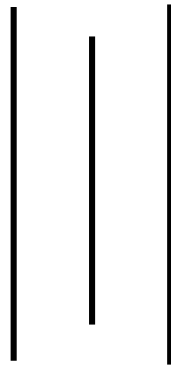


**A STUDY ON CAMELS RATING OF COMMERCIAL BANKS  
(With Reference to Selected Commercial Banks in Nepal)**

**By  
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**A Thesis Submitted to:  
Office of the Dean  
Faculty of Management  
Tribhuvan University**



*In partial fulfillment of the requirement for the degree of  
Master of Business Studies (MBS)*

**Kathmandu, Nepal  
November 2010**

## **RECOMMENDATION**

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Entitled:

**A STUDY ON CAMELS RATING OF COMMERCIAL BANKS  
(With Reference to Selected Commercial Banks in Nepal)**

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## **DECLARATION**

I hereby declare that the work reported in this thesis entitled “**A Study on CAMELS Rating of Commercial Banks (With Reference to Selected Commercial Banks in Nepal)**” submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the degree of Master of Business Studies (MBS) under the supervision of **Prof. Snehalata Kafle** and **Pitri Raj Adhikari** of Shanker Dev Campus, T.U.

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## **ABBREVIATIONS**

BAFIO	:	Banking and Financial Institutional Ordinance
BCBS	:	Basel Committee of Bank Supervision
BHCs	:	Bank Holding Companies
BIS	:	Bank of International Settlement
BOK	:	Bank Of Kathmandu Limited
FDIC	:	Federal Deposit Insurance Corporation
FFIEC	:	Federal Financial Institution Examination Council
FIs	:	Financial Institutions
FISD	:	Financial Institution Supervision Department
HBL	:	Himalayan Bank Limited
MPIS	:	Macroprudential Indicators
NABIL	:	Nepal Arab Bank Limited
NBOC	:	Nepal Bank of Ceylon Ltd
NCC	:	Nepal Credit and Commerce Bank Limited
NEPSE	:	Nepal Stock Exchange
NGOs	:	Non-Government Organizations
NIBL	:	Nepal Investment Bank Limited
NIC	:	Nepal Industrial and Commercial Bank Limited
NRB	:	Nepal Rastra Bank (Central Bank)
NSBI	:	Nepal SBI bank ltd
OCC	:	Controller of the Currency
OIG	:	Office of Inspector General
PCA	:	Prompt Corrective Action
SBL	:	Siddhartha Bank Limited
SCB	:	Standard Chartered Bank
SCBNL	:	Standard Chartered Bank Nepal Limited
SEBON	:	Security Exchange Board Nepal
UFIRS	:	Uniform Financial Institutional Rating System

# **CHAPTER - I**

## **INTRODUCTION**

### **1.1 Background**

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

The ability to monitor the soundness of the financial sector presupposes the existence of valid indicators of the health and stability of the financial systems. These macro prudential indicators (MPI's) allow for assessments to be based on objective measure of financial soundness. If MPI's are made publicly available, they enhance disclosure of key financial information to the market. In addition, if the indicators are comparable across countries they facilitate monitoring of the financial system, not only at the national level but also globally. The latter is crucial in view of the magnitude and mobility of the international capital and the risk of contagion of financial crises from one country to another like current financial crisis.

Hilbers, Krueger and Moretti (September 2000) in their publication recommended CAMELS framework as one commonly used framework for

analyzing the health of individual institutions, which looks at six major aspects of the FI: capital adequacy, assets quality, management soundness, earnings, liquidity, and sensitivity to the market risk. These have shown that certain macroeconomic trends have often preceded banking crisis. Assessments of financial soundness therefore need to incorporate the broad picture particularly an economy's vulnerability to capital flow reversals and currency crisis.

The open market and liberalization policies directly influence the world economy which creates the environment for the establishment, growth and development of the financial institutions. Financial institutions are the specialized firms that facilitate the transfer of funds from savers to borrowers. They act as a bridge between the savers and users. They collect scattered deposits and give loans to maximize their wealth (Poudel and Others, 2006). The financial institutions (FIs) in Nepal can be broadly classified into two parts: banking and non-banking financial institutions. Banking financial institutions include commercial banks and development banks. Non-banking financial institutions include finance company, cooperative institution, provident fund, insurance company and mutual fund (Adhikari and Shrestha, 2063).

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

affirms in its introduction text of the reversed UFIRS that it has over the years proven to be an effective internal supervisory tool for evaluating the soundness of FIs on a uniform basis and for identifying those institutions requiring special attention or concern. The press release reasons number of changes has occurred in the banking industry and in the federal Supervisory agencies policies and procedures, for the revision of 1979 rating system. The revisions to UFIRS with inclusion of the sixth component addressing sensitivity to market risks will be in effect from January 1, 1997. The direct public beneficiaries of private supervisory information, such as that contained in CAMELS rating, would be depositors and holders of banks securities. Small depositors are protected from possible bank default. Rather than evaluating a bank solely on its performance to date or focusing on areas of minimal risk, it is imperative to evaluate both banks performance and management's ability to identify, measure, monitor, and control risk. Nepal Rastra Bank (NRB), Financial Institutions regulatory in Nepal, directed this concept vide circular Bia. Bya. Pa. Pa. 66/057 dated 26-04-2001 by implementing minimum capital requirement standard in Nepal and by implementing Basel II also. The purpose of this research is to focus on identifying and monitoring current and potential areas of risk in one of the major FIs of Nepal.

A banker or bank is a financial institution that acts as a payment agent for customers, and borrows and lends money. According to Oxford English Dictionary, "Bank is an establishment for the custody of money received from or on behalf of its customers its essential duty is to pay their draft on it, its profit arise from its use of the money left unemployed by them." Bank can be defined as an institution which renders a lost of financial services besides taking deposits and giving loans. Nowadays, the functions of a bank are not limited to the taking the deposits from general public and providing it to the person or organization that may use such money in better way. Bank provides other much more important services to its clients and also the operations of bank, today, are not confined within the boundary of a nation. Banks are



becoming more international in their service providing capacity. Banks established to support the country's commercial sector are called commercial banks. These banks collect the saving from different part of the society and provide loans to the productive sector of the economy. Commercial banks also provide the overdraft facilities to the interested clients, exchange the foreign currency, transfer the money from one part to other, discount the exchange paper, provide security to invaluable and also play the role of the trustee.

## **1.2 Profile of the Banks**

### **1.2.1 SCBNL**

Standard Chartered Bank Nepal Limited was established in 1987 as a joint venture bank with Nepal Bank Limited. Today the Bank is an integral part of Standard Chartered Group who has 75% ownership in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status of the largest international bank currently operating in Nepal. Standard Chartered Bank Nepal Limited, offers a full range of banking products and services in Wholesale and Consumer banking, catering to a wide range of customers from individuals, to mid-market local corporate to multinationals and large public sector companies, as well as embassies, aid agencies, airlines, hotels and government corporations.

### **1.2.2 NABIL**

Nepal Arab Bank commonly and popularly known as the NABIL Bank was established on July 12<sup>th</sup> 1984 under a technical service agreement with Dubai Bank Limited, Dubai, which was later merged with Emirates Bank LTD, Dubai. NABIL Bank is the first joint venture bank in the country. It was incorporated with the objective of extending international standard modern banking services to various sectors of the society. NABIL, with 50% local ownership, 20% financial institutions and 30% individual ownership, is a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal

as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business.

### **1.2.3 HBL**

Himalayan Bank Limited was incorporated in 1992 by the distinguished business personalities of Nepal in partnership with Employees Provident Fund and Habib Bank Limited, one of the largest commercial banks of Pakistan. Banks operation was commenced from January 1993. It is the first commercial bank of Nepal with maximum share holding by the Nepalese private sector with 80% local ownership and 20% foreign ownership, the local ownership comprises of 14% financial institution, 51% organized institution and 15% general public. Besides commercial activities, the Bank also offers industrial and merchant banking.

### **1.2.4 NIBL**

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one the largest banking group in the world. With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen acquired the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd. on April 2002.

### **1.2.5 BOK**

Bank of Kathmandu was established in 1995 as a joint venture between Siam Commercial Bank and Nepalese Promoters. Siam Commercial Bank held 30% and Nepalese promoters held 70%. Siam Commercial Bank sold its stake to Nepali Promoters in the Year 1998, after which it has become 100% Nepalese-Owned Bank.

### **1.2.6 SBI**

SBI has been in operation since 1993 and is a joint venture with State Bank of India. State Bank of India holds 50% of share capital of Nepal SBI Bank remaining 50% are with Nepalese shareholders including 5% financial institutions, 15% organized institutions and remaining 30% general public. The management control also rests with State Bank of India.

### **1.2.7 SBL**

Siddhartha Bank is established in the Year 2002. The head office is located in Kathmandu with 100% local ownership divided into 16.79% organized institution and remaining 83.21% others. The bank has started its operation nationwide.

### **1.2.8 NCC**

NCC bank formally registered as Nepal Bank of Ceylon Ltd. (NBOC) , commenced its operation on 14<sup>th</sup> October 1996 as a joint venture with Bank of Ceylon, Sri Lanka. It was the first private bank with the largest authorized capital of NPR 100 million. The head office of this bank is located at Siddhartha Nagar, Rupandehi, the birth place of LORD BUDDHA, while its corporate office is placed at Bagbazar, Kathmandu.

### **1.2.9 NIC**

NIB bank, which commenced operation on 21 July 1998, it is the first commercial bank in the country to be capitalized at NPR 500 million. The bank was promoted by some of the prominent business houses of the country. Promoters hold 65% of the shares while remaining 35% is held by the general public. NIC bank is one of the most widely held companies in Nepal with nearly 32000 shareholders. The shares of the bank are actively traded in Nepal Stock Exchange with market capitalization of about NPR 12119 million as at the year ended 15 July 2008.

### **1.3 Focus of the Study**

In Nepal NRB uses the CAMELS (Capital, Assets, Management, Earnings, Liquidity and Sensitivity) system for accessing the financial soundness of the commercial banks and accordingly for the first time ranked the banks based on the statistics of 3<sup>rd</sup> quarter of the FY 2061/62. However the office of the Inspectors General (OIG) Audit report, USA (September 2002) replaced CAMELS with SCOR for review program of the FDIC Supervised banks. SCOR uses quarterly Reports of Condition and income (call reports) to rate institutions.

The research study is focused on assessing the financial condition and performance of the Banks by using descriptive and analytical research design, prescribed by UFIRS and in accordance to BASEL accord. The study encompasses all the six components of CAMELS and carried out with annual reports of condition and income. The tools under CAMELS will be applied to diagnose the financial performance of the commercial banks selected. More specifically, the study focuses on the current analysis of Capital Adequacy Ratio, non performing loan composite, total expenses to revenue ratio, earning per employee, return on equity, return on assets, net interest margin, earning per share and liquidity with respect to NRB standards for the period 2065/66.

### **1.4 Statement of the Problem**

The main objective of a Financial Institution (FI) is to increase its returns for its owners which often comes, however at the cost of various increased risk: Credit risk, Liquidity risk, Interest rate risk, Interest, Market risk, Off balance sheet risk, Foreign exchange risk, Country risk, Technology risk, Operational risk and Insolvency risk. The government owned banks in Nepal are almost running in loss. It is also very difficult to call the private sector banks sound though they are earning profit since they may be exposed to aforesaid risks. Questions are being raised over the validity of their balance sheet and profit and loss accounts. If the suspicion comes true, it will prove very costly to the

depositors, creditors and national economy as a whole. In view of this it is important that FIs manage these risks and have appropriate policies, processes, or practices in place that management follows and uses.

The profitability position of a firm is generally known through financial statements but a major question emerges whether these are adequate to reflect the overall performance of company. Hence, there is a need to assess the overall condition and strengths of the financial institutions. For the very purpose, several assessment tools have been developed by experts and financial institutions all over the world. One of them is CAMEL. The elementary problem of this research is to scrutinize the financial condition of the banks in the framework of CAMELS and is an attempt to come back with the following research questions.

- ) How the banks manage their Capital Adequacy?
- ) What is the purpose of rating system?
- ) Is it in line with the regulated minimum capital requirements?
- ) Is the capital structure consisting of only equity or debt as well? And how the capital structure affects the bank's profitability.
- ) What are the impacts of assets quality on banks financial statements?
- ) What is the level of Assets composition and Risk Weighted Assets of the banks and what is the status of the banks loans and loan provision mix?
- ) What is the proportion of loan loss provision in relation to the total loan?
- ) What is the position of non-performing loan of the banks?
- ) How the banks are managing their expenses with respect to revenues?
- ) Whether the management organization and function is sound or not?
- ) What control and monitoring mechanism have they maintained?
- ) What is the level of earnings and is there stability in earnings?
- ) Whether the bank is able to utilize its assets in proper manner for adequate return?
- ) How the return is is effective to the shareholder of the banks?

- J Is the liquidity position of banks adequate in consideration of the current level and prospective sources of liquidity compared to funding needs?
- J Is the banks are able to maintain the Cash Reserve Ratio(CRR) and Statutory Liquidity Ratio(SLR) as per the directives of Nepal Rastra Bank.?
- J What is the impact of interest rate risk in banks?
- J How changes in interest rates can affect banks earnings?

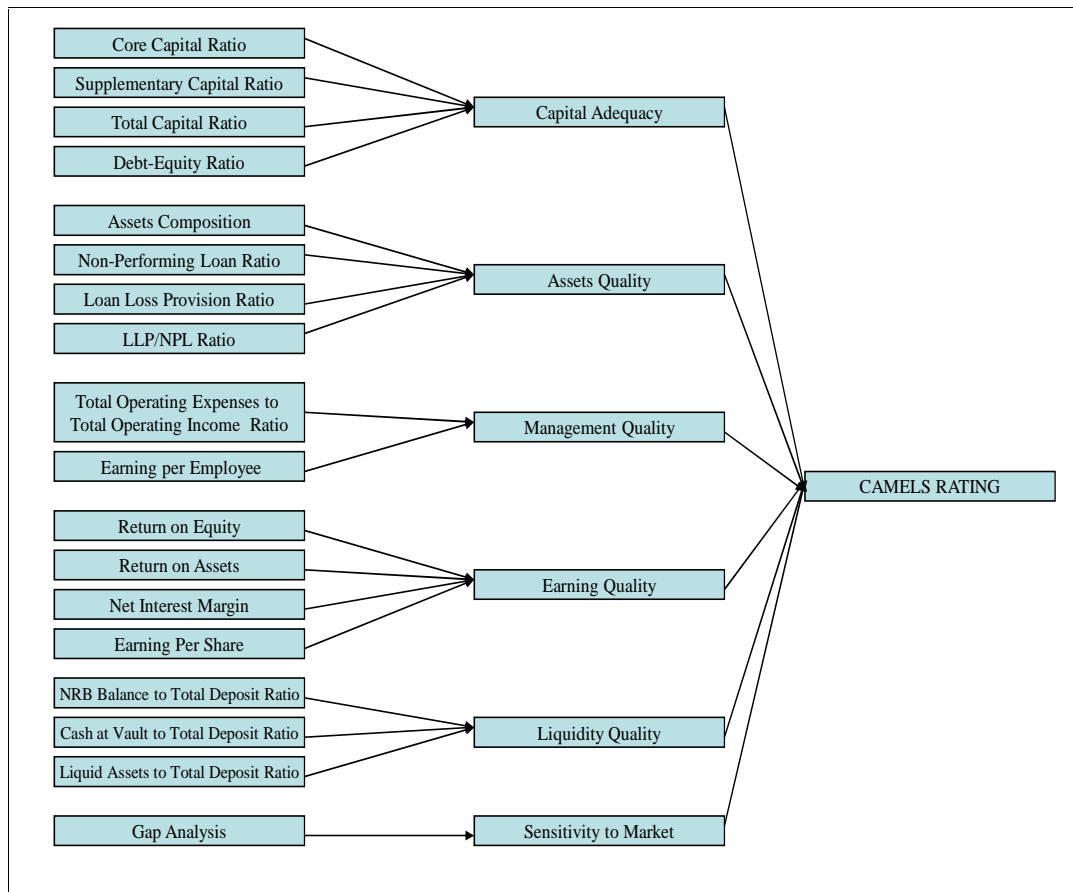
### **1.6 Theoretical Framework**

The study is based on the financial statements published publicly in the annual report by the respective banks. The CAMELS rating is done from the result of each individual ratio from the components of the CAMELS. The component consists of (C) Capital Adequacy ratio

- (A) Assets Management
- (M) Management
- (E) Earning Quality
- (L) Liquidity and
- (S) Sensitivity to the market.

The ranking will be done on each sub-component of the each component and each component will be rate according to the sub-components average. And final rating is based on the components rating. The framework is illustrated in the figure below.

**Figure 1.1**  
**Theoretical Frameworks**



The above figure shows the framework of the study. First the core capital ratio, supplementary capital ratio, total capital ratio and debt equity ratio will be calculated with the reference of the financial of each banks then the capital adequacy ratio will be obtained from the group average of all the above. Similarly assets composition, non performing loan ratio, loan loss provision and loan loss provision ratio will be calculated to obtained assets quality. The management quality will be obtained from the group average of earning per employee and total operating expenses to total operating income ratio. With the group average of return on equity, return on assets, net interest margin and earning per shares earning quality shall be obtained. The group average of NRB deposit to total deposit ratio, cash at vault to total deposit ratio and liquid assets to total deposit ratios are calculated to get liquidity quality and the gap

analysis will be used to get the sensitivity to the market. Finally, from the average of the entire six components final CAMELS rating shall be obtained.

### **1.6 Objectives of the Study**

The national and international economy has undergone through drastic changes over a decade and abruptly since the last seven years. The threat imposed by Nepalese economy, have made it imperative to search for opportunities in order to curb any hindrances to the economical development. Because of the importance and relevance of banks in shaping the economy, it has become important to review the banking industry and its business strategies.

In line with the statement of problem, the main objectives of this study is to analyze the financial condition of the selective class A commercial banks excluding three government banks (Nepal Bank Limited, Rastriya Banijya Bank and Agricultural Development Bank) for the year 2065/66 and following are the objectives on specific terms:

- ) To analyze the Capital Adequacy and Liquidity Position of the banks under study, compare with the regulatory minimum capital requirements.
- ) To explore the quality of assets and evaluate risk weighted assets of the banks with loan loss provisions and the non-performing loan.
- ) To examine the effective utilization of equity and assets of the banks.
- ) To evaluate the level of earnings and its stability during the period under reference.
- ) To access the sensitivity to markets.

