative to RWA of NCCBL is 3.32% in FY 2003/04, 3.48% in FY 2004/05 and maximum with 9.61% in FY 2007/08 whereas in FY 2005/06 and FY 2006/007, the ratios are negative with 5.05% and 9.13% respectively. The core capital adequacy ratio of the bank is below NRB standard in all the fiscal years except in the concluding FY 2007/08. The reduction of accumulated losses due to profit earned by the bank and increased in the paid up capital have supported the bank to maintain core capital adequacy ratio above NRB standard in the concluding fiscal year. Thus, as a whole, it is found that the core capital adequacy ratio maintained by the bank is in highly fluctuating trend as well as inadequate to minimize risks.

4.2.2 The supplementary capital adequacy ratio of the bank is 0.66% , 0.72%, 1.59%, 0% and 1.48% in FY 2003/04 to FY 2007/08 respectively. In 2003/04, FY 2004/05 and FY 2007/08, the ratio is within the limit of NRB standard whereas in FY 2005/06 and FY 2006/07, the ratio is in excess to the NRB standard by 6.64% and 9.13% respectively due to

negative core capital adequacy ratio. The supplementary capital adequacy ratio is not consistent.

4.2.3 The capital adequacy ratio of the bank is 3.99% in FY 2003/04, 4.20% in FY 2004/05 and maximum with 11.09% in FY 2007/08 whereas the ratio are below zero i.e. -3.46% and -9.13% in FY 2005/06 and FY 2006/07 respectively due to negative capital as a result of high accumulated losses in the reserve. The bank is found not following the NRB directives as the capital adequacy ratio is short by 7.01%, 6.80%, 14.46% and 20.13% in FY 20003/04 to FY 2006/07 respectively. Further, the ratios are in highly fluctuating trend. All these reflect that the bank is running with inadequate and weak capital base to manage risk of losses and operational smoothness. However, the capital adequacy ratio is above NRB standard in the concluding FY 2007/08 as a result of reduction of accumulated losses in the reserve due to the profit earned by the bank and issue of right shares.

4.2.4 The percentage of performing loans of the bank varies from minimum 66.35% in FY 2006/07 to maximum 91.34% in FY 2004/05. The NPL is 12.72%, 8.66%, 23.69%, 33.65% and 17.73% in FY 2003/04 to FY 2007/08. In the initial period, the asset quality of the bank is found high. But, latter on, it gradually declined down as the NPL ratio is much above the international standard and IAR. However, in the concluding FY 2007/08, the level of NPL decreased due to recovery of outstanding loan of Rs.732.80 million. It shows some improvement in the credit administration practices and recovery efforts. The sub-standard loan, doubtful loan and bad loan exist in the lower to higher proportions in the NPL. Overall, the NPL ratio is found in the fluctuating trend.

4.2.5 In FY 2003/04 and FY 2004/05, the bank has maintained adequate level of LLP i.e. in excess to the NRB standard for pass loan only. Similarly, the bank has met the LLP as prescribed by NRB for pass loan and sub-standard loan in FY 2005/06 and for sub-standard loan and doubtful loan in FY 2006/07. In the concluding year (FY 2007/08), the bank has

maintained the provision for all the loans as required by NRB. The LLP ratio is maximum with 28.72% in FY 2006/07 due to the higher NPL and weakness in timely collection of loan and minimum with 17.12% in FY 2007/08 as a result of recovery of certain outstanding loan. The LLP ratio is not consistent with the increasing trend.

4.2.6 In FY 2005/06, the total expense is maximum with Rs. 1232.19 million due to highly increased in loan loss provision and unproductive expenses whereas in the concluding FY 2000/08, the total income is maximum with Rs. 1448.12 million due to write back of loan loss provision. The mean ratio for the review period is 96.20%. As a whole, the total expense to total income ratio is in the fluctuation trend. On the other hand, the ratio is not consistent with the decreasing trend.

4.2.7 The earning per employee is Rs.14,627.30, -Rs.19,684.66, -Rs. 2,455,796.18, -Rs. 442,475.37 and Rs. 1,768,635.93 in FY 2003/04 to FY 2007/08 respectively. Average earning per employee is Rs. 226,938.60. It shows poor contribution of employees on earning and managerial deficiency. Despite this, the trend of earning per employee is increasing. The earning per employee is maximum with Rs. 1,768,635.93 when net profit (Rs. 498,755,331) and number of employees (282) are highest in the concluding fiscal year.

4.2.8 The ROE ratio of the bank is 1.82% in FY 2003/04 and maximum with 72.80% in the concluding FY 2007/08 whereas in FY 2004/05 to FY 2006/07, the earning has gone down below zero. In the concluding fiscal year, the increased in the earning due to reduction in loan loss provision and issue of right shares have resulted in highly increased in the ROE. Despite this, the overall earning performance of the bank is found weak as the average ROE is negative and far below the international benchmark. Further, the ROE is highly inconsistent with the increasing trend and this trend still lies within the negative range.

4.2.9 Over the study period, the ROA ratio of the bank lies in between -8.86% in FY 2005/06 and 6.05% in the concluding FY 2007/08. The ROA is

above 1.5% benchmark only in the concluding fiscal year. Otherwise, the return from FY 2004/05 to FY 2006/07 is negative which indicates deteriorating earning performance as a result of inefficient utilization of the assets. The assets of the bank are sufficient, but it is lacking efficient mobilization of the asset. Similarly, the sector of investment is found limited over the study period. Mostly, the assets of the bank turned out into non-performing. The ROA ratio is highly inconsistent with the increasing trend.

4.2.10 The NIM ratio of the bank is minimum in FY 2004/05 with 3.56% and maximum in FY 2003/04 with 6.46%. The mean ratio is 4.50%. The ratio is variable with the decreasing trend. As prescribed by the World Bank, the NIM is above 3% over the study period which shows strong earning capability to meet financial obligations of the bank i.e. the bank has properly managed the assets and liabilities portfolio and effectively utilized them to generate earning.