### **1.7 Significance of the Study**

Apart from aiming to gain knowledge, research itself adds new to the existing literature. The significance of this study lies mainly in identifying problem or deteriorating FI's, as well as for categorizing the institutions with deficiencies in particular component areas. Further, it assists in following safety and soundness in assessing the aggregate strength and soundness of the industry. The research is prepared in order to supplement present examination



procedures applicable to FIs of Nepal. As such, the study assists the stakeholders in fulfilling their collective mission of maintaining stability and public confidence. It would be helpful for the senior management involved in day to day operations. Bankers and examiners, alike can use this report to further their understanding of banks financial conditions. It would also be helpful for the rating agencies to rate the commercial banks in Nepal. As CAMELS has little been researched in the context of Nepal, the scholars will find it a literature for their future research works.

### **1.8 Limitations of the Study**

The evaluations made herein are taken from only nine commercial banks. It is focused on the financial analysis of the study units in the framework of the six components of CAMELS system. The study remains largely in the realms of offsite monitoring system. The proxy financial tools are used to measure the qualitative factors like the Management component. The banks audited and somewhere unaudited reports of conditions for the period 2065/66 are the primary sources of information and treated as authentic. These are extracted from the banks itself and from Nepal Rastra Bank.

### **1.9 Organization of the Study**

The study is organized into five chapters: Introduction, Review of Literature, Research Methodology, Data Processing and Analysis and Summary, conclusions and Recommendations. An introduction chapter includes background, focus of the study, statement of the problem, objectives, significance, limitations of the study and organization of the study. Similarly, second chapter deals with conceptual review and review of related studies. In third chapter research methodology describe the methodology adopted in this study. In the same way, presentation and analysis of data is included in chapter four. Finally summary, conclusions and recommendations of the work are given in chapter five. Besides, bibliography and appendix are also shown at the last of the study.

## **CHAPTER - II**

### **REVIEW OF LITERATURE**

In this chapter, the focus has been made on the review of literature relevant to the CAMELS rating of commercial banks. Every possible effort has been made to grasp knowledge and information that is available from the libraries, document collection centers, other information managing bureaus and concerned commercial banks. This chapter will help to take adequate feed back to broaden the information base and inputs to the study. Conceptual framework given by different authors, research scholars, practitioners etc, will be reviewed from books, research papers, annual reports, and articles etc, which are arranged into the following order:

#### **2.1 Conceptual Review**

This sub-chapter presents the theoretical aspect of the study. It covers the historical development of financial system and evolution of commercial banks in Nepal, concept of commercial banks, functions of commercial banks and financial performance approaches.

##### **2.1.1 Historical Development of Financial System and Evolution of Commercial Banks in Nepal**

Nepal's formal financial system begun in 1937 A.D. with the establishment of Nepal Bank Ltd (NBL) which was the first commercial bank in the country. The Nepal Rastra Bank (NRB), the country's central bank, was established in 1956 A.D. under the NRB Act 1955 A.D. and the Rastriya Banijya Bank (RBB) was set up in 1966 A.D. as the second commercial bank under the RBB Act with a view to expand activities in the banking sector and to provide better banking facilities to the people. In the developing stage of financial institutions in Nepal, the establishment of Agriculture Development Bank was another significant achievement. It was established in 1968 A.D. under the ADBN Act

1967 A.D. to address the needs of agriculture sector (Shrestha and Bhandari, 2004).

The mid-July 2006 bulletin published by Nepal Rastra Bank shows that there is a tremendous growth in the number of financial institution in Nepal in the last two decades. At the beginning of the 1980s when financial sector was not liberalized, there were only two commercial banks, and two development banks performing banking activities in Nepal. There were no micro-credit development banks, finance companies, cooperatives and non –government organizations (NGOs) with limited banking transactions. But it speeded up this process only in early 1990s. Private sector rushed into the finance industries especially after the restoration of democracy in 1990. Most of the commercial banks came into operation during the decade of 1990s. After the liberalization of the financial sector; financial sector has made a hall–mark progress both in terms of the number of financial institutions and beneficiaries of financial services. By mid - January 2009, NRB licensed bank and non-bank financial institutions totaled 235. Out of them, 26 are commercial banks, 58 development banks, 79 finance companies, 12 micro- credit development banks, 16 saving and credit co-operatives and 47 NGOs.

**Table 2.1**  
**Growth of Financial Institutions**

Types of Financial Institutions	Number of Institutions							
	1980	1985	1990	1995	2000	2005	2006	August 2010
<b>Commercial Banks</b>	2	3	5	10	13	17	18	28
<b>Development Banks</b>	2	2	2	3	7	16	29	58
<b>Finance Companies</b>				21	45	60	70	79
<b>Micro Credit &amp; Development Banks</b>				4	7	11	11	12
<b>Saving &amp; Cooperatives</b>				6	19	20	19	16
<b>NGO's</b>					7	47	47	47
	4	5	7	44	98	181	194	235

*Source: Banking and Financial Statistics, NRB*

### **2.1.2 Concept of Commercial Banks**

A commercial bank is a profit-seeking firm, dealing in money or rather dealing in claims to money. It is a financial institution that creates deposits liabilities which circulates money unlike the deposits of other financial institutions. In fact, the greater part of money supply is the direct consequence of the profit-creating activities of commercial banks. A commercial bank is an institution that operates for profits. Like other industrial enterprise, a bank too, seeks to earn maximum income through the suitable employment of its resources. It is a financial intermediary, middleman between people with surplus funds and people in need of funds. It accepts deposits for the purpose of lending or investment and thereby hopes to make profit, which are adequate enough to enable the bank to pay interest at the prescribed rates to its depositors, meet establishment expenses, build reserves, pay dividend to the shareholders etc. In general, commercial banks are those FIs, which play the role of financial intermediary in collection and disbursement of funds from surplus unit to deficit unit.

Upadhyaya and Tiwari (1998) stresses that the commercial bank is established with a view to provide short term debt necessary for trade and commerce of the country along with other ordinary banking business such as collecting the surplus in the form of deposit, lending debts by discounting bills of exchange, accepting valuable goods in security, acting as an agent of the client etc. In the same way, Abrol and Gupta (2002) explain that principally a commercial bank accepts deposits and provides loans primarily to business firm. On the other hand, the broad concept of commercial bank holds that the commercial bank is a banking institution other than central bank. The commercial bank is the only institution other than central bank permitted to accept demand and time deposits (Crosse, 1963).

Commercial Banks have the following functions

- ) Accepting Deposits
- ) Loans and advances

- ) Foreign Trade Operations
- ) Utility Facilitation Functions
- ) Agency Functions

### **2.1.3 Approaches to Supervision**

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

This *Economic Letter* selectively surveys this literature, focusing mainly on studies using CAMELS ratings. These supervisory ratings are assigned at the end of exams and are directly disclosed only to senior bank management and to the appropriate supervisory personnel. CAMEL's ratings are commonly viewed as summary measures of the private supervisory information gathered by examiners regarding banks' overall financial conditions, although they also reflect available public information. The general consensus in this literature is that the private supervisory information contained in CAMELS ratings is useful in the supervisory monitoring of banks. Furthermore, to the extent that this information filters out into the financial markets, it appears to affect the prices of bank securities. Thus, private supervisory information in CAMELS ratings also appears to be useful in the public monitoring of banks.

Overseeing who operates banks and how they are operated, referred to as bank supervision. Or more generally as prudential supervision, is an important method for reducing adverse selection and moral hazard in the banking business, since banking industry reflect the economy and banks can be used by crooks or overambitious entrepreneurs to engage in highly speculative

activities, such as undesirable people would be eager to run a bank (Charles Keating Jr. is an example given by Eakins and Mishkin). Effective supervision is a prerequisite for growth and stability of the financial system. Supervision facilitates the detection of frauds, malpractices, abuses of power by management and undesirable trends and imprudent practices such as, deterioration in the quality of loan portfolio and insider lending. So at present all commercial banks are supervised by the Bank Supervision Department.

Banks and financial institutions are supervised in most, if not all, countries. However, the nature of the supervision and its detailed application varies greatly from country to country depending upon the character of its industry, size, complexity and their priorities. The past has shown that although the cost of supervision is high, the cost of poor supervision is even higher. The cost of bank failure to society as a whole is higher than the private cost (the loss to the shareholders), which is the compelling reason for supervising banks. Some of the major justifications behind the supervision are:

- ) To maintain stability and confidence in the financial system, thereby reducing the risk of loss to depositors and other stakeholders.
- ) To ensure that banks operate in a safe and sound manner and they hold sufficient capital to support the risks that arise in their business.
- ) To foster an efficient and competitive banking system that is responsive to the public's need for good quality and an easy access of financial services at a reasonable cost.

After the institution of Nepal Rastra Bank, a Supervision Unit was established in NRB to execute the supervision function. Gradually as the supervisory function started to gain prominence, this unit was converted into "Division" in 2031 B.S., under the Banking Development and Credit Department and later in 2041 B.S. into a separate department named Inspection and Supervision Department. Today, there are two separate departments executing the supervision function of NRB. Bank supervision department (BSD) is

responsible for the inspection and supervision of all the commercial banks while Financial Institution Supervision Department (FISD) oversees the inspection and supervision of all other Financial Institutions licensed by NRB. The **Bank Supervision Department** spearheads the supervisory functions of the Central Bank. The most common supervisory tools used by the regulatory agencies in promoting safety and soundness are on-site supervision and off-site supervision. Both on-site and off-site supervision (inspection reports) helps to discourage the unnecessary delays.

### **2.1.3.1 On-site Supervision**

The BSD is responsible to conduct the on-site examination of the commercial banks in accordance with the annual plan of the department. Almost more than two thirds of the department's staff is dedicated to these activities. On-site examinations are carried out at the banks' premises and involve examination of their business books and assessment of their technical, professional and organizational resources. The objectives of on-site inspection conducted by Bank Supervision Department can be summarized as:

- ) To determine the commercial banks' financial position and the quality of its portfolios and operations so as to ensure that it is not operating against the interests of the depositors.
- ) To assess and appraise the competence and capability of the commercial bank's management and staff, as the quality of the institution's management will determine the soundness of its operation.
- ) To ascertain whether the bank is complying with applicable laws, regulations and monetary measures issued by the NRB.
- ) To evaluate the adequacy of the bank's records, systems, and internal controls.
- ) To test the accuracy and validity of the data submitted to the NRB by the Banks.

### **2.1.3.2 Off-site Supervision**

This BSD carries out the off-site surveillance of all the commercial banks, operating in Nepal. The core objective of this function is to conduct periodic financial review of the banks in order to identify the potential problems and to gauge the compliance to prevailing laws and statute as well as to support the on-site function of the department. In order to pursue its objectives through systemic development, the Department has devised an off-site supervision manual, which has been put into effect. The supervision manual provides guidelines on the objectives, procedures and prescribed documents of the off-site supervision. The inspection and supervision Bylaw, 2059 identifies the following key objectives of an off-site supervision of the Bank Supervision Department.

- ) To obtain regular information in respect of financial condition and health of the commercial banks.
- ) To identify potential problems of commercial banks in the absence of onsite inspection.
- ) To help and strengthen the quality of on-site inspection.
- ) To ascertain the compliance status to the applicable laws, regulations and directives on the basis of financial statements and other documents obtained from the commercial banks.

The off-site aspect reviews and analyses the financial conditions of banks using prudential reports, statutory returns and other relevant information. It also monitors trends and developments for the banking sector as a whole. Industry reports are generated on quarterly basis. The Off-Site Supervision Unit is responsible for supervising banks' operations on the basis of data and reports submitted by banks. On the basis of prudential analysis of different financial indicators by banks, groups of peer banks and the banking system as a whole, the banks are rated in terms of the level of risk involved in their business operations in accordance with the adopted methodology for analysis.



The Off-Site Surveillance Unit monitors, reviews, and analyzes financial institutions' returns and prepares reports based on said returns and serve as **an early warning** device to detect emerging problems before they lead to an opened crisis. The returns are used by the supervisors/examiners for the purpose of determining banks' exposures to risk, the effect on banks' profits, etc. Some basic ratios (the financial soundness indicators) are computed from these returns and are used to analyze such important areas as Capital Adequacy, Assets Quality, Earnings, Liquidity and sensitivity to market risk (CAELS rating). The off-site review and analysis deal with capital, liquidity, which can be quantified, but is less well suited to qualitative issues such as management strength and operational risks. Besides, off-site supervision is taken as an early warning system to identify potential problems in commercial banks as well as for the compliance of applicable provisions. This supports and strengthens the quality of on- site examination.

#### **2.1.4 Financial Performance Approaches**

Every business entity should be able to enhance their competitive strength through achieving the financial goals. Commercial bank's strength is usually thought of both in quantitative terms, namely a firm's intrinsic financial condition as reflected in its capital, reserves, asset quality, earnings and liquidity, and in qualitative terms, as evidenced in the underlying quality and effectiveness of management, internal controls, and risk management policies and practices. The soundness of commercial banks is found on a strong balance sheet and strong management. There are many approaches for measuring the performance of commercial banks focuses on balance sheet. They are ROA, ROE, RAROC, RORAC and CAMEL (Koch and Macdonald, 2007). Among them, CAMEL-style method of analysis has been considered in this study. Within this framework, the financial condition and performance of the banks has been assessed.

#### **2.1.4.1 Return on Assets (ROA) Approach**

The rate of return on assets is one of the most common performance measurement approaches of commercial banks. It measures the ability of management to utilize the real and financial resources of the firm to generate returns. Further it examines the profitability of a concern in terms of the relationship between profit earned and assets employed in the firm. It shows the effectiveness of the utilization of assets. It is primarily an indicator of managerial efficiency; it indicates how capably the management of the firm has been converting the institution's assets into net earnings (Rose, 2002). The return on assets provides information on how efficiently a bank is being run. The higher the bank's return on assets the better it is doing in operation and vice versa.

#### **2.1.4.2 Return on Equity (ROE) Approach**

The return on equity is also one of the popular performance measurement approaches of commercial banks. Equity holders of company are concerned about how much the company is earning on their equity investment. This information is provided by the return on equity. It measures the rate of return on shareholders' investment. It is the aggregate returns to stockholders before dividends. The higher the return the better, as company can add more to retained earnings and pay more in cash dividends when profits are higher (Koch and Macdonald, 2007). It measures the rate of return flowing to the bank's shareholders. It indicates how well the bank has utilized the resources of the owners.

#### **2.1.4.3 Risk Adjusted Return on Capital (RAROC) Approach**

Risk adjusted return on capital is an effective tool for measuring risk - adjusted financial performance. In the 1990s Banker's Trust popularized a method of evaluating loans known as RAROC. Today, many banks and financial institutions employ RAROC to measure managerial performance (Gupta and

Kolari, 2005). It is a risk-adjusted framework for profitability measurement and profitability management. It is defined as the ratio of risk-adjusted return to economic capital. Economic capital is attributed on the basis of three risk factors: market risk, credit risk and operational risk. The use of risk-based capital strengthens the risk management discipline within business lines, as the methodologies employed quantify the level of risk within each business line and attribute capital accordingly. Using this method, income is adjusted for risk. Typically, income is adjusted for expected losses. It provides a uniform view of profitability across businesses (Strategic Business Units / divisions.)

#### **2.1.4.4 Return on Risk Adjusted Capital (RORAC) Approach**

Return on risk adjusted capital is also a popular method of measuring risk adjusted profit of any commercial banks. Using this method, capital is adjusted for risk. Typically, capital is adjusted for a maximum potential loss based on the probability of future returns or volatility of earnings. Today, many large banks and financial institutions evaluate their line of business profitability and risk via RAROC or RORAC system (Koch and Macdonald, 2004).

#### **2.1.5 CAMELS Approach**

**CAMELS** is an ideal rating system, practiced worldwide by Central Banks and rating agencies, to evaluate and analyze safety and soundness of a bank or financial institution. The acronym **CAMELS** refers to six components namely **C**apital Adequacy, **A**ssets Quality, **M**anagement Quality, **E**arnings Quality, **L**iquidity and **S**ensitivity to Market Risks. It has proved as an effective internal supervisory tool for evaluating the soundness of banks and financial institutions on a uniform basis and for identifying those institutions requiring special supervisory attention or concern. Since January 1, 1997 the ratings became **CAMELS** with the addition of a market sensitivity rating (Koch and Macdonald, 2007). Under such framework, individual components are typically evaluated on a rating scale. These individual ratings are then aggregated to arrive at a composite ranking of the institution, which usually reflects

differential emphasis on individual components, and not a simple average. A prime task of bank supervision is to judge or evaluate the financial condition of the banks for which they are responsible.(A Grier Waymond,2009).CAMELS rating system was originally used by the three federal banking supervisors [the Federal Reserve, the FDIC, and the Office of the Comptroller of the Currency (OCC)] and other financial supervisory agencies to provide a convenient summary of firm conditions at the time of an exam (McNally, 1996). The rating system known as the CAMELS serves as a supervisory tool to help identify those banks and non banks that are having problems and require increased supervision. Bank Supervision Department and Financial Institution Supervision Department have been using the CAMELS based approach for the on-site examination of bank and non banks in Nepal (NRB Annual Report, 2005). Based on this methodology, the bank and non banks operation's is assessed in respect of the components of CAMELS and the individual rating of the component and a consolidated rating is computed. The CAMELS rating ranges from 1 to 5, lower rating representing a better and well managed bank and financial institutions (Madura, 2001).

The most important criteria for determining the appropriateness of a financial institution to act as a financial intermediary are its solvency, profitability, and liquidity. In this respect, The Basle Committee on Banking Supervision of the Bank of International Settlements (BIS) has recommended using capital adequacy, assets quality, management quality, earnings and liquidity (CAMEL) as criteria for assessing a FI in 1988 (ADB 2002). The sixth component, market risk (S) was added to CAMEL in 1997 (Gilbert, Meyer and Vaughan 2000). However, most of the developing countries are using CAMEL instead of CAMELS in the performance evaluation of the FIs. Monetary authorities in the most of the countries are using this system to check up the health of an individual FI. In addition, International Monetary Fund also is using the aggregated indicators of individual FIs to assess the financial system soundness

of its member countries as part of its surveillance work (Hilbers, Krueger and Moretti 2000).

The camels rating system provides a standardized method for rating banks, but it is only as effective as the skills and judgment of the supervision who are examining, evaluating rating banks on regular basis (Waymond,2009).

#### **2.1.5.1 Capital Adequacy (C)**

The first component, capital adequacy ultimately determines how well the banks can manage with the shocks to their balance sheets. The capital component (C) signals the institutions 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, 2007). The effect of credit, market, and other risks on the institution's financial condition should be considered when evaluating the adequacy of capital.