4.2.11 The EPS of the bank is Rs. 0.49, -Rs. 0.74, -Rs. 81.39, -Rs. 16.56 and Rs. 35.63 in FY 2003/04 to FY 2007/08 respectively. The average EPS is -Rs. 12.51. Though the EPS is in the increasing trend, it is highly volatile and lies within the negative range. On an average, it is found that the EPS and market position of the bank is in deteriorating condition.

4.2.12 The liquid assets to total deposit ratio is minimum with 15.61% in FY 2004/05 and maximum with 46% in the concluding FY 2007/08. In FY 2004/05 and FY 2005/06, the ratio is below the IAR in the remaining fiscal years. The bank has maintained liquidity above the 20% NRB standard all the fiscal years except in FY 2004/05. The ratio is toward increasing trend and shows that liquidity level of the bank is strong.

4.2.13 The ratio of NRB balance to total deposit of the bank over the study period is 9.19%, 6.65%, 7.22%, 3.93% and 10.42% in FY 2003/04 to FY 2007/08 respectively. The ratio is above the IAR only in the concluding FY 2007/08 whereas it is above the 5% NRB standard in all the fiscal

years except in FY 2006/07. This cash reserve with NRB is in the fluctuating trend over the study period.

4.2.14 The cash in vault to total deposit ratio is minimum with 2.28% in FY 2004/05 and maximum with 8.10% in FY 2007/08. The bank has maintained cash in vault to total deposit ratio above IAR over the review period. Thus, it is found that the cash in vault of the bank is adequate as well as in the increasing trend.

4.2.15 On an average, the GAP (RSAs-RSLs) of the bank is positive in the short run maturity buckets (0-90/91-180/181-270/271-365 days) of the review period. The CGAP ratio is in the increasing trend. On an average, it is found that the sensitivity level of RSAs and RSLs to interest change risk is maximum. In the long term maturity bucket (>365 days), the GAP (RSAs-RSLs) is negative. The CGAP ratio and change in NII are zero in FY 2003/04 to FY 2006/07 of the review period whereas in the concluding FY 20007/08, the ratios are above zero which indicate the RSAs and RSLs are less sensitive to interest rate change. Thus, the sensitivity of the bank's earning to interest rate change is high in the short run whereas it is zero and low (concluding fiscal year) in the long run.

CHAPTER V

SUMMARY,CONCLUSIONS AND RECOMMENDATIONS

This chapter is divided into three partsZsummary, conclusions and recommendations. The whole study is briefly summarized in the first part. Then, the conclusions drawn out are included in the next part. Lastly, the final part presents the recommendations.

5.1 Summary

With a view of rating the banks and FIs in terms of efficient management of various risks emerged as a result of globalization and high competition, this study attempts to evaluate the financial performance of Nepal Credit and Commerce Bank Ltd. (NCCBL) in the CAMELS framework. Based on the publicly available financial data, the rating procedure has focused on the six componentsZcapital adequacy, assets quality, management efficiency, earning position, liquidity level and sensitivity to market risk so that the specific problematic areas within the bank are identified and overall financial performance is judged.

As NCCBL is taken as sample out of the 25 commercial banks till mid-June 2008, this represents case study approach and convenience sampling method is used. The research design followed is descriptive- cum analytical research design. The study covered five fiscal years' data published in the NCCBL's annual reports from FY 2003/04 to FY 2007/08 forming the major source of data. Besides this, directives related to NRB and other secondary informations are obtained by the field visit.

The Basel Committee on Banking Supervision (BCBS) of the Bank for International Settlements (BIS) has recommended using CAMELS framework as criteria for assessing a FI's financial performance. The BCBS replaced the Basel -I capital accord, which was issued in 1988, by new capital accord (Basel-II) in June, 1999 with an objective to make the capital framework more risk sensitive. NRB has adopted Basel Core Principles for Effective Supervision as guideline

for supervision of commercial banks. Despite the complexities in the implementation, the new capital accord involves various virtues and will be a milestone in improving banks' internal mechanism and supervisory process.

CAMELS is a common method for appraising the performance of the banks used by the worldwide supervisory authorities. Under each component of CAMELS, the performance of the bank is rated in a scale ranging from 1-5, lower rating represents better performance and higher rating represents worse performance. To understand and include the relevant views of different scholars, authors, researchers, etc., various books, journals, dissertations, etc. were reviewed.

The application of pertinent financial tools and the comparison of the results with NRB standard and IAR show that despite the negative core capital adequacy ratio in the two fiscal years, the bank has raised up the core capital level above NRB standard in the concluding fiscal year. The bank has maintained supplementary capital adequacy ratio as per NRB standard in FY 2003/04, FY 2004/05 and FY 2007/08 only. The capital adequacy ratios are below than the NRB standard except in the concluding fiscal year. The higher percent of NPL than that of the 5% benchmark shows deteriorating assets quality. The satisfactory quality of assets cannot sustain in the latter fiscal years as the NPL ratios are above the IAR. The LLP ratio shows the increasing trend. Overall, the bank has allotted the provision as per the specified norms of NRB. The fluctuation in the total expenses to total income ratio and the negative mean earning per employee reflect the management's weakness, though improvement in the concluding fiscal year can be observed. With respect to ROE, ROA and EPS, the earning performance of the bank is unsatisfactory as their mean ratios are negative as well as below the World Bank standard. Despite the decreasing trend of NIM, the bank has maintained the generally accepted benchmark. The liquidity risk exposure ratios show that bank has maintained adequate level of cash as CRR is above the NRB standard except in one fiscal year and cash in vault is above the IAR. Similarly, except in one fiscal year, liquid assets to total deposit ratio is above NRB standard whereas it is above the IAR in FY 2003/04,

FY 2006/07 and FY 2007/08 only. In the short run, the status of GAP, CGAP and CGAP ratio in the initial maturity buckets of the first fiscal year are negative whereas they are positive in rest of the all fiscal year. The trend of the CGAP ratio is increasing over the study period. Overall, it indicates that the RSAs and RSLs repricing in the short run are highly sensitive to interest rate risk. In the long run time buckets, the zero CGAP ratio in the first four fiscal years implies that the interest rate change has no effect on them. In the concluding fiscal year, the CGAP ratio is above zero. Comparatively, it indicates the bank is low sensitive to interest rate risk in the long run.