Capital is a source of financial support to protect an institution against unexpected losses, and is, therefore, a key contributor to the safety and soundness of the firm. So, banks have to make decisions about the amount of capital they need to hold mainly for three reasons. First, capital helps prevents company failure, a situation in which the company cannot satisfy its obligations to pay its depositors and other creditors and so goes out of business. Second, the amount of capital affects returns for the owners (equity holders) of the company .And third; a minimum amount of firm capital is required by regulatory authorities. Thus, capital provides a cushion against the risk of failure. The level of capital plays a key role in the evaluation of any banks. Any FI should have adequate capital to support the stability and sustainability of its operation (Mishkin and Eakins, 2006). Capital Adequacy is a measure of a firm's capital as a percentage of its risk weighted assets, such as the loans it has provided and the securities it holds. Thus, this parameter indicates whether a particular institution has enough capital to absorb unexpected losses. This is required to maintain depositor confidence and preventing the institution from

going bankrupt. If its capital is sufficient, other financial, managerial, and operational weaknesses can usually be absorbed.

#### **2.1.5.1.1 New Basel Capital Accord (Basel -II)**

Basel-II is a capital adequacy related standard framed by BASEL committee. It aims to replace Basel-I, which was issued in 1988 with an amendment in 1996, to make the capital framework more risk sensitive. BASEL committee set out a minimum capital requirement of 8 percent for banks in 1988. After the successful implementation of 1988 capital accord in more than 100 countries, the Basel Committee on Banking Supervision (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](http://www.bis.org)).

The Basel-II has been introduced basically for the protection of depositor's interest by preserving the integrity of capital of 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:

1. Credit risk
2. Market risk, and
3. Operational risk

#### **2.1.5.2 Asset Quality (A)**

The asset quality component (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, 2007). Asset quality refers to the degree of

financial strength and risk in a financial institution's assets, typically loans and investments. The assets of the firm are assessed to evaluate the market or realizable values of the firm's assets, particularly the loan portfolio. This aspect reviews the quality of the loan portfolio and the investment with due consideration to the provisions made by the firm. It also reviews the activities of firm management in terms of the development and implementation of various policies and the enactment of system of controls.

A comprehensive evaluation of asset quality is the most important components in assessing the current condition and future viability of the financial institution. The ability of management to identify, measure, monitor, and control credit risk is also reflected here. The evaluation of asset quality consider the adequacy of the allowance for loan and lease losses and weight the exposure to counterparty, issuer, or borrower default under actual or implied contractual agreements. All other risks that may affect the value or marketability of a institution's assets, including, but not limited to, operating, market, reputation, strategic, or compliance risks has to be considered.

#### **2.1.5.2.1 NRB Directives related to Assets Quality**

According to the NRB unified directives for Banks and Non-Bank FIs issue number E. Pra.Ni.No 02/061/62 (Ashar 2062 BS), finance company has to classify loan into the following four categories.

##### **Pass**

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

##### **Substandard**

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

##### **Doubtful**

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

**Loss**

All loans and advances which are past due for more than 1 year and have least possibility of recovery or considered unrecoverable shall included in this category. Besides this, any loan whether past due or not, in situations of inadequate security, borrower declared insolvent, misuse of borrowed fund is to be classified as loss category. Loans and advances falling in the above category of sub-standard, doubtful and loss class are defined as non-performing loan. The loan loss provisioning, on the basis of the outstanding loans and advances and bills purchased classified as above should be provided as follows:

**Table 2.2**  
**Classification of Loans**

S.N.	Classification of Loan	Loan Loss Provision
1	Pass	1%
2	Substandard	25%
3	Doubtful	50%
4	Loss	100%

Loan loss provision set aside for performing loans is defined as general loan loss provision and loan loss provision set aside for non-performing loan is defined as specific loan loss provision.

**2.1.5.3 Management Quality (M)**

The performance of the other four CAMEL components will depend on the vision, capability, ability, professionalism, integrity and competence of the financial institution's management. As a sound management is crucial for the success of any institution, management quality is generally accorded greater weighting in the assessment of the overall CAMEL framework.

The third factor M (the "hump" in the CAMEL rating) in the acronym CAMEL refers to the bank's management quality. While the other factors can be quantified fairly easily from current financial statements, management quality



is a somewhat elusive and subjective measure, yet one that is crucial to institutional success.

Sound management is the 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. ADB recommends cost per unit of money lent as a proxy of management quality. But this can not be used as an indicator of management quality in Nepal. Since the data on amount of the total loan mobilized during a particular FY is not available in published financial statements and annual reports. The management component (M) reflects the amount of existing credit risk of directors and senior management systems and procedures to identify, measure, monitor, and control risk (Koch and Macdonald, 2004). Generally, directors do not actively involve in day-to-day operations; however, they provide clear guidance regarding acceptable risk exposure levels and ensure that appropriate policies, procedures, and practices have been established. Senior management is responsible for developing and implementing policies, procedures, and practices that translate the board's goals, objectives, and risk limits into prudent operating standards.

The competence of the management is the key in evaluating the performance of the commercial bank. The management is responsible to mobilize the resources of the firm and to create a sound control environment and risk management practices. Thus, it focuses on appraising the competence, involvement and integrity of the management in the day to day administration of the firm, involvement in formulating policies and procedures and the implementation of systems and controls; and in ensuring the firm's compliance with applicable laws and regulations.

#### **2.1.5.4 Earnings Quality (E)**

The earning quality component (E) reflects not only the quantity and trend in earnings, but also the factors that may affect the sustainability or quality of earnings (Koch and Macdonald, 2004). The quality and trend of earnings of an institution depend largely on how well the management manages the assets and liabilities of the institution. This parameter lays importance on how an institution earns its profit. This also explains the sustainability and growth in earnings in the future. Future earnings adversely affected by an inability to forecast or control funding and operating expenses, improperly executed or ill-advised business strategies, or poorly managed or uncontrolled exposure to other risks.

The purpose of the earnings (E) measure in CAMEL is to provide a ratio representative of management's level of effectiveness in utilization of assets to earn profits. Earning capacity or profitability keeps up the sound health of a commercial bank. Profit is important for survival and economic welfare of the business. It is used as yardstick to measure the economic efficiency of the bank. Good earning performance inspires the confidence of depositors, investors, creditors, and the public at large. However, the earnings of the bank should be able to absorb normal and expected losses in a given period and provide a source of financial support by contributing to the bank's internal generation of capital and its ability to access capital externally. The earnings are, thus, assessed to evaluate the current and future earning capability and the efficiency of the bank based on the existing asset and liability structure, as well as pricing and costs (Madura, 2001).

#### **2.1.5.5 Liquidity (L)**

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 balance sheet. 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 can not 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. But maintaining the high liquidity position to minimize such risks also adversely affects the profitability of FIs. Return on highly liquid assets is almost zero. Therefore, FIs should strike the tradeoff between liquidity position and profitability so that they could maintain their health sound.

Liquidity is the ability of a company which has funds available to meet cash demand for loans and deposit withdrawal. The liquidity component (L) reflects the adequacy of institution's current and prospective sources of liquidity and fund management practices (Koch and Macdonald, 2004). 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). Much more liquidity surplus hurts the profitability of the commercial banks by reducing the returns on assets. So both the deficit and excess liquidity indicate the problem in the financial health of a company. Despite, liquidity management need to design to ensure that the firm has ability to generate or obtain sufficient funds in a timely manner and on a cost effective basis in order to meet its commitments to its customers and counter parties as they fall due.

While evaluating the adequacy of a financial institution's liquidity position, consideration should be given to the current level and prospective sources of liquidity compared to funding needs, as well as to the adequacy of funds management practices relative to the institution's size, complexity, and risk

profile. Moreover, there needs to be an effective asset and liability management system to minimize maturity mismatches between assets and liabilities and to optimize returns.

#### **2.1.5.6 Sensitivity to Market Risk**

Sensitivity to market risk refers to the risk that changes in market conditions could adversely impact earnings and capital. This reflects the degree to which changes in interest rates, foreign exchange rates, commodity prices, or equity prices can adversely affect a commercial bank's earnings or economic capital (Koch and Macdonald, 2004). The sensitivity is assessed to determine the bank's ability to monitor and manage its exposure to market risk. In addition, consideration should be given to management's ability to identify, measure, monitor, and control market risk; the institution's size; the nature and complexity of its activities; and the adequacy of its capital and earnings in relation to its level of market risk exposure to evaluate this component. During an on-site bank exam, supervisors gather private information, such as details on problem loans, with which to evaluate a bank's financial condition and to monitor its compliance with laws and regulatory policies. A key product of such an exam is a supervisory rating of the bank's overall condition, commonly referred to as a CAMELS rating. This rating system is used by Nepal Rastra Bank and other financial supervisory agencies to provide a convenient summary of bank conditions at the time of an exam.

The acronym "CAMEL" refers to the five components of a bank's condition that are assessed: *Capital* adequacy, *Asset* quality, *Management*, *Earnings*, and *Liquidity*. A sixth component, a bank's *Sensitivity to market risk* was added in 1997; hence the acronym was changed to CAMELS. (Note that the bulk of the academic literature is based on pre-1997 data and is thus based on CAMEL ratings.) Ratings are assigned for each component in addition to the overall rating of a bank's financial condition. The ratings are assigned on a scale from 1 to 5. Banks with ratings of 1 or 2 are considered to present few, if any, supervisory concerns, while banks with ratings of 3, 4, or 5 present moderate to

extreme degrees of supervisory concern. All exam materials are highly confidential, including the CAMELS. A bank's CAMELS rating is directly known only by the bank's senior management and the appropriate supervisory staff. CAMEL's ratings are never released by supervisory agencies, even on a lagged basis. While exam results are confidential, the public may infer such supervisory information on bank conditions based on subsequent bank actions or specific disclosures. Overall, the private supervisory information gathered during a bank exam is not disclosed to the public by supervisors, although studies show that it does filter into the financial markets.

### **2.1.6 CAMELS' ratings in the Supervisory Monitoring of Banks**

Several academic studies have examined whether and to what extent private supervisory information is useful in the supervisory monitoring of banks. With respect to predicting bank failure, Barker and Holdsworth (1993) find evidence that CAMEL ratings are useful, even after controlling for a wide range of publicly available information about the condition and performance of banks. Cole and Gunther (1998) examine a similar question and find that although CAMEL ratings contain useful information, it decays quickly. For the period between 1988 and 1992, they find that a statistical model using publicly available financial data is a better indicator of bank failure than CAMEL ratings that are more than two quarters old.

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

CAMELS ratings, is clearly useful in the supervisory monitoring of bank conditions.

### **2.1.7 CAMELS' ratings in the Public Monitoring of Banks**

Another approach to examining the value of private supervisory information is to examine its impact on the market prices of bank securities. Market prices are generally assumed to incorporate all available public information. Thus, if private supervisory information were found to affect market prices, it must also be of value to the public monitoring of banks.

Such private information could be especially useful to financial market participants, given the informational asymmetries in the commercial banking industry. Since banks fund projects not readily financed in public capital markets, outside monitors should find it difficult to completely assess banks' financial conditions. In fact, Morgan (1998) finds that rating agencies disagree more about banks than about other types of firms. As a result, supervisors with direct access to private bank information could generate additional information useful to the financial markets, at least by certifying that a bank's financial condition is accurately reported.

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

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

The market for bank equity, which is about eight times larger than that for bank subordinated debt, was valued at more than \$910 billion at year-end 1998. Thus, the academic literature on the extent to which private supervisory information affects stock prices is more extensive. For example, Jordan, et al., (1999) find that the stock market views the announcement of formal enforcement actions as informative. That is, such announcements are associated with large negative stock returns for the affected banks. This result holds especially for banks that had not previously manifested serious problems.

Focusing specifically on CAMEL ratings, Berger and Davies (1998) use event study methodology to examine the behavior of BHC stock prices in the eight-week period following an exam of its lead bank. They conclude that CAMEL

downgrades reveal unfavorable private information about bank conditions to the stock market. This information may reach the public in several ways, such as through bank financial statements made after a downgrade. These results suggest that bank management may reveal favorable private information in advance, while supervisors in effect force the release of unfavorable information.

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

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

### **2.1.8 CAMGELS Framework**

Nepal Rastra Bank (NRB) has used the CAMELS methodology since 2062 B.S. for analysis and rating the soundness of banks and financial institutions (NRB Annual Report, 2005). This analysis methodology may not capture the full range of governance risks in a bank and financial institutions. Rating agencies have also followed a similar framework for rating banks and financial institutions. The rating methodologies employed by central banks, rating



agencies creditors and investors do not appear to include explicitly the analysis of governance risks. SEBON Journal (September,2004) points out that a key factor contributing to bank failure in Asia, was due to lack of adequate bank governance systems and it may be worthwhile to expand the rating methodology to include governance as a key risk factor. The **CAMGELS** is an acronym which refers to seven components namely Capital Adequacy, Assets Quality, Management Quality, Governance, Earnings Quality, Liquidity, and Sensitivity to Market Risks.

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). It spells out rules and procedures for making decisions on corporate affairs. It is understood as the set of rules and incentives by which management of a company is directed and controlled so as to maximize profits and the value of the company. It obviously, involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. It also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. Good corporate governance helps ensure that business corporations undertake their operations to maximize shareholders value, which will eventually bring benefits to other stakeholders from a long-term perspective.

### **2.1.9 Newest Trends in Bank Supervision**

Traditionally, on-site supervision have focused primarily on assessment of the quality of bank's balance sheet at a point in time and whether it complies with capital requirements and restriction on assets holdings. Although the traditional focus is important for reducing excessive risk taking by banks, it is no longer felt to be adequate in today's world in which financial innovation has produced new markets and instruments that make easy for bank and their employee to

make best easily and quickly. In this new financial environment, a bank that is quite healthy at a particular point in time can be drive into insolvency extremely rapidly from trading losses, as forcefully demonstrated by the failure of Barings in 1995. Thus an examination that focuses only on a banks position at a point in time may not be effective in indicating whether a bank will in fact be taking on excessive risk in the near future. So to prevent from such chances there are some newest trends and are

1. Disclosure requirements
2. Consumer protection and
3. Restriction on competition.

## **2.2 Research Review**

This section deals with the review of journals, International and Nepalese along with Masters' dissertations. International journals have been accessed through the website [www.blackwell-synergy.com](http://www.blackwell-synergy.com) and [www.springerlink.com](http://www.springerlink.com). Similarly, Nepalese journals and Masters' dissertations have been accessed from Library of Shanker Dev Campus and Central Library T.U.

### **2.2.1 Review of Journals**

This section provides a picture about what international and Nepalese scholars have done in similar subject. Those studies and issues which the researcher has found relevant to this study are presented below:-

Barker and Holdsworth (1993) found an evidence that CAMEL ratings is significant predictors of bank failure, even after controlling for a wide range of publicly available information about the condition and performance of banks. Berger and Davies (1994) evaluated the impact of CAMEL rating changes on the parent holding company's stock price. They separated stock price changes into two components: a 'private information' effect (which identified the public's awareness of new information discovered by examiners), and a 'regulatory discipline' effect (which valued the regulators' presumed ability to

force a bank to change its behavior). Berger and Davies' empirical results provided only weak evidence of a regulatory discipline effect, but they found a strong private information effect. However, the information effect applied only to CAMEL downgrades, which tend to precede stock price declines. Consistent with the findings of Hand, Holthausen and Leftwich (1994), Berger and Davies found no movement in stock price following a CAMEL upgrade. Cole and Gunther (1997, 1999) found that the information contained in CAMEL ratings decays quickly with respect to predicting bank failure from 1986 to 1992. In particular, they found that a model using publicly available financial data is a better indicator of the likelihood of bank failure than the previous CAMEL rating that are more than two quarters old. These two studies address the issue of information decay directly; however, the primary purpose of CAMEL ratings is not to identify future bank failures; but to provide an assessment of bank's overall conditions at the time of the examinations. DeYoung (1998) found a strong positive correlation between efficiency and management quality, as proxies by bank CAMEL ratings. Examining the relationship between cost efficiency and problem loans, he found that cost efficiency to Granger-cause reductions in problem loans. He note that a decline in cost inefficiency generally tends to be followed by a rise in nonperforming loans, "evidence that bad management practices are manifested not only in excess expenditures, but also in sub par underwriting and monitoring practices that eventually lead to nonperforming loans."

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

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

The academic literature effectively shows that CAMELS ratings, as summary measures of the private supervisory information gathered during on-site bank exams, do contain information useful to both the supervisory and public monitoring of commercial banks. A relevant policy question is whether supervisors might benefit by disclosing CAMELS ratings to the public. Such disclosure could benefit supervisors by improving the pricing of bank securities and increasing the efficiency of the market discipline brought to bear on banks. As argued by Flannery (1999), market assessments of bank conditions compare favorably with supervisory assessments and could improve with access to supervisory information. However, although supervisors could benefit from such improved public monitoring of banks, the costs to the current form of supervisory monitoring must also be considered. For example, if CAMELS ratings were made public, the current information-sharing relationship between examiners and bankers could change in a way that adversely affects supervisory monitoring. Further research and debate on this question is currently needed.

Hirtle and Lopez (1999) examined the usefulness of past CAMEL ratings in assessing banks' current conditions. They found that, conditional on current public information, the private supervisory information contained in past CAMEL ratings provides further insight into bank's current conditions, as

summarized by current CAMEL ratings. The authors found that, over the period from 1989 to 1995, the private supervisory information gathered during the last on-site exam remains useful with respect to the current condition of a bank for up to 6 to 12 quarters (or 1.5 to 3 years). The overall conclusion drawn from study is that private supervisory information, as summarized by CAMELS ratings, is clearly useful in the supervisory monitoring of bank conditions. Barth and others (2004) carried out a study on "Bank Safety & Soundness and the Structure of Bank Supervision: A Cross Country Analysis". They have raised two central questions about the structure of bank supervision are whether central banks should supervise banks and whether to have multiple supervisors. They have used data for 70 countries across developed, emerging and transition economies to estimate statistical connections between banking performance, the structure of bank supervision, permissible banking activities, legal environments, banking market structure and macroeconomic conditions. They found that where central banks supervise banks, banks tend to have more non-performing loans. Countries with multiple supervisors have lower capital ratios and higher liquidity risk. They also found that conclusions from non-transition economies may not necessarily apply to transition economies. Derviz and Podpiera (2007) investigated the determinants of the movements in the long-term Standard & Poors and CAMELS bank ratings in the Czech Republic during the period of 1998 to 2001. The same list of explanatory variables corresponding to the CAMELS rating inputs employed by the Czech National Bank's banking sector regulators was examined for both ratings in order to select significant predictors among them. They have employed an ordered response logit model to analyze the monthly long-run S&P rating and a panel data framework for the analysis of the quarterly CAMELS rating. The predictors for which they found significant explanatory power are: Capital Adequacy, Credit Spread, the ratio of Total Loans to Total Assets, and the Total Asset Value at Risk. Models based on these predictors exhibited a predictive accuracy of 70 percent. Additionally, they found that the verified variables satisfactorily predict the S&P rating one month ahead. Baral (2008)

carried out a research study on "Health Check –up of Commercial Banks in the Framework of CAMEL: A Case Study of Joint Venture Banks in Nepal". It has covered four fiscal years period from 2001 to 2004 .The study was based on historical data disclosed by annual reports of joint venture banks, and NRB in its supervision annual reports. The study concluded that the financial health of joint venture banks is better than that of the other commercial banks. The study further indicates that the CAMEL component indicators of the joint venture banks are not so strong to manage the possible shocks. The CAMELS rating system provides a standardized method for rating banks, but it is only as effective as the skills and judgment of the supervision who are examining ,evaluating and rating banks on a regular basis (Waymond,2009).