5.2 Conclusions

With respect to the findings, the research study has been reached at the following conclusions.

5.2.1 As the core capital adequacy ratio maintained by NCCBL is inadequate over the four consecutive fiscal years and highly fluctuating trend, it can be concluded that the bank is running with weak capital base, high risk of losses and complexities in the operations. However, in the concluding fiscal year, the bank has satisfactorily maintained the core capital above NRB standard. To some extent, it has supported the bank to recover from the deteriorating financial performance.

5.2.2 The adequacy of supplementary capital by not exceeding the NRB standard is not so satisfactory over the study period. However, it can be concluded that the contribution of supplementary capital in the total capital fund is positive, but the extent to which it has to support is not adequate and stable for maintaining minimum risk based total capital standard.

5.2.3 The capital adequacy ratio of bank is below NRB requirement over the four consecutive fiscal years. Therefore, the bank is poorly capitalized which has adverse effect in the banking operation and confidence of the shareholders. Overall, the bank is not financially sound. However, the

bank has partially overcome from the deteriorating financial performance by maintaining adequate capital in the concluding fiscal year.

5.2.4 In the initial period, the bank has properly maintained the quality of assets. But, latter on, the performing loan turned out into non performing due to lack of effective recovery policies and investment opportunities in an increasing competitive market. As a whole, the quality of assets is below satisfactory level. However, the bank is able to reduce the level of NPL through recovery of certain outstanding loans and there seems some improvement in the credit administration practices and recovery efforts.

5.2.5 The higher level of LLP ratio has adversely affected the profitability of the bank. Though, the bank has improved its loan recovery efforts with positive effect on LLP ratio, but still the bank has loan default risk associated with the increasing trend of LLP ratio. The loan loss provision maintained by the bank for minimizing the loan default risk is quite satisfactory.

5.2.6 Lack of productive expenses and stable control of management on expense and income have increased the total expense to total income ratio. The ratio is in the fluctuating trend. Despite these, on the basis of decreasing trend of the ratio, it can be concluded that managerial efficiency is improving and positive effect on profitability can be expected in the future.

5.2.7 On an average, the contribution of employees on earning is poor. The management is lacking effective utilization of the workforce. The increasing trend of earning per employee is not at satisfactory level. Overall, the performance efficiency of the employees is not adequate to maintain management soundness in the bank.

5.2.8 The substantial drop on ROE shows lack of efficient mobilization of the investment. This has reduced the earning capability of the bank to fulfill its financial obligations. Though ROE in the concluding fiscal year is fine, it can be concluded that the overall earning performance of the bank

is weak for maintaining sound financial health of the bank and meeting shareholders' expectations.

5.2.9 The fluctuating trend of ROA cannot smoothly support in the financial operations of the bank. The risks associated with assets are inadequately identified and managed in a limited investment opportunities which caused inefficient utilization of the assets. Mostly, the ROA is in deteriorating condition. As a whole, the ROA is not satisfactory.

5.2.10 Despite the narrow down of interest rate spread, bank has properly measured and utilized this spread. Bank has efficiently mobilized the earning assets with higher interest income and liabilities with less interest costs and risks. Overall, it can be concluded that the position of NIM is at satisfactory level.

5.2.11 As the average EPS of the bank is in deteriorating condition, it has adversely affected the expectations of its shareholders and market position. As a whole, the earning of the bank is not sufficient to meet its financial obligations and maintain sound financial health of the bank.

5.2.12 The liquid assets to total deposit ratio of the bank is sufficient to maintain balance liquidity position. It can be concluded that the bank has maintained satisfactory level of liquid assets and has accessibility to source of liquid funds at acceptable terms.

5.2.13 The fluctuating trend and the higher CRR above NRB standard may negatively effect the profitability of the bank. Otherwise, the CRR maintained by the bank is properly executing its fund management practices to minimize the liquidity risk.

5.2.14 The cash in vault to total deposit ratio reveals that the level of cash in vault maintained by the bank is adequate to meet its short term financial obligations. It can be concluded that the liquidity level of the bank is satisfactory. The performance of the bank is strong and capable to minimize the current and prospective liquidity risk and to maintain balanced liquidity position.

5.2.15 In the short run, the bank is asset sensitive and the bank is earning more in a rising interest rate environment. Slightly change in the interest rate has higher effect on the earning of the bank and the sensitivity can be more in the future. In the long run, the bank is liability sensitive and the falling interest rate environment is favourable for the bank. But as the bank is able to match the risk sensitive assets to risk sensitive liabilities, the interest rate change has no effect on them. In the concluding fiscal year, the bank is keeping low mismatch (RSA-RSL) and has minimized the interest rate change risk. As a whole, it can be concluded that control over IRR is not so adequate and there is possibility of adverse effect on earning and capital of the bank.

5.3 Recommendations

Based on above conclusions, the following recommendations regarding financial performance of NCCBL have been provided.