New Business Age (2007) came up with ranking of Nepali commercial banks for the second consecutive quarter of the F.Y. 2006/07. The assessment was made by using some parameters set under the famous CAMEL model with minor modifications to suit the information availability. The figures were based on the financial results published by respective banks in the newspapers. So the banks that had not published the results were excluded from the ranking. The capital adequacy of the Nepali commercial banks was ranked by calculating capital adequacy ratio and debt-equity ratio. The asset quality of the banks was ranked by calculating non-performing loan to total loan and advances ratio and loan loss provision to non performing loan ratio. The management quality was measured by calculating return on net worth and profit per employee. The earning quality was measured by calculating percentage change in net profit and interest income to total income ratio. And the liquidity of the Nepali commercial banks was compared based on the parameters namely liquid asset to total deposit ratio and liquid asset to total asset ratio.

### **2.2.2 Review of Dissertations**

Bhandari (2008) performed a study on “*Financial Performance Analysis of Himalayan Bank Limited in the Framework of CAMEL*”. The basic objective of

the study was to analyze the financial performance of Himalayan Bank Limited through CAMEL framework. Bhandari has used secondary data for the period of six years from 1999 to 2004. The study revealed that adequate capital of the bank. The non-performing loan though in decreasing trend is still a matter of concern. The bank is still with better return on equity (ROE) however it is in decreasing trend. The decreasing trend of net interest margin shows management slack monitoring over the bank's earning assets. The liquid funds to total deposit ratio is above the industrial average ratio. NRB balance and cash in vault to total deposit ratios are below the industrial average ratio during the study period.

Chand (2006) conducted a study on "*Financial Performance Analysis of NABIL Bank Limited in the Framework of CAMELS*". The main objective of the study was to analyze the financial condition of NABIL. This study has covered only five fiscal years 2000/01 through 2004/05. The research was based on secondary information data. Some financial and statistical tools and descriptive techniques are applied to evaluate the financial performance of NABIL. He found that the capital adequacy of the bank were generally above the NRB standards in all the years. The non performing loan to loan ratios were all below the industrial average and the international standard. The loan loss provision of the bank is decreasing constantly in each year. The management proxy ratios, total expenses to total income ratio and earning per employees were favorable to the bank. The earning quality ratios were generally above the benchmark prescribed by World Bank. The overall liquidity position of the bank was in good condition. The cumulative gap of risk sensitive assets and risk sensitive liabilities, re-priced over the over maturity bucket was in continuous decreasing trend. The interest rate sensitivity ratio to the total earning assets over the short term horizon was in decreasing trend.

Likewise, Sharma (2007) carried out the research study entitled "*Financial Performance Analysis of Nepal SBI Bank Ltd. in the Framework of CAMEL*"

with the basic objective of analyzing the financial performance of Nepal SBI Bank Ltd. (NSBL) in the CAMEL framework. The study was based on secondary data covering the period of six years from 2001 to 2006 A.D. Sharma has used only the financial tools. The researcher concluded that NSBL was well capitalized and complying with the directives of NRB. The bank has maintained satisfactory level of past due loan on total loan except in 2001. Earning per employees of the bank was found quite high. NIM of the bank was found satisfactory. Furthermore, the liquidity position of the bank was found sound.

Gurung (2007) carried out a research study on *"Financial Performance Analysis of Annapurna Finance Company Limited in the Framework of CAMEL"*. The main objective of the study was to analyze the financial performance of Annapurna Finance Company Limited (AFCL) in the framework of CAMEL from the F.Y. 059/60 to the F.Y. 062/63. The study was based on secondary data covering the period of five years. Gurung used various financial and statistical tools to get the meaningful result and to meet the research objective. The result that the capital fund of AFCL is sound and sufficient to meet the financial operation as per the NRB standard. The non-performing loan ratios are below the international standard and in fluctuating trend. The loan loss ratios are also fluctuating but in increasing trend during the study period. The management proxy ratio total expense to total income ratios are also in fluctuating trend due to changes in taxation rate and increase in provision for possible losses. Another management proxy ratio earning per employee is in increasing trend. The earning quality ratios are generally in fluctuating and decreasing trend except the net interest margin which is in increasing trend. The overall liquidity position of AFCL is in good condition.

Sanjel (2008) conducted a study on *"Comparative Analysis of Financial Status and Performance Evaluation of Himalayan Bank Limited and NABIL Bank Limited in the Framework of CAMELS Rating System"*. The research study was



focused on assessing the financial performance of Nabil Bank Limited (NABIL) and Himalayan Bank Limited (HBL) comparatively in the framework of CAMELS, by using descriptive and analytical research design, prescribed by UFIRS and in accordance to BASEL accord. The banks' audited annual reports of condition for the period 2004/01 to 2006/07 were the primary source of information and treated as authentic. Financial ratios, simple mathematical and statistical tools had been applied to get the meaningful result of the collected data in this research work. From the study we can found that the capital adequacy ratios are above the NRB standard in case of NABIL but HBL was not able to maintain the adequate level. The non-performing loans to loan ratios are well below the industrial average and the international standard. The loan loss provision of NABIL is decreasing continuously in each year whereas the loan loss provision of HBL is in increasing trend but it is below industrial average. The total expenses to revenue ratio are in decreasing trend and the earnings per employee are in increasing trend which indicates effective management of NABIL. But in case of HBL, both are in decreasing trend, which implies overstaffing in the bank. The earning quality ratios like return on equity, return on assets, net interest margin, earning per share of both the banks are generally above the benchmark prescribed by World Bank and in increasing trend which show that the quality of earning is increasing. Overall the liquidity of NABIL is in good position whereas the liquidity position of HBL in overall is also good but the bank is not strictly following the NRB directives i.e. the amount to be maintained in vault and NRB balance is not sufficient.

Joshi (2008), conducted a study on “*A Comparative Study on Financial Performance of Nepal SBI Bank Ltd & Nepal Bangladesh Bank Ltd.*” with the objectives to highlight various aspects of relating to financial performance of Nepal Bangladesh bank and Nepal SBI bank ltd for a period of 1999/00 to 2006/07, to analyze financial performance through the use of appropriate financial tools and to show the cause of change in cash position of the two banks.

Sapkota (2009) in his study “*Profitability Benchmarking of NB Bank*” has analyzed Profitability Position with other Joint Venture (JV) banks i.e. NABIL, SCB, HBL, NSBI, EBL with given objectives of examining the profitability situation of the JV bank industry as a whole and sample banks analyzing the profitability trend of NB Bank and the JV bank industry over the last five years and ascertaining the comparative position of profitability of NB Bank with respect to other JV Banks. The main findings of this study are: It is identified from the analysis that NB Bank is performing not well under the industry standard and also has least performance among all players in the JV Bank industry in Nepal. NB Bank’s past and present earning generating potential is assessed low in many parameters of profitability in comparison to the industry as well as other joint venture banks in the country.

Pradhan (2009) conducted a study entitled “*Profit Planning of Commercial Banks with a Comparative Study of Everest Bank Ltd., NABIL Bank Ltd. and Bank of Kathmandu Ltd.*” The main objectives of this study are: to find out the relationships between total investment, loan and advance, deposit, net profit and outside assets, to identify the investment priority sectors of commercial banks to assess the impact of investment on profitability to analyze and forecast the trend and structure of deposit utilization and its projection for five years of commercial banks to provide suggestion and possible guidelines to improve investment policy and its problems.

Similarly, Maharjan (2010), has performed a case study in “*Financial Performance of Nabil Bank*” with the primary data for the last eight years from 2003 to 2009. The study was conducted by analyzing the various financial ratios which are also the measuring tools in camels analysis. The main objective of this analysis is to determine the efficiency and performance of the firm’s management as reflected in the financial records and reports

### **2.3 Research Gap**

Various studies have been conducted in the past on financial analysis of commercial banks in Nepal and as well as in other countries with different purpose and results. The research paper done in the context of Nepal mainly emphasized on liquidity, profitability and leverage of the commercial banks. Though many research works has been done in the past, they lack micro-level analysis and found applying traditional analysis of financial performance. However, these all research lacks analysis of sixth component i.e. sensitivity of the market risks. Since financial institutions are the backbone of the economy it should be evaluated and analyzed properly to figure out the actual condition by using various advanced tools, techniques and with much expertise. Focusing on the above point this study attempts to evaluate the financial performance of the participating banks on all the components.

## **CHAPTER - III**

### **RESEARCH METHODOLOGY**

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

#### **3.1 Research Design**

The evaluation of the performance is designed to reflect an assessment of the financial condition of the first fifteen commercial banks based on CAMELS perspective prescribed by UFIRS/UBPRS in the line with BASEL II accord. Hence the research is conducted on historical and analytical case study basis. Therefore descriptive cum analytical research methodology has been followed, to achieve the desired objectives. In order to evaluate the financial performance of the selected nine banks, some financial and statistical tools and descriptive technique are applied.

#### **3.2 Nature and Sources of Data**

Basically the research is based on secondary information data. The annual report of the banks is the major sources of data. The regulatory data will be collected from NRB directives and reports. The basic conceptual information was collected through BASEL, FDIC and NRB publications and work papers. The information related to the past and current work conducting in the research field will be collected from the following sources:

- ) NRB reports and bulletins and its official website
- ) BASEL Committee publications through its official website
- ) Various research papers and dissertations
- ) Various articles published in journals and financial magazines
- ) Nepal Stock exchange report from its website

- J The annual reports of the related banks and from their respective official websites

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

### **3.2.1 Sampling**

Nepalese banking industries consist of 28 commercial banks but the study was carried out by choosing the 9 commercial banks which includes the high ranked banks and the banks of low ranking like SCBNL, NABIL, NIBL are the top banks whereas banks like NCC, SBL, BOK are banks with problems and NIC, HBL, SBI are the average banks in market.

### **3.3 Data Collection Procedure**

The required information will be collected by conducting visits to each bank, consulting library, surfing the internet and related text books. The annual reports of each bank for the study period will be obtained from the respective banks through personal approach and internet surfing to the banks' official website. NRB regulatory directives, statistics of commercial banks of Nepal and other related publications will be obtained. Existing literature on the subject matter was collected from various research papers placed in regional and central library. Likewise the review of working papers conducted by various international scholars on the related matters was done through internet surfing to various websites.

### **3.4 Data Processing**

The financial data from the published documents and audited financial statements will be manually extracted into the computer files of Microsoft Excel program which will act as master database file. The data will be refined further into spreadsheets to carry out financial ratios calculation and graphical

illustrations through mathematical functions and chart programs of the excel program.

### **3.5 Data Analysis Tools**

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

### **3.6 Financial Ratio Analysis Tools**

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

#### **3.6.1 Capital Adequacy**

##### **3.6.1.1 Total Capital Adequacy Ratio**

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

$$\text{Total Capital Adequacy Ratio} = \frac{\text{Tier 1 + Tier 2 Capitals}}{\text{RWA}}$$

##### **3.6.1.2 Tier I Capital Adequacy Ratio**

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

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

### **3.6.1.3 Tier II Capital Adequacy Ratio**

This shows the absolute contribution of supplementary capital in capital adequacy. It is used to analyze the supplementary capital adequacy of the banks and determined by using the following model.

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

### **3.6.1.4 Debt-Equity Ratio**

It is the relationship between liabilities and the net worth of the banks. It is arrived by dividing the total borrowing and deposits by the net worth, which includes equity capital, reserves and surpluses. It shows leverage of the banks, lesser the debt equity ratio, stronger the banks. Banks with negative net worth have been assigned zero score. The ratio is used to analyze the capital adequacy of the bank and determined by using the given model.

$$\text{Debt-Equity Ratio} = \frac{\text{Total Deposits and Borrowings}}{\text{Net Worth}}$$

## **3.6.2 Assets Quality**

### **3.6.2.1 Assets Composition**

The assets compositions of the banks are observed and the qualitative analysis will be made for the study. Though it has no effect in current rating system, it reflects the assets management of the participant banks.

### **3.6.2.2 Loan and Advances**

Loan and Advances usually form the largest assets items and carry greatest amount of potential risk to the bank's capital account, the primary factor effecting overall assets quality is the quality of loan portfolio and the credit administration program. It is the most important source of income for all the commercial banks with high risks. Following analysis is made to analyze the loan and advances.

### **3.6.2.2.1 Loan Classification Mix Analysis**

As per the NRB directives, all loans and advances must be classified in order of principal default. The loan is classified into four categories and analysis is made. Further following analysis are made for the study.

#### **3.6.2.2.1.1 Non-Performing Loan Ratio**

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

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

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

#### **3.6.2.2 Loan Loss Provision to Total Loan Ratio**

The provision for loan losses is a change to current earning to build the allowance for loan and lease losses (ALLL). The ALLL is a general reserve kept by banks to absorb loan losses. While it measures the possibility of loan default, it reflects adequacy of to absorb estimated credit losses associated with the loan and lease portfolio of the banks. For the purpose of this study following model will be used to determine the loan loss ratio.

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



### **3.6.3 Management Component Analysis**

#### **3.6.3.1 Total Expenses to Total Income Ratio**

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

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

#### **3.6.3.2 Earning per Employee**

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

$$\text{Earning per Employee} = \frac{\text{Net Income After tax}}{\text{No. of Employee}}$$

### **3.6.4 Earning Quality Analysis**

#### **3.6.4.1 Return on Equity (ROE)**

The return on equity indicates the relationship between net profits after tax to total equity capital. It measures the rate of return flowing to the banks shareholders. Higher is the return on equity, higher the investment which the shareholders will undertake. For the purpose of the study following model will be used to determine the return on equity ratio.

$$\text{Return on Equity} = \frac{\text{Net Income After Tax}}{\text{Total Number of Equity Shareholders}}$$

### 3.6.4.2 Return on Assets (ROA)

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

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

### 3.6.4.3 Net Interest Margin

Net interest margin is the expression of numerical relationship between the net interest income and total earning assets of the bank. It measures how large a spread between interest revenue and interest costs management has been able to achieve b close control over the banks earning assets and the pursuit of the cheapest sources of funding (Rose 1999). For the purpose of the study following model is used to determine net interest margin.

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

Where, Net Interest Income = Interest income-Interest Expenses

Total earning assets= Total interest bearing assets.

### 3.6.4.4 Earning Per Share (EPS)

Earning per share provides a direct measure of the returns flowing to the banks owner (its stock holders) measured relative to the number of shares to the public (Rose, 1999). It gives the strength of the shares in the market. Following is the expression of earning per share:

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

### **3.6.5 Liquidity Component Analysis**

#### **3.6.5.1 Cash Reserve Ratio (CRR)**

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

#### **3.6.5.2 NRB Balance to Total Deposit Ratio**

NRB balance to total deposits ratio shows the numerical relation between NRB balance and total deposits of the banks. It measures the proportion of the NRB balance in total deposits. Following model is used to determine the NRB balance to total deposit ratio:

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

#### **3.6.5.3 Cash in Vault to Total Deposit Ratio**

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

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

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

#### **3.6.5.4 Liquid Assets to Total Deposits Ratio**

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

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

Where

Total liquid assets = cash in hand + NRB balance + Domestic bank balance + Foreign currency bank balance + placements + investment in government securities.

### 3.6.5 Sensitivity to Market

#### 3.6.5.1 Interest Rate Sensitivity

Interest rate sensitivity is estimated by GAP analysis. If @Ri is the average interest rate change affecting assets and liabilities that can be replaced within ith maturity bucket, the effect on the banks net interest income (NII) in the ith maturity bucket is calculated by (Saunders and Cornett, 2004):

$$\begin{aligned} @NII_i &= \left( \sum_{i=1 \text{ Day}}^{i=1 \text{th maturity bucket}} RSA_i - \sum_{i=1 \text{ Day}}^{i=1 \text{th maturity bucket}} RSL_i \right) * @R_i \\ &= GAP_i * R_i \end{aligned}$$

Where

@NII<sub>i</sub> = Change in interest income in the *i*<sup>th</sup> maturity bucket

GAP<sub>i</sub> = Rupee size of gap between book value of rate sensitivity assets RSA and rate sensitivity liabilities RSL in maturity bucket *i*.

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

$$@NII_i = CGAP_i * R_i$$

Where

$$\begin{aligned} CGAP_i &= \left( \sum_{i=1 \text{ Day}}^{i=90 \text{ Days}} RSA_i - \sum_{i=1 \text{ Day}}^{i=90 \text{ Days}} RSL_i \right) + \left( \sum_{i=91 \text{ Day}}^{i=180 \text{ Days}} RSA_i - \sum_{i=91 \text{ Day}}^{i=180 \text{ Days}} RSL_i \right) + \left( \sum_{i=181 \text{ Day}}^{i=270 \text{ Days}} RSA_i - \sum_{i=181 \text{ Day}}^{i=270 \text{ Days}} RSL_i \right) \\ &+ \left( \sum_{i=271 \text{ Days}}^{i=365 \text{ Days}} RSA_i - \sum_{i=271 \text{ Days}}^{i=365 \text{ Days}} RSL_i \right) \end{aligned}$$

### 3.6.5.2 Interest Rate Sensitivity

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

$$\text{Interest Rate Sensitivity Ratio} = \text{CGAP} * 100/A$$

### 3.6.6 Statistical Tools

#### 3.6.6.1 Average

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

$$@ = \frac{\sum X}{N}$$

Where,

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

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

### 3.7 Limitations of the Methodology

The research is conducted to fulfill the academic requirement of Masters of Business Administration. It is focused on the CAMELS rating system and are based on the audited financial annual reports of each bank for the period 2065/66. Since the research work on all the six components is little been done in Nepalese environment, the study may not reveal reliability and validity in every field. The basic limiting conditions within which the research work is conducted are

- ) The evaluation made herein of one sample unit of nine banks only, hence cannot be reasoned for similar condition of the whole industry. However, it gives a particular direction to the industry if not actual.