5.3.1 As the bank is inadequately capitalized with respect to NRB requirement, the bank should maintain strong and stable capital for smooth operation and minimization of risk of losses. For this, the bank is required to formulate appropriate strategy for proper management of capital. The next step is to reduce the high accumulated losses in the reserve through recovery of outstanding loans which minimized the loan loss provision and identification of more profitable sector to earn maximum profit. Similarly, the bank should have easy access to internal and external source of capital. Finally, the management is recommended to maintain sufficient and stable capital adequacy ratio as per NRB requirement for sound financial performance of the bank.

5.3.2 The quality of assets is less than satisfactory. In order to decrease the volume of NPL, the bank should aggressively recover its outstanding loan by utilizing maximum efforts and introducing effective recovery policies. Similarly, the bank has to follow the loan diversification policy. Effective credit administration practices and close supervisory attention are needed.

The bank must provide loans only after conducting proper risk based credit rating. The bank should be careful about the adverse effect of higher loan loss provision on profitability. Thus, the bank is required to increase the assets quality taking consideration into industrial average and international norms.

5.3.3 The total expense to total income ratio of the bank is in fluctuating trend over the study period. So, management should formulate appropriate strategy for effective control over expenses and divert them towards productive purposes. Similarly, management should give equal priority to the quantity and quality of revenue. In order to increase the performance and earning efficiency of the employees, management must introduce employee development program and participative management system. The productivity of total expense to total income ratio and earning per employee should be increased to the required level. Finally, the bank is required to maintain good corporate governance which is the ultimate factor for maintaining sound managerial performance in the bank. In addition to this, management has to install latest technology for increasing cost effectiveness and efficiency of its employees.

5.3.4 As the overall earning performance of the bank is weak, the bank should focused on efficient mobilization of investment for constantly earning required level of profit which can reduce the accumulated loss, add equity to the total capital fund and provide reasonable return to it's shareholders. Similarly, proper identification of problem assets is required for effective utilization of assets. The bank should make continuous effort for earning more NIM in the future. The bank should be able to increase its EPS to maintain confidence of its shareholders and strengthen the market position in the competitive environment. Overall, the bank is recommended to earn maximum profit to provide adequate financial support and maintain sound financial performance in the bank.

5.3.5 As the liquidity position indicated by liquid assets to total deposit ratio, NRB balance to total deposit ratio and cash in vault to total deposit ratio

is quite satisfactory, this should be continued in the future. The bank should give priority on collecting low cost deposit and its diversification and avoid high liquidity surplus.

5.3.6 The sensitivity of the bank's earning to interest rate change varies from zero to high over the study period. Management should try to keep adequate control over IRR or other market risks and avoid their adverse effect on earning and capital of the bank. The management must make proper arrangement for minimizing the risk that arises from the mismatch of interest rate profile of the assets and liabilities. Specially, the mismatch of RSAs and RSLs repriced in the short run should be minimized. Interest rate change is uncertain and unexpected change can significantly alter the NII. Therefore, the bank is required to pay vital attention in effective functioning of ALCO to formulate appropriate strategies for assessing and minimizing the interest rates change risk and managing mismatch according to the rates change so as to attain optimum NII.

BIBLIOGRAPHY

Books

Adhikari, Nanda K. and Shrestha, Prakash.(2063). ***A Text Book on Corporate Finance***. Kathmandu: Khusbhu Prakashan Pvt. Ltd.

Gup, Benton E. and James W. Kolari.(2005). ***Commercial Banking: An Overview of Asset/Liability Management.*** 3rd ed. Singapore: John Wiley and Sons Pte. Ltd.

Hayes, L. and M. Meerchuan.(1991). ***Managing Financial Institutions.*** New Delhi: Mc Graw- Hill.

Koch, Timothy W. and S.Scott Macdonald.(2004).***Bank Management***. 5th ed. First Reprint. Singapore: Thomson Asia Pte. Ltd.

Kolb, R. and R. Rodrigeuz.(1996). ***Financial Institutions and Markets***. UK: Blackwell Publishers.

Kothari, C.R. (2004). ***Research Methodology Methods and Techniques.*** Revised 2nd ed. New Delhi: New Age International Pvt.

Pandey, I. M. (2005). ***Financial Management.*** 9th ed. New Delhi: Vikas Publishing House Pvt. Ltd.

Rose, Peters. (2002). ***Commercial Bank Management***. 5th ed. New York: Mc Graw- Hill / Irwin.

Sauders, Anthony and Marcia M.Cornett.(2004). ***Financial Markets and Institution.*** 2nd ed. New Delhi: Tata Mc Graw - Hill Publishing Company Ltd.

Sharma, Puspa Raj. (2064). ***Research Methodology with SPSS.*** 1st ed. Pokhara: Manakamana Books and Stationers.

Van Horne, James C. (2006). ***Financial Management and Policy***. 12th ed. New Delhi: Prentice - Hall of India Pvt. Ltd.

Weston, J.F. and T.E. Copeland.(1992). ***Managerial Finance.*** 9th ed. New York: The Dryden Press.

Master Dissertations

Adhikari, Dev R. (1993). Evaluating the Financial Performance of Nepal Bank Ltd. MBA diss., Tribhuvan University.

Bhandari, Krishna R. (2006). Financial Performance Analysis of Himalayan Bank Ltd. in the Framework of CAMEL. MBS diss., Tribhuvan University.

Bohara, Bhoj R. (1992). A Comparative Study of the Financial Performance of Nepal Arab Bank Ltd. and Indosuez Bank Ltd. Mater diss., Tribhuvan University.

Chand, Digendra.(2006). Financial Performance Analysis of Nabil Bank Ltd. in the Framework of CAMELS. MBS diss., Tribhuvan University.

Deoja, S. (2001) . A Comparative Study of the Financial Performance between Nepal State Bank of India Ltd. and Nepal Bangladesh Bank Ltd. Master diss., Tribhuvan University.

Gurung, Samjhana. (2007). Financial Performance Anlysis of Annapurna Finance Company Limited in the Framework of CAMEL. Master diss., Tribhuvan University.