- J The study remains largely in the realms of offsite monitoring system hence qualitative assessment may not be reflected by the study. However the proxy financial tools are helpful to give a close picture of such factors.
- J The quarterly financial reports of the banks are not available or not adequate whereas the effectiveness of CAMELS assessment requires quarterly financial reports. However, Cole and Gunther (1998) examined that a statistical model using publicly available financial data is better indicator of bank failure than CAMELS rating that are more than two quarters old.
- J The data figures from the different other sources may not be congruent with the banks published data. However audited data published by the banks are treated as authentic. The study is carried out within the framework of the case study research design. So, it is difficult to eliminate the limitations of the case study research design, in which the study as well as the methodology is bounded. Only a single unit is taken for the study, therefore, the study may not be able to represent the whole scenario.

## **CHAPTER - IV**

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

This chapter deals with the presentation of collected data and its analysis with focus on the CAMELS six components. The data was collected or absorbed from the annual report of the respective bank and is entered and processed in the excel sheet and further the processed data are collected for the qualitative analysis. The major findings from the analysis are made following the presentation.

The analysis has been done in six major parts. The data collected from different sources has been refined and documented in excel tables, which are further processed to analyze and arrive at the findings on the financial conditions of the banks in terms of camels framework. The rank is obtained from all the sub components to get the average rank of each component and further with the help of the rank of all the components the composite ranking is obtained from the average rank of each component. As per the standard the bank must be ranked within the five points but, it is difficult so for the convenience the banks are ranked from one to nine.

#### **4.1 Capital Adequacy**

Capital adequacy component analysis of the banks is based on the regulations and standard prescribed by NRB as to maintaining minimum risk based core and total capital standard, and maximum risk based supplementary capital standard. The minimum risk based capital standard which includes a definition of risk based capital, a system for calculating risk weighted assets (RWA) by assigning on and off balance sheet items to broad risk categories. Capital adequacy ratio takes into account the most important financial risk foreign exchange, credit and interest rate risk, by assigning risk weights to the institutions assets.

#### **4.1.1 Core Capital (Tyre I) Adequacy Ratio**

Core (Tyre I) capital, which is the capital of permanent nature, comprise of paid up, share premium non redeemable preference share, general reserve, dividend equalization fund, capital adjustment reserve, retained earnings and profit and loss accounts. It is obtained by taking the percentage of Core Capital to the RWA. Table 4.1 presents the observed core capital ratio during the year and minimum core capital standard set by NRB.

#### **4.1.2 Supplementary Capital (Tyre II) Adequacy Ratio**

Supplementary capital are collected by way of hybrid capital instruments, General Loan Loss Provision, Exchange Fluctuation reserve, Asset Revaluation reserve, Interest Spread Reserve, Subordinate Term Debt, and other free reserve. The ratio reflects proportion of supplementary capital components in total risk adjusted assets and relative contribution in the CAR. NRB regulates supplementary capital ratio by following supplementary capital not exceeding 100% of the core capital for CAR calculation. It is obtained by the ratio of supplementary capital to RWA.

#### **4.1.3 Total Capital Adequacy Ratio**

Capital adequacy ratio above NRB standard indicates adequacy of capital and signifies higher security to depositors, higher internal source and higher ability to cushion operational and unanticipated losses. The lower value on the contrary, indicates lower internal resources, comparatively weak financial position and lower security to depositors. It is obtained from the ratio of total capital to RWA.



**Table 4.1**  
**Capital Adequacy Ratio**

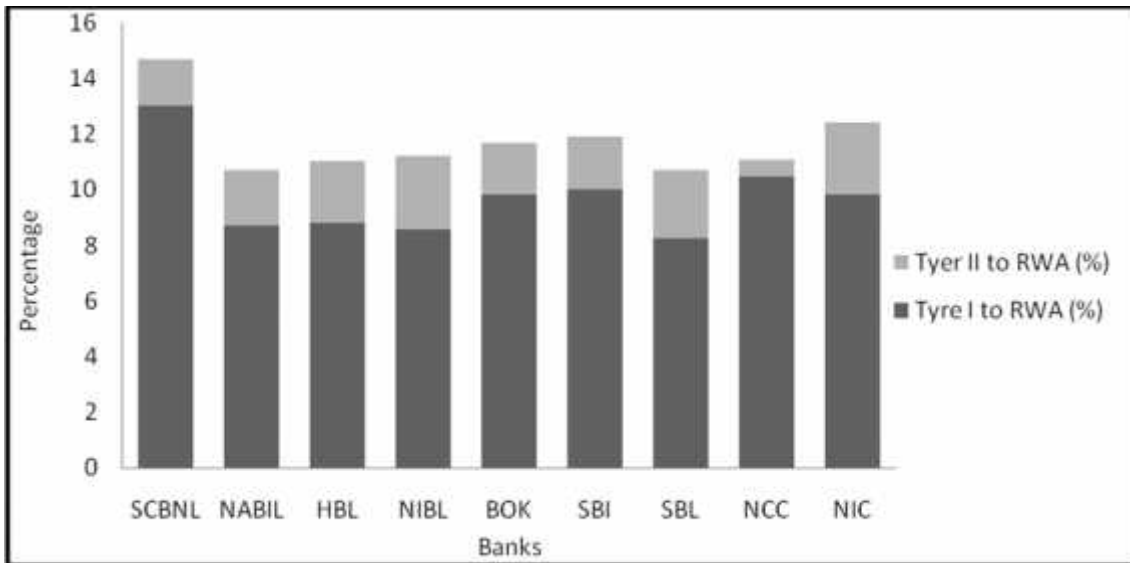
(Amount In Million)

S.N.	Bank	Tyre I	Tyre II	Total Capital	RWA	Tyre I to RWA (%)	Tyer II to RWA (%)	Total Capital to RWA (%)	Rank
	Minimum NRB Standard					5.50	5.50	11.00	
1	SCBNL	2,832.76	357.60	2,630.90	21,703.00	13.05	1.65	14.70	1
2	NABIL	3,044.34	682.74	2,968.91	4,816.00	8.74	1.96	10.7	9
3	HBL	3,074.44	770.77	3,253.52	34,905.88	8.81	2.21	11.02	7
4	NIBL	3,879.97	1,215.38	6,550.15	45,312.26	8.56	2.68	11.24	5
5	BOK	1,683.58	322.18	1,623.03	17,167.51	9.81	1.87	11.68	4
6	SBI	1,692.37	319.67	1,722.19	16,872.7	10.03	1.89	11.92	3
7	SBL	1,257.07	368.38	1,147.73	15,210.56	8.26	2.43	10.69	8
8	NCC	881.33	113.18	684.06	8,983.85	10.48	0.59	11.07	6
9	NIC	1,649.00	305.93	1,613.63	15,741.61	9.81	2.61	12.42	2

*Sources: Annual Report of the respective Banks for the year 2065/66, NRB Directives and BASEL II*

As shown in Table 4.1 the total capital is classified as core (Tyre I) and supplementary (Tyre II) capital. The minimum NRB standard for the capital adequacy ratio for core (Tyre I) is 5.5% and 11% for total capital. The rank is given on the basis of the higher the capital adequacy higher the rank. All the banks have maintained the core (Tyre I) capital adequacy as set by the NRB. Though all the banks maintained the core (Tyre I) capital, on the basis of the higher the total capital adequacy higher the rank, SCBNL bank is at one followed by NIC, SBI, BOK, and NIBL. It shows that the higher ranked banks have higher security to depositors, higher internal source and higher ability to cushion operational and unanticipated losses and vice versa.

**Figure 4.1**  
**Capital Adequacy Ratio**



In the above Figure 4.1 the total capital is divided into core and supplementary capital. Almost all banks have maintained the core capital ratio of 5.5% and the total capital ratio of 11% except NCC bank. NIBL has the higher ratio followed by NIC, NABIL, SCBNL and HBL. It is stated in NRB directives that higher the capital adequacy ratio better the bank is in terms of higher security to depositors, higher internal source and higher ability to cushion operational and unanticipated losses and vice versa. The inadequate in capital of NCC bank could shows higher earning ratio. According to the NRB directives the commercial banks should increased their capital to 2 billion.

#### **4.1.4 Debt-Equity Ratio**

It is arrived by dividing the total borrowing and deposits by the net worth, which includes equity capital, reserves and surpluses. It shows leverage of the banks, lesser the debt equity ratio, stronger the banks. The bank with lesser D/E ratio states that the bank is strong enough for the operation. But the organization with higher D/E ratio could earn higher profit, but will not be strong enough for the operation, especially in the banking industry. The higher D/E ratio is considered as risky in this industry.

**Table 4.2**  
**Debt -Equity Ratio**

(Amount In Million)

S.N.	Banks	Total Borrowings and Deposits	Net-Worth	D/E Ratio	Rank
1	SCBNL	29,744.00	3,052.4	11.85	5
2	NABIL	39,329.56	3,129.02	12.56	7
3	HBL	31,925.97	3,119.83	11.28	4
4	NIBL	34,451.73	3,907.84	12.23	6
5	BOK	15,933.74	1,741.57	10.56	3
6	SBI	15,342.88	1,702.57	16.87	9
7	SBL	10,396.57	1,278.74	12.83	8
8	NCC	7,320.24	1,098.92	8.31	1
9	NIC	13,419.69	1,660.25	9.90	2

*Sources: Annual Report of the respective Banks for the year 2065/66*

In the Table 4.2 the debt equity ratio is calculated by dividing the total debt by net-worth of the banks. The total debt comprises of total deposits plus total borrowings and net-worth comprise of equity capital, reserves and surpluses. It is considered that lower the D/E ratio better the bank is and vice versa. The higher D/E ratio can effect in the profitability of the bank.

SBL is the bank with least D/E ratio of 9.73 and is ranked first followed by NIC (10.30), SBI (10.93), BOK (11.87), and SCBNL (11.93). NCC has the higher D/E ratio of 39.10 and is ranked last. If we follow the table and NRB directives SBL is the stronger bank and NCC is the weakest. But according to the Modigliani Miller theory of leverage, higher the leverage higher the profit and vice versa, but is not far from higher risk in case of default.

**Figure 4.2**  
**Debt -Equity Ratio**

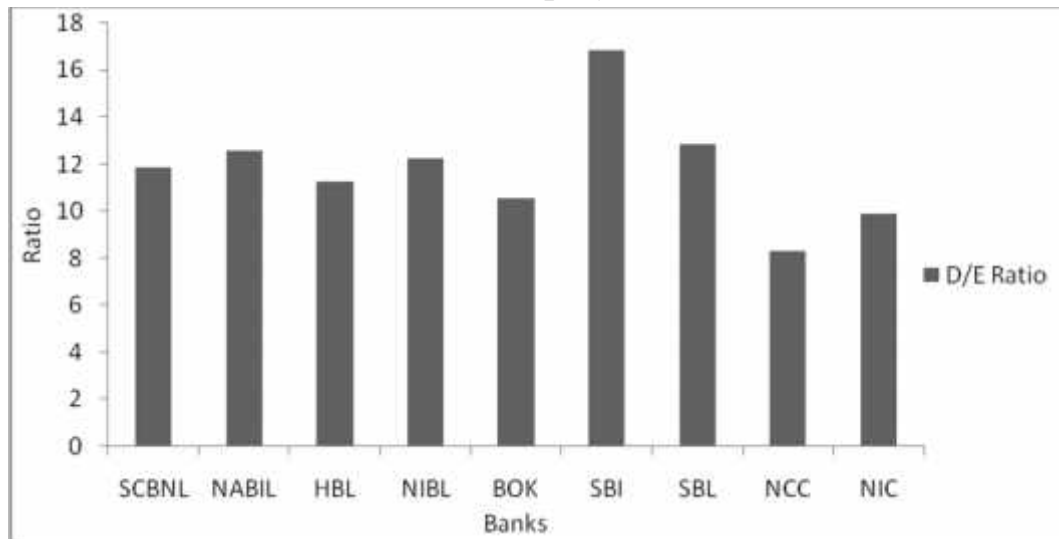


Figure 4.2 shows the D/E ratio of the participant banks. It shows leverage of the banks, lesser the debt equity ratio, stronger the banks. According to the directives issued by NRB lower D/E ratio is better and stronger, and SBL has the lower D/E ratio. Higher D/E ratio is more profitable (NCC) as the organization is using less of their own money and playing with others money, but is too much risky in case of default, and is stated as weak and poor. In case of default of the banks the partners of the banks with higher D/E ratio will be affected highly then the bank with lower D/E ratio. It is directly related to the profitability of the banks. The bank with higher D/E ratio may earn high profit.

**Table 4.3**  
**Capital Adequacy Ratio**

S.N.	Bank	CAR (in %)	Rank	D/E Ratio	Rank	Group Average
1	SCBNL	14.70	1	11.85	5	6
2	NABIL	10.7	9	12.56	7	8
3	HBL	11.02	7	11.28	4	6
4	NIBL	11.24	5	12.23	6	6
5	BOK	11.68	4	10.56	3	4
6	SBI	11.92	3	16.87	9	6
7	SBL	10.69	8	12.83	8	8
8	NCC	11.07	6	8.31	1	4
9	NIC	12.42	2	9.90	2	2

*Sources: Annual Report of the respective Banks for the year 2065/66, NRB Directives and BASEL II*

In Table 4.3, capital adequacy ratio and debt equity ratio are put together to rank the capital adequacy of the banks. Since both the ratios are the component of the capital adequacy ratio in the CAMELS rating system, they are put together. As we see in the CAR component SCBNL is better followed by NIC, SBI, BOK, NIBL, but as we see the component of the D/E ratio NCC is better followed by NIC, BOK, HBL. For our consideration the average of the two ratios are taken for the ranking of the capital adequacy component of the CAMELS rating system. The group average is taken for the analysis.

The total Capital Fund and CAR of most of the commercial banks is satisfactory except few commercial banks who have failed to maintain it as per the NRB directives. According to NRB, commercial banks have to maintain 11% CAR. From this point of view the above data shows that CAR of most of the banks is above 11% where as,. In the year 2065/66 SCBNL maintain the high CAR than other banks. The main reason for the Banks not being able to maintain minimum capital fund is due to the increased non-performing loans. While such increase in bad loans eat up the profit (decrease, the corresponding provision for such bad loans cannot be counted as capital as NRB has allowed banks only to count their provisions for good loans as supplementary capital.

#### **4.2 Assets Quality Analysis**

Here out of several indicators of assets quality Assets composition, Non performing assets ratio and loan loss provisioning ratio are taken to examine the assets quality of the banks. The comparative analyses of total assets composition of the different banks are analyzed with major highlight on investment component due to its sensitive exposure. The loan and advances having major exposure and sensitive to banks performances are carried out using comparative analysis technique. The analysis of total loan and advance contains examination of loan classification and non performing loan to total loan ratio which is used as a proxy for assets quality. The coverage ratio the ratio of provision to loan was examine since it provides a measure of the share of bad loans for which provisions has been already been made.

The loan portfolio diversification analysis to assess inherent credit risk couldn't be conducted as the banks financial data format (prescribed by NRB) in the annual reports lacked detailed sectoral loan portfolio unlike financial reports required in the US regions. It is advisable NRB to stipulate banks present with detailed loan and advances exposure for signaling vulnerability of the financial system, economy and inherent credit risks.

#### **4.2.1 Assets Composition**

Assets portfolio of the banks represents the varied nature and consequence of the banks function and investments policies. Usually every banker seems to arrange their assets appearing in balance sheet in decreasing order of liquidity. The capital and liability of banks are invested in various assets in the form of cash and bank balance, placement investment, bills purchase, loans and advances and fixed assets. Of these, loan usually makes the largest portion of the all assets. As they are the least liquid form of assets, loan and advances contain the high proportion of potential risks to the banks capital. Assets part is considered as the strength of the financial institution which entails the ability of FI's to expose the liability. Only the small proportion of assets is cash. That's because the bank wants to put its money to work earning interest. If the bank simply sticks its cash in a vault and forgets about it, it will have a hard time making a profit. Thus, a bank keeps most of its money tied up in loans and investments, which are called "earning assets" in bank-speak because they earn interest. Banks don't like putting their assets into fixed-income securities, because the yield isn't that great. However, investment-grade securities are liquid, and they have higher yields than cash, so it's always prudent for a bank to keep securities on hand in case they need to free up some liquidity. The purpose of holding securities is for the bank to have safe, liquid assets available, so the banks primarily hold Treasuries and agency debt (such as Fannie Mae- or Freddie Mac-issued debt), which yield around the rate of the current long-term U.S. Government yield, anywhere from 4%-6%. Loans represent the majority of a bank's assets. A bank can typically earn a higher

interest rate on loans than on securities, roughly 10%-12%. You can find detailed information about the rates earned on loans and investments in the financial statements. Loans, however, come with risk. If the bank makes bad loans to consumers or businesses, the bank will take a hit when those loans aren't repaid. Because loans are a bank's bread and butter, it's critical to understand a bank's book of loans. However, bank stock investors have to read the financials if they want to know the kind of risks to which they are exposed.

Other assets, including property and equipment, represent only a small fraction of assets. A bank can generate large revenues with very few hard assets. Compare this to some other companies, where plant, property, and equipment (PP&E) is a major asset. A bank's assets are its meal ticket, so it's critical to understand how its assets are invested, how much risk they are taking, and how much liquidity the bank has in securities as a shield against unforeseen problems. In general, investors should pay attention to asset growth, the composition of assets between cash, securities, and loans, and the composition of the loan book. Not only the banks assets but also need to understand the other side of the balance sheet -- its liabilities, which are how a bank finances its assets.

### **Generally Assets comprises of following components**

- ) Cash Balance
  - Balance with Nepal Rastra Bank
- ) Balance with Banks/Financial Institution
- ) Money at Call and Short Notice
- ) Investment
- ) Loans, Advances and Bills Purchase
- ) Fixed Assets
- ) Non Banking Assets
- ) Other Assets

#### **4.2.2 Loan and Advances**

The fact that the loans usually form the largest of the assets items and carry greatest amount of potential risk to the banks capital account, the primary factor effecting overall assets quality is the quality of loan portfolio and the credit administration program. For the evaluation of assets quality of the banks the adequacy of allowance for loan and lease losses (ALLL) has been considered and the exposure to counter party, issuer, or borrower default under actual or implied contractual agreement is weighted. Assets with inherent credit weaknesses, categorized into non performing assets components. Substandard, doubtful and loss grades are examined as per minimum criteria laid down by NRB based on the overdue period of the advances. These graded loans are required requires provisioning of 25%, 50% and 100% respectively, in order to safeguard the interest of the stakeholders. Quality of loan and advances of the banks is assessed based on its loan classification and loan loss provision mix as below.

#### **4.2.3 Loan Classification Mix Analysis**

The default in repayment of interest or principal within the stipulated time frame, the performing loan turns into non performing loan. As per NRB directives, all loans and advances must be classified in order of principal default aging into pass (past due up to 3 months), substandard (past due between 3-6 months), doubtful (past due between 6-12 months) and loss (past due over one year). NPL forms an aggregate of substandard, doubtful and loss loans. The ratio of Net NPL to total loan and advance shows the percentage of NPL in total loan. The lower the ratio the better is the proportion of performing loans and risk of default.

#### **4.2.4 Net Non-Performing Loan Ratio**

The non-performing loan ratio indicates the relationship between non-performing loan and total loan. It is measured by the proportion of non-performing loan in total loan and advances.



**Table 4.4**  
**Net Non-Performing Loan Ratio**

(Amount in Million)

S.N.	Bank	Net Non-Performing Loan	Total Loan and Advances	Net NPL Ratio (%)	Rank
1	SCBNL	91.041	13,679.75	0.66	3
2	NABIL	224.81	27,589.93	0.80	4
3	HBL	551.30	24,793.15	2.16	7
4	NIBL	213.90	36,241.20	2.69	8
5	BOK	190.31	14,647.29	1.27	5
6	SBI	315.95	15,131.74	2.02	6
7	SBL	60.30	13,328.62	0.45	1
8	NCC	197.06	6,858.19	2.74	9
9	NIC	129.17	13,679.39	0.23	2

*Sources: Annual Report of the respective Banks for the year 2065/66 and*

*NRB Directives*

In Table 4.4, the net non performing loan ratio is obtained by the percentage of net non performing loan to the total loan and advances. NPL ratio is the measurement for the loan which crosses the due period for repayment of principal and interest. As per NRB directives lower NPL ratio is better for the banks. NRB directives has prescribed the standard NPL ratio 1% , this is the standard ratio which Banks have to maintain during operation period. Banks which have higher NPL ratio requires higher provision for the doubtful loan loss provision. Similarly, form above table we can conclude that SBL is ranked at 1 and is at better position compare to other banks followed by NIC, NABIL.

#### **4.2.5 Loan Loss Provisioning Ratio**

The loan loss provisioning ratio indicates adequacy of allowance for loans. It is obtained by ratio of loan loss provision to the total loan (Garden and Miller, 1988). Loan loss ratio provides useful insight into the quality of a banks loan portfolio and bad debts coverage, and the adequacy of the loan loss provisions. Greater loan loss provision reflects the possibility of high losses but inadequacy may also result to high losses. This ratio shows the possibility of

loan default of the banks. It indicates how efficiently it manages its loan and advances and makes effort for the loan recovery. Higher ratio implies higher portion of non performing loan portfolio. The ratio of loan loss provision to total loan and advances describes the quality of assets that a bank is holding. The provision for loan loss reflects the probability of non performing loans in the volume of total loans and advances. Loan loss provision on the other hand signifies the cushion against future contingency created by the default of the borrowers. The higher ratio signifies the relatively more risky assets in the volume of loan and advances. The higher provision for loan loss shows the recovery of loan to be difficult, irregular and the age of the loan is increasing. More delay the banks get to collect the loan, the provision will be higher and the ratio will be higher. Altman and Sametz (1977) have identified few earning warning variables based on the balance sheet data. The loan loss ratio as defined by them is the ratio of provision for loss to the total loan and investments. The ratio is defined as the measure of prospective losses that are envisioned by the bank management in relation to the banks overall loan and investment.

**Table 4.5**  
**Loan Loss Provisioning Ratio**

(Amount in Million)

S.N.	Bank	Loan Loss Provision	Total Loan and Advances	LLP to Total Loan and Advance Ratio (%)	Rank
1	SCBNL	56.63	13,679.75	0.41	7
2	NABIL	45.72	27,589.93	0.16	1
3	HBL	68.80	24,793.15	0.27	4
4	NIBL	166.20	36,241.20	0.45	8
5	BOK	33.74	14,647.29	0.23	2
6	SBI	39.84	15,131.74	0.26	3
7	SBL	40.34	13,328.62	0.30	6
8	NCC	74.56	6,858.193	1.087	9
9	NIC	39.51	13,679.39	0.28	5

*Sources: Annual Report of the respective Banks for the year 2065/66 and*

*NRB Directives*

The Table 4.5 shows the loan loss provision to total loan and advance ratio. The loan loss provision ratio is directly proportional to the bad loan or the risk of loan default. We see that NABIL ranking is top which shows least provision for the NPL. At the same time the NCC has highest provision for the loan which accounts 1.087%. This shows that NCC has highest number of NPL compare to other banks. Here NABIL is ranked 1 followed by BOK, SBI, HBL, NIC, SBL, SCBNL, NIBL and NCC. The loan loss provision freezes the capital of the banks and also harms credibility of the bank. Loan Loss provision depicts how much provision a bank has to create for its loan out of the total loan provided. The lower the rate depicts that the quality of the assets (loans and advances) is of low risk.

#### 4.2.6 Loan Loss Provision to Non-Performing Loan Ratio

The ratio of loan loss provision to non performing loan has been analyzed because, it reflects the safety margin for the bank against NPL Higher the ratio, better for the bank. It is obtained by the ratio of loan loss provision to non performing loan.

**Table 4.6**

#### **Loan Loss Provision to Non-Performing Loan Ratio**

(Amount in Million)

S.N.	Bank	Loan Loss Provision	Non Performing Loan	LLP/NPL (%)	Rank
1	SCBNL	56.63	91.041	62.20	3
2	NABIL	45.72	224.81	20.33	6
3	HBL	68.80	551.30	12.47	9
4	NIBL	166.20	213.90	77.69	1
5	BOK	33.74	190.31	17.72	7
6	SBI	39.84	315.95	12.60	8
7	SBL	40.34	60.302	66.89	2
8	NCC	74.56	197.068	37.83	4
9	NIC	39.51	129.178	30.58	5

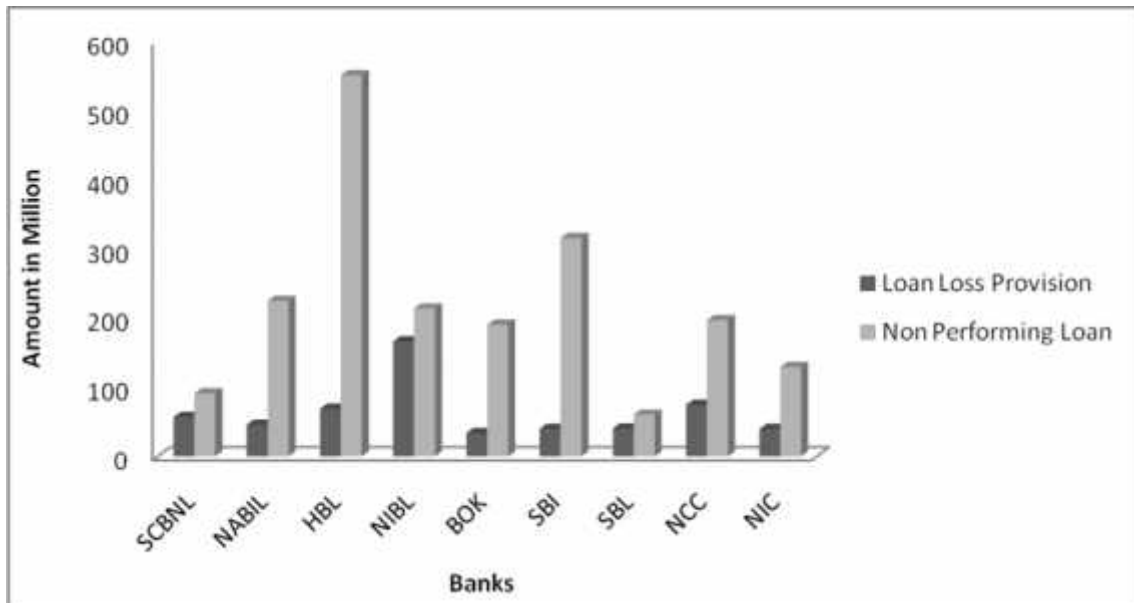
*Sources: Annual Report of the respective Banks for the year 2065/66 and*

*NRB Directives*

The Table 4.6 Shows the ratio of loan loss provision to non-performing loan ratio. Though there is no benchmark for this ratio higher is assumed as better. Here NIBL bank is ranked at 1 with 77.69 percent of the ratio followed by SBL, SCBNL, SCBNL, NCC, NIC, NABIL, BOK and SBI. Though higher is considered as better it also reflects the probability of the default on the loan. The banks make the provision if there is the risk of default on the loan.

**Figure 4.3**

**Non-Performing Loan and Loan Loss Provision**



The Figure 4.3 represents the table 4.5 and 4.6, and it can be seen that in non-performing loan to total loan and advances, SBL is ranked at 1 and is at better position compare to other banks followed by SCBNL, NIC, BOK, NCC, NIBL, NABIL, SBI and HBL. Whereas if we look at the Loan loss provisioning ratio BOK is ranked 1 followed by SBI, NIC, SBL, NABIL, HBL, NCC and NIBL. Banks which have higher NPL ratio requires higher provision for the doubtful loan loss provision. But loan loss provision freezes the capital of the banks and also harms credibility of the bank. Loan Loss provision depicts how much provision a bank has to create for its loan out of the total loan provided. But though higher LLP to NPL is considered as better it also reflects the probability of the default on the banks loan. The banks make the provision if there is the risk of default on the loan and as per the NRB directives.

**Table 4.7**  
**Assets Quality Analysis**

(Amount in Million)

S.N	Bank	NPL Ratio	Rank	LLP Ratio	Rank	LLP/NPL Ratio	Rank	Group Average
1	SCBNL	0.66	3	0.41	7	62.20	3	4
2	NABIL	0.80	4	0.16	1	20.33	6	3
3	HBL	2.16	7	0.27	4	12.47	9	6
4	NIBL	2.69	8	0.45	8	77.69	1	6
5	BOK	1.27	5	0.23	2	17.72	7	5
6	SBI	2.02	6	0.26	3	12.60	8	6
7	SBL	0.45	1	0.30	6	66.89	2	3
8	NCC	2.74	9	1.087	9	37.83	4	8
9	NIC	0.23	2	0.28	5	30.58	5	4

*Sources: Annual Report of the respective Banks for the year 2065/66 and*

*NRB Directives*

In Table 4.7, NPL ratio, LLP ratio and LLP/NPL ratio are put together to rank the assets quality of the banks. Since all the ratios are the component of the assets quality analysis in the CAMELS rating system, they are put together. Here SBL is ranked 1 with group average 3 followed by NABIL with 3.66 group average, NIC with 4 group average, SCBNL with 4.33 group average, BOK with 4.66 group average, SBI and NIBL with group average 5.66 and HBL with 6.66. Non performing loan(NPL%) is the loan with the due date of 3 months up to 6 months(Sub standard), 6months up to 1 year(Doubtful), and more than 1 year(Bad). Lower NPL ratio indicates the better management of assets. Lower NPL ratio indicates the better risk assessment and robust credit management systems in place and vice-versa. At the same time, while higher loan loss provisions indicate poor credit management, it also indicates adequate reserve for possible loan loss and protects the balance sheets of respective banks. Looking at the table, it is found that most of the banks have lower NPL and LPL percentage; however, there are few banks whose NPL percentage is

higher. These banks will have to focus on risk management control and should step forward in order to recover their bad debts.

### **4.3 Management Component Analysis**

Management role is very important in the performance of FIs. The key distinct areas that reflect the overall quality of management are governance, general management, human resource policy, management information system, internal control and audit strategic planning and budgeting. While the other factors can be quantified fairly easily from current financial statements, management quality being subjective is difficult to quantify. As such no particular factor can be pointed out as a concrete measure for accessing management quality. The qualitative assessment of aspect like depth and succession of top management, technical aspects, internal control decisions, operating and lending decisions, involvement of board of directors, willingness to serve community needs etc. illustrate the level of management quality as these decisions are reflected in the final balance sheet. There is one measure that is relevant to management is the ratio of total expenses to total revenue. Since the profitability of an institution is determine by the gap of total revenue and total expenses which are well in direct control and monitoring of the management, it is used to represent the management quality. Another measure that is also relevant to management is the ratio of earnings per employee is used as a proxy of management quality.

#### **4.3.1 Total Operating Expenses to Total Operating Revenue**

The ratio of total expenses to total revenue is used as a proxy measure of the management quality. This ratio is calculated by dividing the total expenses by total revenue. A high level of expenditure in unproductive activities may reflect an inefficient management. A high ratio of expenses total revenue may give indication of inefficient operation. This can be, but necessarily due to management deficiencies. In any case, it is likely to negatively affect profitability (IMF, 2000).

Commercial banks earnings originate from interest on loans and advances, investments, commissions and discounts, foreign exchange rate gains and other miscellaneous income. Conversely, it expands on, depositor's interest, staffs salary, provident fund allowances and other operating expenses like rent, water and electricity, fuel expenses, audit fee expenses, management expenses, depreciation, miscellaneous expenses, and all other expenses directly related to the operation of the banks. Expenses such as loss on sale of assets, write off expenses, losses shortage, written off, provision for income tax are non operating expenses. It is obtained by the ratio of total operating expenses to total operating revenue.

**Table 4.8**

**Total Operating Expenses to Total Operating Revenue**

(Amount in Million)

S.N.	Bank	Total Operating Expenses	Total Operating Revenue	TOE/TOR (%)	Rank
1	SCBNL	529.38	2,092.13	25.30	1
2	NABIL	605.06	2,220.98	27.24	3
3	HBL	759.30	1,988.05	38.19	8
4	NIBL	639.61	2,116.66	30.21	4
5	BOK	380.16	1,114.82	34.10	7
6	SBI	345.95	828.67	41.74	9
7	SBL	194.20	569.55	34.09	6
8	NCC	189.48	558.24	33.94	5
9	NIC	194.33	719.92	26.99	2

*Sources: Annual Report of the respective Banks for the year 2065/66*

The Table 4.8 shows the total operating expenses to total operating revenue in percentage. It is assumed that lesser the ratio better the bank will be. Here, the ratio of SCBNL is 25.30 percent and has the least percentage ratio, and SBI has 41.74 percent with the highest. It shows that the management of SCBNL is the strongest. SCBNL has the least expenditure of Rs. 259.38 million to generate the higher revenue of Rs.2092.13 million, here the NABIL bank has the highest revenue of Rs. 2220.98 million but expenses are also high comparative to

SCBNL which amounts to Rs. 605.06 million. NCC has the least operating income of Rs. 558.24 which is followed by SBL of Rs. 569 million but the expenditure of SBL is higher than NCC, which shows that SBL seems weak in this ratio of management analysis. Fails to meet the enough expenses for the revenue is considered as not good, but higher is considered as useless or worthless though each bank wants to earn high than expenses. But there is not a standard result for this ratio.

**Figure 4.4**

**Total Operating Expenses to Total Operating Revenue**

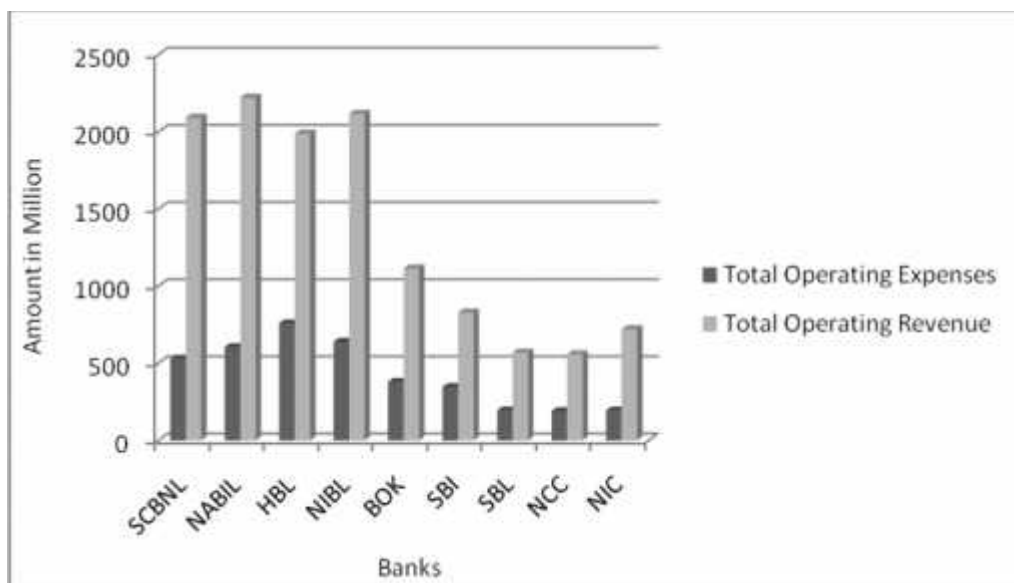


Figure 4.4 represents the total operating expenses to total operating revenue. It is the management quality that decreases the operating expenditure and increase the operating income. All the banks tries to meet such situation of quality management but HBL and SBI fails to maintain the situation as others have. As this ratio effect the profitability of the banks negatively, lower the ratio better the bank and vice versa. Though no standard ratio is there lower ratio is considered as good.

### 4.3.2 Earning Per Employee

Earning per employee is calculated by dividing net profit after taxes by number of employees. Lower earnings per employee can reflect inefficiencies as a



result of overstaffing, with similar repercussions in terms of profitability. (IMF, 2000)

**Table 4.9**  
**Earning Per Employee**

(Amount in Million)

S.N.	Bank	Net Profit ( In Million)	Number of Employee	Earning per Employee	Rank
1	SCBNL	1,025.11	392	2.62	1
2	NABIL	1,031.05	416	2.48	2
3	HBL	752.83	591	1.27	5
4	NIBL	900.62	766	1.18	6
5	BOK	461.73	489	0.94	7
6	SBI	316.37	323	0.98	8
7	SBL	217.92	168	1.30	4
8	NCC	415.46	297	1.40	3
9	NIC	317.43	270	1.18	6

*Sources: Annual Report of the respective Banks for the year 2065/66 and*

*NRB Directives*

Table 4.9 is self-explanatory in terms of explaining earning per employee (productivity) degree that exists within individual banks. Net profit of some of the banks in above table is low, which can be attributed to higher provision of loan loss resulting from poor quality of loans. Whereas the high net profit of the banks indicate that they have less loan loss provisions compared to the lower net profit making bank which shows the management efficiencies. As per the table SCBNL is ranked 1, followed by NABIL, NCC, SBL, HBL, NIBL, BOK, SBI .This has caused in negative per employee productivity of such bank, which is quite a paradoxical situation. This reflects the management efficiencies of higher earnings. It also depends upon the composition of the incomes/earnings. The proportion of the operating income should be high and that of the written off provisions should be low.