Joshi, D. (1993) A Study of Financial Performance Analysis of Commercial Banks of Nepal with Reference to Rastriya Banijya Bank. Master diss., Tribhuvan University.

Kaini, A. (1996). A Comparative Study of Financial Performance of Nepal Arab Bank Ltd. and Nepal Grindlays Bank Ltd. Master diss., Tribhuvan University.

Ranabhat, Min B. (1997). An Analysis of Financial Performance of Finance Companies in Context of Nepal. Master diss., Tribhuvan University.

Shakya, D. R. (1995). Financial Analysis of Joint Venture Banks in Nepal. Master diss., Tribhuvan University.

Sharma, Santosh R. (2007). Financial Performance Analysis of Nepal SBI Bank Ltd. in the Framework of CAMEL. Master diss., Tribhuvan University.

Journals and Publications

ADB. (2002). Guidelines for the Financial Governance and Management of Investment Projects Financial by the ADB. Manila: ADB.

Baral, Keshar J. (2005). Health Check - up of Commercial Banks in the Framework of CAMEL: A Case Study of Joint Venture Banks in Nepal. ***Journal of Nepalese Business Studies,*** Vol. II, No. 1: 41-55.

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

Basel Committee on Banking Supervision.(2005). ***International Convergence of Capital Measurement and Capital Standards.*** Basel: Bank for International Settlements (BIS).

Berger, Allen N. and Sally M. Davies.(1994). The Information Content of Banking Examinations. ***Journal of Financial Services Research*** 14: 117-144.

Berger, Allen N., Sally M. Davies and Mark J. Flannery. (2000). Comparing Market and Supervisory Assessment of Bank Performance: Who knows What When? Board of Governors of the Federal Reserve System. Finance and Economics Discussion Series Paper no. 1998:32.

Cole, Rebel A. and Jeffery W. Gunther.(1998). Predicting Bank Failures: A Comparison of On-and Off-Site Monitoring Systems. ***Journal of Financial Services Research*** 13, No. 2 : 103 -117.

Derviz, Alexix and Jiri Podpiera.(2004). Predicting Bank CAMELS and S &P Ratings: The Case of the Czech Republic. Working Paper Series No.1.

Dziobek, C., J.K. Hobbs and D. Marston.(2002). Toward a Framework for Systemic Liquidity Policy. Washington: IMF Working Paper 00/34.

Hirtle, B.J. and J.A. Lopez.(1999). Supervisory Information and Frequency of Bank Examinations. Federal Reserve Bank of New York. ***Economic Policy Review*** 5:1-20.

International Monetary Fund. (2000). Macroprudential Indicators of Financial System Soundness. Washington: IMF Occasional Paper, 00/192.

McNally, Edward A. (1996). ***Basic Topics in Sound Bank Management***. EDI Working Paper, Washington DC: The World Bank.

Nepal Credit and Commerce Bank Limited. ***Annual Reports*** (FY 206(2064/65). Kathmandu.

Nepal Rastra Bank.(2005). ***Bank Supervision Annual Reports, 2003/04***. Kathmandu: Bank Supervision Department, Central Office, NRB.

_ _ _.(2005). ***NRB Directives***. Kathmandu: Banking Supervision Division, NRB.

_ _ _.(2007, January). ***Macroeconomic Indicators of Nepal***. Kathmandu: Research Department, Statistics Division, NRB.

_ _ _. (2008). ***Bank Supervision Annual Reprots,*** 2007/08. Kathmandu: Bank Supervision Division, NRB.

_ _ _. (2008,July). ***Macroeconomic Indicators of Nepal***. Kathmandu: Research Department, Statistics Division, NRB.

Securities, Board. (2004, September). ***Corporate Governance Practices in Nepal.*** Kathmandu SEBO Nepal.

Related Website

www.bis.org

www.nrb.org.np

APPENDIX 1

List of Commercial Banks in Nepal
As of Mid-June 2008

S.N.	Names	Operation Date (A.D.)	H.O.
1	Nepal Bank Limited	1937/11/15	Kathmandu
2	Rastriya Banijya Bank	1966/01/23	Kathmandu
3	Agriculture Development Bank Limited	1968/01/02	Kathmandu
4	NABIL Bank Limited	1984/07/16	Kathmandu
5	Nepal Investment Bank Limited	1986/02/27	Kathmandu
6	Standard Chartered Bank Nepal Limited	1987/01/30	Kathmandu
7	Himalayan Bank Limited	1993/01/18	Kathmandu
8	Nepal SBI Bank Limited	1993/07/07	Kathmandu
9	Nepal Bangladesh Bank Limited	1993/06/05	Kathmandu
10	Everest Bank Limited	1994/10/18	Kathmandu
11	Bank of Kathmandu Limited	1995/03/12	Kathmandu
12	Nepal Credit and Commerce Bank Limited	1996/10/14	Siddharthanagar, Rupendehi
13	Lumbini Bank Limited	1998/07/17	Narayangadh, Chitawan
14	Nepal Industrial and Commercial Bank Limited	1998/07/21	Biratnagar, Morang
15	Machhapuchhre Bank Limited	2000/10/03	Pokhara, Kaski
16	Kumari Bank Limited	2001/04/03	Kathmandu
17	Laxmi Bank Limited	2002/04/03	Birgunj, Parsa
18	Siddhartha Bank Limited	2002/12/24	Kathmandu
19	Global Bank Limited	2007/01/02	Birgunj, Parsa
20	Citizens Bank International Limited	2007/06/21	Kathmandu
21	Prime Bank Limited	2007/09/24	Kathmandu
22	Sunrise Bank Limited	2007/10/12	Kathmandu
23	Bank of Asia Nepal Limited	2007/10/12	Kathmandu
24	Development Credit Bank Limited *	2001/01/23	Kamaladi, Kathmandu
25	NMB Bank Limited*	1996/11/26	Babarmahal, Kathmandu

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

** upgraded to commercial bank on May 2008*

APPENDIX 2

Nepal Credit and Commerce Bank Limited
Comparative Balance Sheet

Fiscal Year (Mid-July)	2003/04	2004/05	2005/06	2006/07	2007/08
Capital and Liabilities					
Share Capital	595,000,000	693,554,000	698,415,000	699,117,000	1,399,558,000
Reserve Funds	(407,767,244)	(437,707,146)	(1,007,451,859)	(1,209,453,052)	(714,474,898)
Borrowings	13,500,000	-	13,600,000	-	-
Deposit Accounts	5,987,700,484	6,630,943,486	6,619,581,479	6,500,343,387	7,320,236,470
Bills Payable	16,568,732	5,893,006	63,604,697	14,508,617	110,170,952
Income tax Liability	-	-	-	-	2,642,908
Other Liabilities	393,510,879	592,602,699	39,951,014	32,160,460	1,23,200,971
Total Liabilities	**6,598,512,851**	**7,485,286,045**	**6,427,700,331**	**6,036,676,412**	**8,241,334,403**
Assets					
Cash	209,687,442	151,353,934	230,560,856	265,782,660	592,632,068
Bank Balance:	760,697,790	511,348,475	553,395,614	492,380,795	885,201,272
NRB	550,555,462	441,010,479	478,205,223	255,572,530	762,437,926
Other Local/ Foreign Banks / FIs	210,142,328	70,337,996	75,190,391	236,808,265	122,763,346
Money at Call or Short Notice	54,447,893	47,943,843	21,099,716	75,664,688	154,406,072
Investment	573,984,312	400,337,042	591,644,217	1,236,621,182	1,900,758,425
Loans, Advances and Bills Purchased	4,271,633,357	5,419,734,669	4,643,261,823	3,707,642,473	4,417,856,995
Fixed Assets	122,025,564	124,026,764	111,836,760	104,233,049	114,063,667
Non- Banking Assets	87,072,834	57,484,100	72,617,397	46,556,042	59,963,283
Other Assets	518,963,659	773,057,218	203,283,948	107,795,523	116,452,621
Total Assets	**6,598,512,851**	**7,485,286,045**	**6,427,700,331**	**6,036,676,412**	**8,241,334,403**

Source : NCCBL, Annual Reports.

APPENDIX 3

Nepal Credit and Commerce Bank Limited
Comparative Profit and Loss Account

Particulars	FY 2003/04	FY 2004/05	FY 2005/06	FY 2006/07	FY 2007/08
Interest Income	486,826,310	541,854,740	562,779,986	474,407,885	576,608,701
Interest Expenses	314,272,158	315,800,105	315,991,044	283,006,400	278,723,687
Net Interest Income	**172,554,152**	**226,054,635**	**246,788,942**	**191,401,485**	**297,885,014**
Commission & Discount	33,679,308	37,866,120	37,469,997	31,773,010	34,234,902
Other Operating Income	24,087,711	26,133,929	20,097,528	36,257,131	75,763,182
Foreign Exchange Gain	1,232,773	10,551,641	13,773,011	5,940,380	18,467,475
Total Operating Income	**231,553,944**	**300,606,325**	**318,129,478**	**265,372,006**	**426,350,573**
Staff Expenses	33,469,599	39,221,694	48,178,096	56,155,794	76,071,637
Other Operating Expenses	67,525,242	76,594,634	69,829,001	89,622,882	95,931,126
Foreign Exchange Loss	-	6,662,932	-	-	-
Operating Profit Before Provision	**130,559,103**	**178,127,065**	**200,122,381**	**119,593,330**	**254,347,810**
Provision for Possible Losses	124,591,746	165,579,870	782,710,348	206,867,720	163,874,580
Operating Profit	**5,967,357**	**12,547,195**	**(582,587,967)**	**(87,274,390)**	**90,473,230**
Non Operating Income/ (Expenses)	750,000	(1,819,176)	4,685,841	2,913,329	29,562,521
Write Back of Provision for Possible Loss	-		95,783,782	50,901,142	733,487,881
Profit From Regular Activities	**6,717,357**	**10,728,019**	**(482,118,344)**	**(33,459,919)**	**853,523,632**
Extra Ordinary Income / (Expenses)	-	-	(72,143,860)	(42,420,042)	(222,018,774)
Profit before Bonus and Taxes	**6,717,357**	**10,728,019**	**(554,262,204)**	**(75879961)**	**631,504,858**
Provision for Staff Bonus	671,736	-	-	-	57,409,533
Provision for Income Tax - This Year - Last Year	2,637,459 2,637,459	15,885,401 15,885,401	15,482,509 15,482,509	40048586 40,048,586	75,339,994 75,339,994
Net Profit / (Loss)	**3,408,162**	**(5,157,382)**	**(569,744,713)**	**(115,928,547)**	**498,755,331**

Source : NCCBL, Annual Reports.