**Figure 4.5**  
**Earning Per Employee**

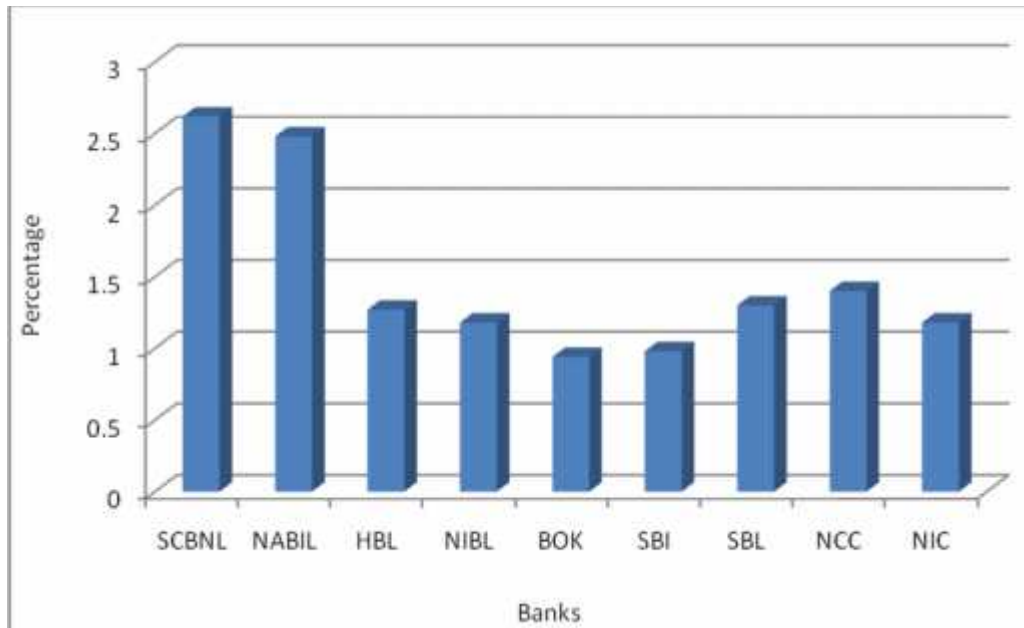


Figure 4.5 shows the earning per employee of the participant banks. There is no standard ratio for this but higher is better. As shown in the figure SCBNL has the highest earning per employee and ranked 1, followed by NABIL, NCC, SBL, HBL, NIBL, BOK, SBI, which has the earning per employee of 2.62, 2.48, 1.40, 1.27, 1.30, 1.27, 1.18, and 0.94. It reflects the management efficiencies of the participant banks. The ratio should consider the operating income which shows the real picture of the earnings. The earning ratio of the NCC is higher but its operating income is lower but it even shows higher income due to its written back of the provisions. Hence it shows higher ratio but does not reflect the true picture.

**Table 4.10**  
**Management Component Analysis**

(Amount in Million)

S.N.	Bank	TOE/TOR (%)	Rank	Earning Per Employee	Rank	Group Average
1	SCBNL	25.30	1	2.62	1	1
2	NABIL	27.24	3	2.48	2	2
3	HBL	38.19	8	1.27	5	6
4	NIBL	30.21	4	1.18	6	5
5	BOK	34.10	7	0.94	7	7
6	SBI	41.74	9	0.98	8	8
7	SBL	34.09	6	1.30	4	6
8	NCC	33.94	5	1.40	3	5
9	NIC	62.65	7	1.18	6	7

*Sources: Annual Report of the respective Banks for the year 2065/66 and NRB Directives*

**Table 4.10 shows the average ranking of the management component of the analysis. Only profit making is not enough, banks should be able to sustain it. A true picture of the management efficiency is reflected upon the sustainability of profit for these banks. If we look at the above table, most of the banks are able to sustain its profit. NCC has to go a long way and make out their future plans and create a right management team. In the above sections, we have observed the net profit for all 9 commercial banks. This shows the degree of earnings sustainability for commercial Banks in the country. We can safely conclude that management of those banks who have been able to increase their net profits in a constant and sustainable manner over a period of time are considered as efficient and successful, whereas management of the banks who have not been able to grow their earnings in a sustainable manner can be considered as inefficient.**

**Although, there is a risk of being slightly subjective, the issue of evaluating management quality cannot be completed, if we do not discuss about the Corporate Governance factor. While management must work to maximize Shareholder's value in any organization, there must be a clear line between management and shareholders or board of directors in terms of authority, responsibility and accountability levels. It has been observed that some of the banks could not perform well as there existed a significant interference of shareholders in day-to-day affairs of management. A good corporate governance requires policies, procedures and operating manuals to be supreme in any bank, whereby non-other than professional considerations should play any role in strategic decision-making. Unfortunately, generally speaking, Nepalese banking need to do a lot more in terms of implementing fair corporate governance practices.**

#### **4.4 Earning Quality Analysis**

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

##### **4.4.1 Return on Equity (ROE)**

The return on equity indicates the relationship between net profits after tax to total equity capital and is obtained by the ratio of net profit after tax to shareholders equity. ROE is measure of the rate of return flowing the banks shareholders. ROE is the profit as percentage return on the owner's stake in the firm. The level of profit depends on the ROE i.e. the profit per dollar invested (Meir Kohn, 1999). Computed as the ratio of net income to the equity, it reflects the income earned from its internal sources. The ROE measures the book return to the owners of the firm. It is a bottom line ratio in that sense

(Weston & Copland), 1991). Return on equity reveals how well the bank uses the resources of owners. The higher ratio represents sound management and efficient mobilization of the owner's equity and vice-versa. ROE of 15% is treated as standard and banking industry are desired to have higher than this (World Bank, 1996).

**Table 4.11**  
**Return on Equity**

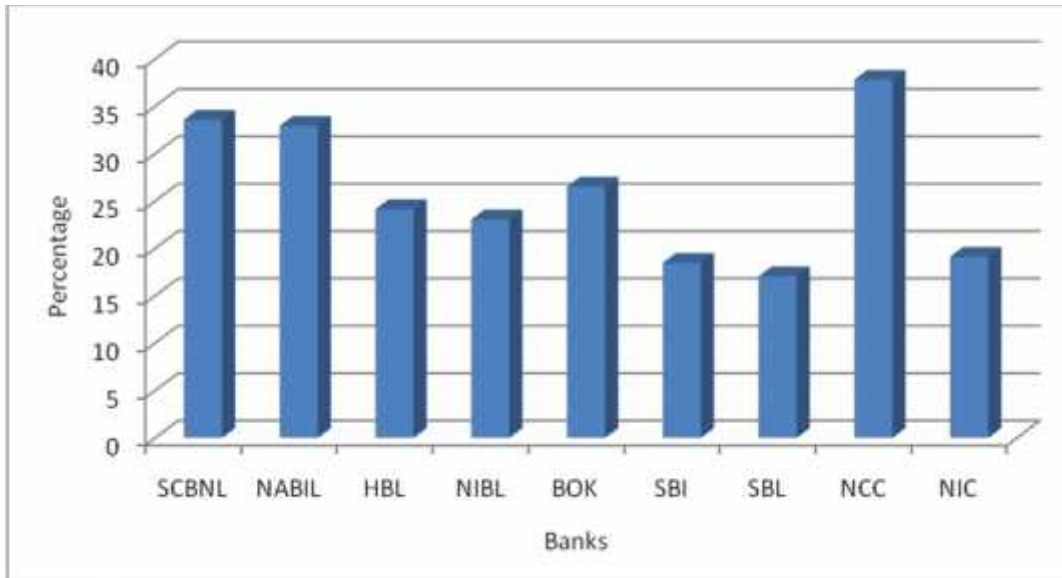
(Amount in Million)

S.N.	Bank	Net Profit After Tax	Shareholders Equity	Return on Equity	Rank
1	SCBNL	1,025.11	3,052.46	33.58	2
2	NABIL	1,031.05	3,130.24	32.93	3
3	HBL	752.83	3,119.88	24.13	5
4	NIBL	900.61	3,907.84	23.04	6
5	BOK	461.73	1,741.59	26.51	4
6	SBI	316.37	1,712.61	18.47	8
7	SBL	217.91	1,278.74	17.04	9
8	NCC	415.46	1,098.92	37.80	1
9	NIC	317.43	1,660.25	19.11	7

*Sources: Annual Report of the respective Banks for the year 2065/66 and NRB Directives*

Table 4.11 shows the return on equity ratio of the participant banks. As there is no standard for this ratio higher is considered as better. Higher return on equity is the main objectives of the firm and the management must act according to it. It even reflects the shareholders wealth. It also reflects the share price of the banks in the market. Though operating income of NCC bank is less but the total net profit after writing off the provisions is high it is ranked at 1 followed by SCBNL, NABIL, BOK, NIBL, HBL, NIC and SBL with ROE of 37.80, 33.58, 32.93, 26.51, 24.13, 23.04, 19.11, 18.47, 1 and 17.04 respectively.

**Figure 4.6**  
**Return on Equity**



The above bar diagram represents the return on equity of the participant banks. The figure reflects the higher ratio of 72.80 of NCC bank, which is far higher than other bank. It's because of the proportion of the non-operating profit in net profit. The rank is followed by SCBNL, NABIL, BOK, NIBL, HBL, NIC and SBL, which directly reflects the earnings of the bank. Since, all the banks are there for higher profit, higher the return better the earning is.

#### **4.4.2 Return on Assets (ROA)**

ROA determines the net income produced per dollar of assets. It is a measure of profitability linked to the asset size of the bank (Saunders and Cornett, 2004). It is primarily an indicator of managerial efficiency, it indicates how capably the management of the banks has been converting the institutions assets into net earnings (Rose, 1999). ROA is a popular tool to measure how well its assets are utilized in generating profit. It measures the profit earning capacity by utilizing available resources i.e. total assets. Return will be higher if the banks resources are well managed and efficiently utilized. Generally

return on assets ratio should be 1% and higher is desired to the banking industry (World Bank, 1996).

**Table 4.12**  
**Return on Assets**

(Amount in Million)

<b>S.N.</b>	<b>Bank</b>	<b>Net Profit After Tax</b>	<b>Total Assets</b>	<b>Return on Assets</b>	<b>Rank</b>
1	SCBNL	1,025.11	40,587.00	2.53	4
2	NABIL	1,031.05	43,867.39	2.55	3
3	HBL	752.83	39,320.32	1.91	6
4	NIBL	900.61	53,600.00	1.68	8
5	BOK	461.73	20,496.00	2.25	5
6	SBI	316.37	30,916.68	1.02	9
7	SBL	217.91	17,881.75	5.64	1
8	NCC	415.46	10,590.84	3.76	2
9	NIC	317.43	18,750.63	1.69	7

*Sources: Annual Report of the respective Banks for the year 2065/66 and NRB Directives*

The return on assets of the banks is shown by Table 4.12. As there is no standard for this ratio higher is considered as better. It reflects the earning component of the rating system. The banks assets must be utilized optimally for higher return. Thus the banks assets must be utilized to its optimum capacity. The table reflects higher return on assets and better utilization of the assets by the concerned bank. It even reflects the management's efficiencies to use the assets optimally. The lower ratio indicates that the bank uses their assets below the capacity. As per table SBL is ranked 1 followed by NCC, NABIL, SCBNL, BOK, HBL, NIC, NIBL and SBI.

**Figure 4.7**  
**Return on Assets**

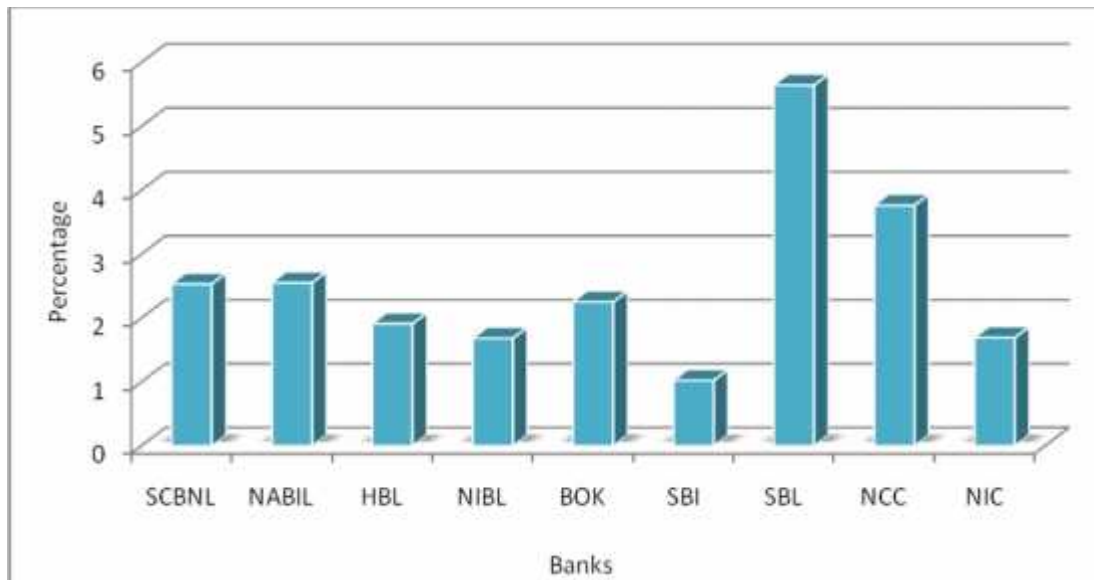


Figure 4.7 represents the table 4.12 and from which we can see that SBL has the higher return on assets and as stated earlier it's because of the non-operating income but not because of the operating income. Though it is ranked 1 it does not reflect the true picture of the bank. It shows how the assets of the concerned banks are utilized. Higher the return, better utilization of assets and vice-versa. Though SBL is ranked as 1 the bank other than this has better utilization of their assets if we see at the operating incomes.

#### **4.4.3 Net Interest Margin (NIM)**

The net interest margin measures the net return on the banks earning assets (investment, securities and loans and leases). It is calculated by dividing the net interest income (NII) with the earning assets (Saunders and Cornett, 2004). Generally, the net Interest margin ratio should be 3% to 4% and higher is better in banking industry (World Bank, 1996). Generally higher ratios are better. However it highlights the fact that looking at returns without looking at risk



can be misleading and potentially dangerous in terms of bank solvency and long run profitability (Saunders and Cornett, 2004).

**Table 4.13**  
**Net Interest Margin**

(Amount in Million)

S.N.	Bank	Net Interest Income	Earning Assets	Net Interest Margin	Rank
1	SCBNL	1,887.22	33,915.87	5.56	8
2	NABIL	2,798.48	38,416.31	7.28	6
3	HBL	2,342.19	33,503.84	6.99	7
4	NIBL	3,267.94	43,641.01	7.48	5
5	BOK	1,347.75	17,430.89	7.73	3
6	SBI	1,460.44	28,417.92	5.13	9
7	SBL	1,265.58	15,505.04	8.16	2
8	NCC	758.36	8,441.29	8.98	1
9	NIC	1,283.52	16,705.41	7.68	4

*Sources: Annual Report of the respective Banks for the year 2065/66*

Table 4.13 shows the net interest margin ratio of the participating bank. Net interest margin is the expression of numerical relationship between the net interest income and total earning assets of the bank. It measures how large a spread between interest revenue and interest costs management has been able to achieve to close control over the banks earning assets and the pursuit of the cheapest sources of funding. In the above table NCC Bank is ranked 1 followed by SBL, BOK, NIC, NIBL, NABIL, HBL, SCBNL and SBI. There is no benchmark for this ratio but higher is considered as better.

**Figure 4.8**  
**Net Interest Margin**

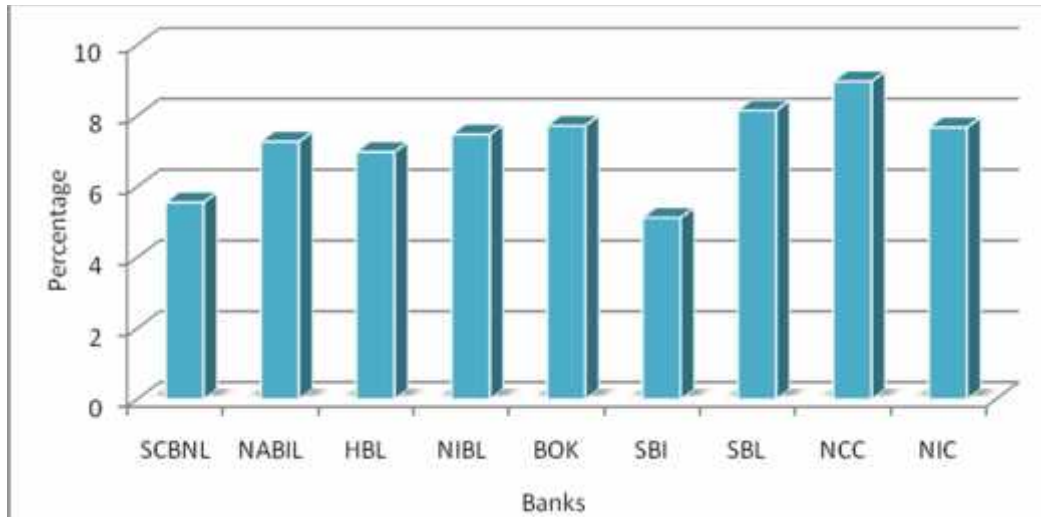


Figure 4.8 represents the net interest margin. The interest spread of NCC is quite good but its earning assets are smaller than any other banks. It shows the interest spread between lending and borrowing and the use of the assets to earn the spread. Though the net interest earning of the banks like SCBNL, NABIL and others are high, but lower net interest margin due to their high earning assets .

#### 4.4.4 Earning Per Share (EPS)

The profitability of the firm from the point of view of the ordinary shareholders is the earning per share. It measures the profit available to the equity shareholders on per share basis and is obtained by the ratio of net profit to numbers of shares (Shiva Prasad Munakarmi, 2002). The earning per share of an organization gives the strength of the share in the market. The higher the EPS is supposed to be a best comparing between the banks.

**Table 4.14**  
**Earning Per Share**

(Amount in Million)

S.N.	Bank	Net Profit	Number of Shares	Earning Per Share	Rank
1	SCBNL	1,025.11	9,319,664	109.99	1
2	NABIL	1,031.05	9,657,470	106.76	2
3	HBL	752.83	12,162,150	61.90	3
4	NIBL	900.61	24,070,689	37.42	5
5	BOK	461.73	8,443,979	54.68	4

6	SBI	316.37	8,745,278	36.18	6
7	SBL	217.91	9,522,000	22.89	9
8	NCC	415.46	13,995,580	29.35	7
9	NIC	317.43	11,404,800	27.83	8

Sources: Annual Report of the respective Banks for the year 2065/66 and  
NRB Directives

Table 4.14 shows the earning per shares of the participant banks. Earning per share provides a direct measure of the returns flowing to the banks owner (its stock holders) measured relative to the number of shares to the public. It is what the shareholders want to be high. Here SCBNL is ranked 1 followed by NABIL, HBL, BOK, NIBL, SBI, NCC, NIC and SBL. This is the amount of money what the shareholders or the investors is willing to pay for in the market price. The net profit of the SCBNL is high but lower number of shareholder ranked it in 1.