APPENDIX 4

List of On- Balance Sheet and Off- Balance Sheet Assets and Weight (Risk Weighted Assets Statement)

S.N.	Particulars	Weights
A	**On - Balance Sheet Assets**	
1	Cash Balance	0%
2	Gold (Tradable)	0%
3	Balance with NRB	0%
4	Investment in Govt. Securities	0%
5	Investment in NRB Bond	0%
6	Fully secured Fixed Deposit Receipt (FDR) loan against own Fixed Deposit Receipt	0%
7	Fully secured loan against Govt. securities	0%
8	Balance with Domestic Banks and FIs	20%
9	Fully secured FDR loan against FDR of other Banks/ FIs	20%
10	Balance with Foreign Banks	20%
11	Money at Call	20%
12	Loan against Guarantee of Internationally Rated Bank	20%
13	Other Investments in Internationally Rated Bank	20%
14	Investment in Shares, Debentures, and Bonds	100%
15	Investments	100%
16	Loan Advances and Bills Purchased/ Discounted	100%
17	Fixed Assets	100%
18	All Other Assets	100%
B	**Off - Balance Sheet Items**	
1	Bills Collection	0%
2	Forward Foreign Exchange Contract	10%
3	Letter of Credit with maturity of less than 6 months	20%
4	Guarantee Provided against Counter Guarantee (CG) of A+ International Banks	20%
5	Letter of Credit with maturity of more than 6 months	50%
6	Bid Bond	50%
7	Performance Bond	50%
8	Advanced Payment Guarantee	100%
9	Financial Guarantee	100%
10	Other Guarantee	100%
11	Irrevocable Loan Commitment	100%
12	Contingent Liability in respect of Income Tax	100%
13	All Other Contingent Liabilities	100%
A+B	**Total Risk Weighted Assets**	

Source : NCCBL, Annual Reports.

APPENDIX 5

Calculation of trend (linear) line by using least square method

a) For LLP

Year	LLPR(Y)	Period Number (X)	X^2	XY
2004	9.45	1	1	9.45
2005	9.88	2	4	19.76
2006	21.84	3	9	65.52
2007	28.72	4	16	114.88
2008	17.12	5	25	85.6
N= 5	$\mid Y = 87.01$	$\mid X = 15$	$\mid X^2 = 55$	$\mid XY = 295.21$

$$\overline{X} = \frac{X}{n} = \frac{15}{5} = 3 \qquad \overline{Y} = \frac{\mid Y}{n} = \frac{87.01}{5} = 17.402$$

$$b = \frac{XY - n\overline{X}\ \overline{Y}}{X^2 - n\overline{X}^{\,2}} \qquad a = \overline{Y} - b\,\overline{X}$$

$$= \frac{(295.21)-(5)(3)\,(17.402)}{55-(5)\,(3)^2} \qquad = 17.402-(3.418)(3)$$

$$= 3.418 \qquad = 7.148$$

$$Y = 7.148+3.418X$$

b) For TETI

Year	TETIR(Y)	Period Number (X)	X^2	XY
2004	76.58	1	1	76.58
2005	73.98	2	4	147.96
2006	167.74	3	9	503.22
2007	112.21	4	16	448.84
2008	50.51	5	25	252.55
n=5	Y = 481.02	X= 15	$X^2 = 55$	XY = 1429.15

$$\overline{X} = \frac{X}{n} = \frac{15}{5} = 3 \qquad \overline{Y} = \frac{Y}{n} = \frac{481.02}{5} = 96.204$$

$$b = \frac{XY-n\overline{X}\ \overline{Y}}{X^2-n\overline{X}^{\,2}} \qquad a = \overline{Y} - b\,\overline{X}$$

$$= 96.204-(-1.391)\,(3)$$

$$= \frac{(1429.15)-(5)(3)\,(96.204)}{55-(5)\,(3)^2} \qquad = 100.377$$

$$= -1.391$$

$$Y = 100.377-1.391X$$

c) For Earning Per Employee

Year	Earning Per Employee (Y)	Period Number (X)	X^2	XY
2004	14,627.30	1	1	14,627.30
2005	(19,684.66)	2`	4	(39,369.32)
2006	(2,455,796.18)	3	9	(7367,388.54)
2007	(442,475.37)	4	16	(1,769,901.48)
2008	1768,635.93	5	25	8,843,179.65
n=5	Y = (1,134,692.98)	X= 15	X^2 = 55	XY = (318852.39)

$$\overline{X} = \frac{X}{n} = \frac{15}{5} = 3 \qquad \overline{Y} = \frac{Y}{n} = \frac{-1134692.98}{5}$$

$$b = \frac{XY - n\overline{X}\,\overline{Y}}{X^2 - n\overline{X}^{\,2}}$$

$$= \frac{(-318,852.39) - (5)(3)(-226,938.596)}{55 - (5)(3)^2}$$

$$= 308,522.655$$

$$= -226,938.596$$

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

$$= -226938.596 - (308522.655)(3)$$

$$= -1,152,506.561$$

$$Y = -1,152,506.561 + 308,522.655X$$

d) For ROE

Year	ROE(Y)	Period Number (X)	X^2	XY
2004	1.82	1	1	1.82
2005	(2.02)	2	4	(4.04)
2006	(184.36)	3	9	(553.08)
2007	(22.72)	4	16	(90.88)
2008	72.80	5	25	364
n=5	Y = (134.48)	X= 15	X^2 = 55	XY = (282.18)

$$\overline{X} = \frac{X}{n} = \frac{15}{5} = 3 \qquad \overline{Y} = \frac{Y}{n} = \frac{-134.48}{5} = -26.896$$

$$b = \frac{XY - n\overline{X}\,\overline{Y}}{X^2 - n\overline{X}^{\,2}}$$

$$= \frac{(-282.18) - (5)(3)(-26.896)}{55 - (5)(3)^2}$$

$$= 12.126$$

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

$$= -26.896 - (12.126)(3)$$

$$= -63.274$$

$$Y = -63.274 + 12.126X$$

e) For ROA

Year	ROA(Y)	Period Number (X)	X^2	XY
2004	0.05	1	1	0.05
2005	(0.07)	2	4	(0.14)
2006	(8.86)	3	9	(26.58)
2007	(1.92)	4	16	(7.68)
2008	6.05	5	25	30.25
n=5	Y = (4.75)	X= 15	X^2 = 55	XY = (4.10)

$\overline{X} = \frac{X}{n} = \frac{15}{5} = 3$ $\quad\quad$ $\overline{Y} = \frac{Y}{n} = \frac{-4.75}{5} = -0.95$

$b = \frac{XY - n\overline{X}\,\overline{Y}}{X^2 - n\overline{X}^{\,2}}$ $\quad\quad$ $a = \overline{Y} - b\overline{X}$

$= \frac{(-4.10)-(5)(3)(-0.95)}{55-(5)(3)^2}$ $\quad\quad$ $= -0.95-(1.015)(3)$

$= 1.015$ $\quad\quad$ $= -3.995$

$$Y = -3.995+1.015X$$

f) For NIM

Year	NIM(Y)	Period Number (X)	X^2	XY
2004	6.46	1	1	6.46
2005	3.56	2	4	7.12
2006	3.88	3	9	11.64
2007	4.71	4	16	18.84
2008	3.87	5	25	19.35
n=5	Y = 22.48	X= 15	X^2 = 55	XY = 63.41

$\overline{X} = \frac{X}{n} = \frac{15}{5} = 3$ $\quad\quad$ $\overline{Y} = \frac{Y}{n} = \frac{22.48}{5} = 4.496$

$b = \frac{XY - n\overline{X}\,\overline{Y}}{X^2 - n\overline{X}^{\,2}}$ $\quad\quad$ $a = \overline{Y} - b\overline{X}$

$= \frac{(63.41)-(5)(3)(4.496)}{55-(5)(3)^2}$ $\quad\quad$ $= 4.496-(-0.403)(3)$

$= -0.403$ $\quad\quad$ $= 5.705$

$$Y = 5.705-0.403X$$

g) For EPS

Year	EPS(Y)	Period Number (X)	X^2	XY
2004	0.49	1	1	0.49
2005	(0.74)	2	4	(1.48)
2006	(81.39)	3	9	(244.17)
2007	(16.56)	4	16	(66.24)
2008	35.63	5	25	178.15
n=5	Y = (62.57)	X= 15	X^2 = 55	XY = (133.25)

$$\overline{X} = \frac{X}{n} = \frac{15}{5} = 3 \qquad \overline{Y} = \frac{Y}{n} = \frac{-62.57}{5} = -12.514$$

$$b = \frac{XY - n\overline{X}\,\overline{Y}}{X^2 - n\overline{X}^{\,2}} \qquad a = \overline{Y} - b\overline{X}$$

$$= \frac{(-133.25)-(5)(3)(-12.514)}{55-(5)(3)^2} \qquad = (-12.514)-(5.446)(3)$$

$$= 5.446 \qquad = -28.852$$

$$Y = -28.852+5.446X$$

APPENDIX 6
Calculation of Industrial Average Ratio (IAR) for Liquidity Ratio of Aggregate Commercial Banks

Rs. in Million

Fiscal Year (Mid-July)	**2003/04**	**2004/05**	**2005/06**	**2006/07**	**2007/08**
Number of Commercial Banks	**17**	**17**	**18**	**20**	**25**
Liquid Assets	50,385.00	50,222.80	61,817.30	64,930.30	79,010.50
Total Deposit	232,576.30	250,464.90	289,975.90	334,453.30	421,523.70
Liquid Assets/ Total Deposit (%)*	21.66	20.05	21.32	19.41	18.74
NRB Balance	24,227.00	20,234.00	22,907.30	22,597.70	23,857.30
Total Deposit	232,576.30	250,464.90	289,975.90	334,453.30	421,523.70
NRB Balance/ Total Deposit (%)*	10.42	8.08	7.90	6.76	5.66
Cash in Vault	4,719.30	5,147.80	6,453.60	7,813.80	13,010.71
Total Deposit	232,576.30	250,464.90	289,975.90	334,453.30	421,523.70
Cash in Vault/ Total Deposit(%)*	2.03	2.06	2.23	2.34	3.09

Source : Macroeconomic Indicators of Nepal, Jan.2007, July 2008.
**Industrial Average Ratio*

APPENDIX 7

Share Capital

Share Capital	Authorized Capital (Rs.)	Issued Capital (Rs.)	Paid up Capital (Rs.)
Fiscal Year (Mid-July)			
2003/04	1,000,000,000 (10,000,000 equity shares @ Rs.100 per share)	1,000,000,000 (10,000,000 equity shares @ Rs.100 per share)	595,000,000 (7,000,000 equity shares @ Rs.100 per share of which 4,900,000 equity shares fully paid and 2,100,000 equity shares paid @ Rs.50 per share)
2004/05	1,000,000,000 (10,000,000 equity shares @ Rs.100 per share)	1,000,000,000 (10,000,000 equity shares @ Rs.100 per share)	693,554,000 (7,000,000 equity shares @ Rs.100 per share of which 6,871,080 equity shares fully paid and 128,920 equity shares paid @ Rs. 50 per share)
2005/06	1,000,000,000 (10,000,000 equity shares @ Rs.100 per share)	1,000,000,000 (10,000,000 equity shares @ Rs.100 per share)	698,415,000 (7,000,000 equity shares @ Rs.100 per share of which 6,968,300 equity shares fully paid and 31,700 equity shares paid @ Rs. 50 per share)
2006/07	1,000,000,000 (10,000,000 equity shares @ Rs.100 per share)	1,000,000,000 (10,000,000 equity shares @ Rs.100 per share)	699,117,000 (7,000,000 equity shares @ Rs.100 per share of which 6,982,340 equity shares fully paid and 17,660 equity shares paid @ Rs. 50 per share)
2007/08	2,000,000,000 (20,000,000 equity shares @ Rs.100 per share)	2,000,000,000 (20,000,000 equity shares @ Rs.100 per share)	*1,399,558,000 (14,000,000 equity shares @ Rs.100 per share of which 13,991,160 equity shares fully paid and 8,840 equity shares paid @ Rs. 50 per share)

Source: NCCBL, Annual Reports.

*Note: *refers issue of 7,000,000 right shares (1:1) @ Rs. 100 per share*