**Figure 4.9**  
**Earning Per Share**

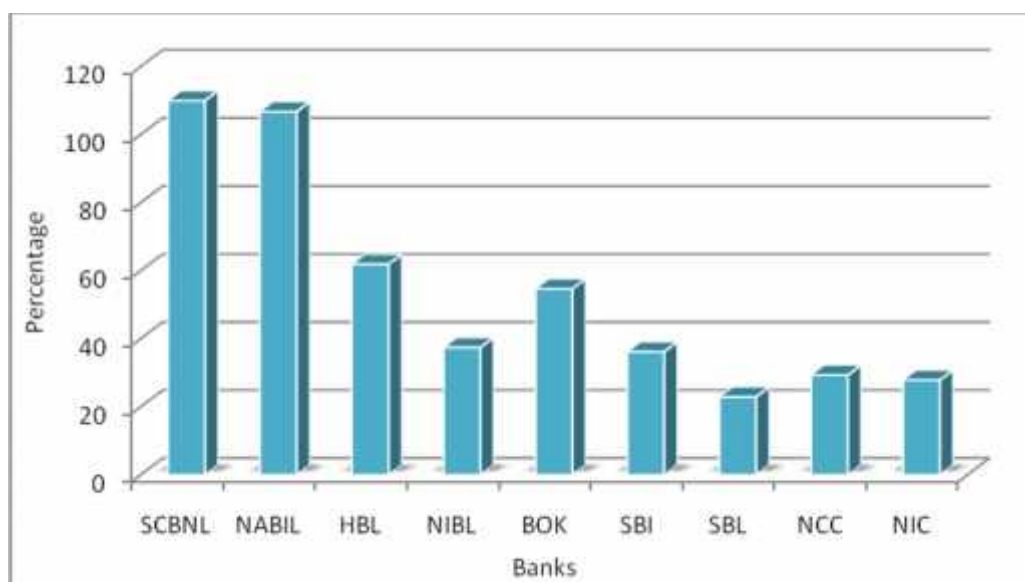


Figure 4.9 represents the earning per share. This is the amount of money what the shareholders or the investors is willing to pay for in the market price. The net profit of the SCBNL is high but lower number of shareholder ranked it in 1 whereas with the moderate net profit and higher number of shareholders NCC

is ranked at 6. But NRB directs the banks should increase the number of shares to reach the capital to 2 billion.

**Table 4.15**  
**Earning Quality**

(Amount in Million)

S.N	Bank	Return on Equity	Rank	Earning Per Share	Rank	Return on Assets	Rank	Net Interest Margin	Rank	Group Average
1	SCBNL	33.58	2	109.99	1	2.53	4	5.56	8	4
2	NABIL	32.93	3	106.76	2	2.55	3	7.28	6	5
3	HBL	24.13	6	61.90	3	1.91	6	6.99	7	5
4	NIBL	23.04	5	37.42	5	1.68	8	7.48	5	6
5	BOK	26.51	4	54.68	4	2.25	5	7.73	3	4
6	SBI	18.47	8	36.18	6	1.02	9	5.13	9	8
7	SBL	17.04	9	22.89	9	5.64	1	8.16	2	5
8	NCC	37.80	1	29.35	7	3.76	2	8.98	1	3
9	NIC	19.11	7	27.83	8	1.69	7	7.68	4	7

*Sources: Annual Report of the respective Banks for the year 2065/66 and NRB*

*Directives*

Table 4.15 shows the component of the earning quality of the participating bank and the average rank with the group rank for the final grading of the earning quality of the banks. Here in this component NCC better because of its higher net profit during the year. Though they earn this much profit due to the written off back of the provisions. ROE of most of the banks is higher than 20% while that of SBI, SBL and NIC is below 20%. Most of the banks are utilizing their Equity capital to generate profit. But these three banks seem not utilizing their equity capital enough. These banks really should concentrate on Capital Management thereby effectively utilizing its equity capital in order to generate profit. EPS of some banks are higher than 100, which shows that the profitability position of these banks is quite good. If we look at the EPS figure SBI, SBL NCC and NIC we come to a conclusion that the shareholders of these banks are really going through hard time due to the poor performance of the bank. The bank should plan its future, can be 5-7 years in advance and should be able to maximize the shareholders wealth in order to gain position in the

market. ROA of some of the banks are higher than 2% while that of NIBL, HBL, SBI, SBL and NIC is below 2%. Most of the banks are utilizing their assets to generate profit. But these three banks seem not to be utilizing their assets. These banks really should concentrate on Asset Management thereby effectively utilizing its assets in order to generate profit. Most of the banks NIM are above 5% which shows that most of the banks have managed higher interest margin or interest spread, which should be less. But only SCBNL is able to maintain the lower NIM of 4.77%, which should be even lower for the better competition.

#### **4.5 Liquidity Component Analysis**

The level of liquidity influences the ability of a banking system to withstand shocks. Liquidity risk arises when an FI's liability holder like depositor demands immediate cash for the financial claim they hold with an FI. The most liquid asset is cash, which FI can use directly to meet liability holders' demand to withdraw funds. Day to day withdrawals by liability holders are generally predictable and large FI can expect to borrow additional funds on the money and financial markets to meet any sudden shortfalls of cash. At times FI face a liquidity crisis due to either a lack of confidence on the FI problem or some unexpected need for cash the liability holders may demand larger withdrawals than usual. This turns the FI liquidity problem into a solvency problem and causes it to fail (Saunders and Cornett, 2004).

##### **4.5.1 NRB Balance to Total Deposit Ratio**

This ratio shows whether a bank is holding the balance as required to NRB. To ensure adequate liquidity in the commercial banks, to meet the depositors' demand for cash at any time, to inject the confidence in depositors regarding the safety of their deposited funds NRB has put the directives to maintain certain percent of total deposit in NRB by the commercial banks. Total deposits means current, savings and fixed deposits accounts as well as call account deposits and certificate of deposits. For the purpose, deposits held in

convertible foreign currency, employee guarantee amount and margin account will not be included (NRB Directives Manual, 2004).

**Table 4.16**  
**NRB Balance to Total Deposit Ratio**

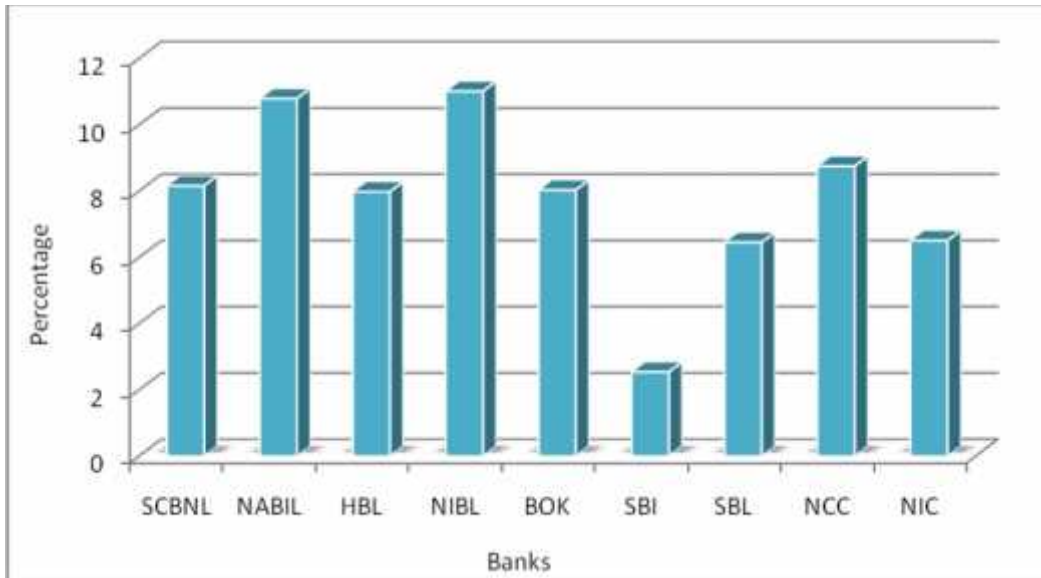
(Amount in Million)

<b>S.N.</b>	<b>Bank</b>	<b>NRB Balance</b>	<b>Total Deposits Less Margin and FCY</b>	<b>NRB Balance/Total Deposits (%)</b>	<b>Rank</b>
1	SCBNL	1,851.13	22,676.57	8.16	4
2	NABIL	2,648.59	24,529.79	10.79	2
3	HBL	2,328.40	29,157.41	7.98	6
4	NIBL	4,411.13	40,063.63	11.01	1
5	BOK	1,324.10	16,481.71	8.03	5
6	SBI	444.13	1,7501.22	2.54	9
7	SBL	984.98	15,260.73	6.45	8
8	NCC	781.44	8,926.11	8.75	3
9	NIC	970.98	14,904.78	6.51	7

*Sources: Annual Report of the respective Banks for the year 2065/66 and NRB Directives*

Table 4.16 shows the ratio of NRB balance to total deposits. The total deposits does not contains deposits held in convertible foreign currency, employee guarantee amount and margin account. It is balance of the concerned banks with NRB in their call accounts which does not offered interest. Higher ratio indicates the better position for the liquidity analysis thus, higher is better. The bank wants to have the optimum level of deposit at NRB but higher is considered as better for the liquidity analysis. This ratio changes every week as the amount of deposits. Here NIBL is ranked 1 followed by NABIL, NCC, SCBNL, BOK, HBL, NIC and SBL. It also implies higher liquidity and states that the bank with higher ratio can meet its short term obligations in no time. It also reflects that higher balance with NRB fails to invest or the poor lending.

**Figure 4.10**  
**NRB Balance to Total Deposit Ratio**



The ratio of NRB balance to total deposits held with the respective banks is represented by above diagram. It also helps to maintain the CRR requirements of the banks. The balance with NRB does not earn interest hence the banks wants less but the directives issued by NRB makes the compulsion for certain amount.

#### **4.5.2 Cash at Vault to Total Deposit Ratio**

This ratio shows the percentage of total deposits held as cash in hand at vault. This ratio is computed by dividing cash at vault by total deposits. Cash and foreign currencies in hand are included as cash in vault. Total deposits means current, savings and fixed deposits accounts as well as call account deposits and certificate of deposits. For the purpose, deposits held in convertible foreign currency, employee guarantee amount and margin account will not be included (NRB Directives Manual, 2004).



**Table 4.17**  
**Cash at Vault to Total Deposit Ratio**

(Amount in Million)

S.N.	Bank	Cash at Vault	Total Deposit Less Margin and FCY	Cash at Vault to Total Deposit (%)	Rank
1	SCBNL	463.34	22,676.57	2.04	7
2	NABIL	674.39	29,729.43	2.27	5
3	HBL	473.75	29,157.41	1.62	9
4	NIBL	1,833.46	40,063.63	4.57	1
5	BOK	565.06	16,481.71	3.43	4
6	SBI	652.02	17,501.22	3.73	3
7	SBL	270.94	15,260.74	1.77	8
8	NCC	342.79	8,926.11	3.8	2
9	NIC	337.35	14,904.78	2.26	6

*Sources: Annual Report of the respective Banks for the year 2065/66 and NRB Directives*

Table 4.17 shows the ratio of cash at vault to total deposits. The total deposits does not contains deposits held in convertible foreign currency, employee guarantee amount and margin account. It is balance of the concerned banks in their own custody at bank. Higher ratio indicates the better position for the liquidity analysis thus, higher is better. The bank wants to have the optimum level of cash at vault but higher is considered as better for the liquidity analysis. This ratio changes every week as the amount of deposits. Here NIBL is ranked 1 followed by NCC, SBI, BOK, NABIL, NIC, SCBNL, SBL and HBL. It also implies higher liquidity and states that the bank with higher ratio can meet its short term obligations in no time. It also reflects that higher balance of cash at vault means the bank is not lending in their optimum capacity.

**Figure 4.11**  
**Cash at Vault to Total Deposit Ratio**

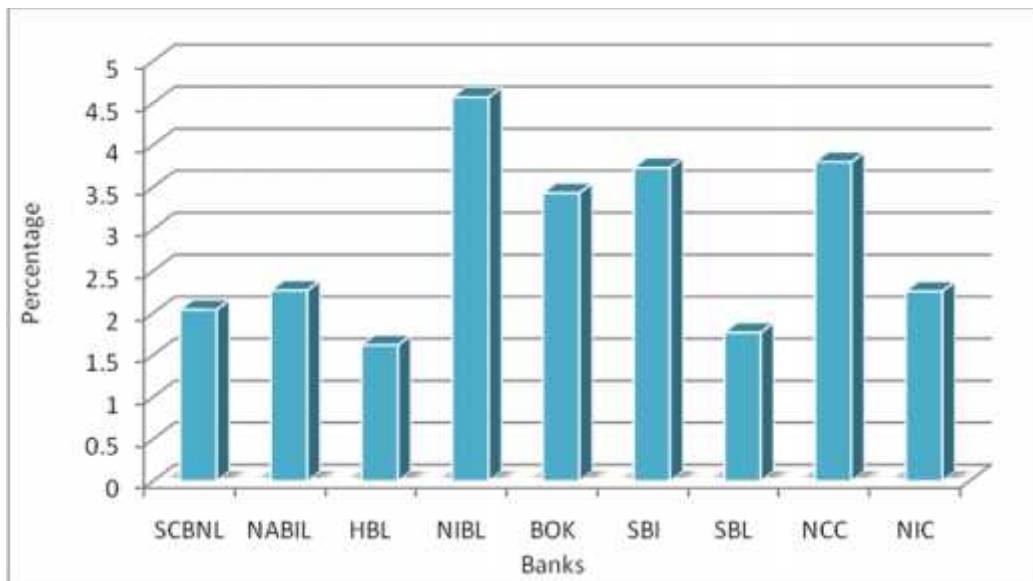


Figure 4.11 represents the ratio of cash at vault to total deposits held with the respective banks.

It also implies higher liquidity and states that the bank with higher ratio can meet its short term obligations in no time. It also reflects that higher balance of cash at vault fails to invest in short term securities or poor lending. The balance of cash at vault does not earn interest hence the banks wants less but the directives issued by NRB makes the compulsion for certain amount. It is the amount of cash that are used for the withdrawing customers.

### **4.5.3 Liquid Assets to Total Deposit Ratio**

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

at NRB, vault and other short term institutional lending can also be considered as liquid assets.

**Table 4.18**  
**Liquid Assets to Total Deposit Ratio**

(Amount in Million)

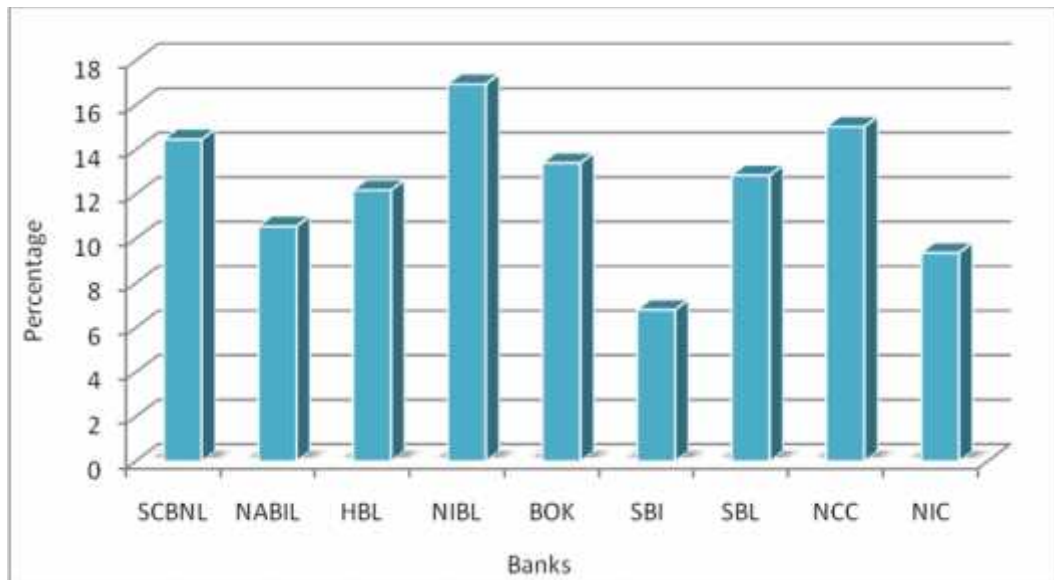
S.N.	Bank	Liquid Assets	Total Deposits	Liquid Assets To Total Deposits	Rank
1	SCBNL	5,192.71	3,5871.72	14.47	3
2	NABIL	3925.1	3,7348.25	10.56	7
3	HBL	4,219.32	3,4681.34	12.19	6
4	NIBL	7,918.00	46,698.10	16.95	1
5	BOK	2,425.46	18,083.98	13.41	4
6	SBI	1,903.90	27,957.22	6.810	9
7	SBL	2,032.52	15,854.79	12.86	5
8	NCC	1,373.40	9,127.74	15.04	2
9	NIC	1,461.15	15,579.93	9.37	8

*Sources: Annual Report of the respective Banks for the year 2065/66 and  
NRB Directives*

Data in above table shows the liquid assets to total deposit ratio of the participant banks. Banks around the world invest significant portion of their deposits in government securities because maintaining adequate CRR and C&B balance only cannot be considered sufficient for liquidity maintenance. There are occasions when a bank may need to face unexpected withdrawals. In such cases, as banks are run from depositor's money, they need to maintain adequate investment in government securities as such investments can be liquidated at any point in time. In India, Reserve Bank of India has directed all the commercial banks to maintain at least 25% of their deposits as Statutory Reserve Requirement (SRR), which is nothing but the ratio between Investments in Government Securities to Total Deposits. In Nepal, however, there is no mandatory requirement for banks to maintain this ratio. I strongly feel that NRB should implement a SRR in Nepal. Here NIBL bank

is ranked 1 followed by NCC, SCBNL, BOK, SBL,HBL, NABIL, NIC and SBI.

**Figure 4.12**  
**Liquid Assets to Total Deposit Ratio**



Graph above represents the table no 4.18. Although in general, we have excess liquidity in the market due to increasing flow of remittance in the country, there might be few financial institutions, as can be witnessed in the above figure, who might be maintaining a very low percentage of their deposits as investment in government securities. But in this regard of ranking NIBL bank is ranked 1 followed by NCC, SCBNL, BOK, SBL,HBL, NABIL, NIC and SBI. This lower liquid assets ratio can cause liquidity crisis or the bank's inability to honor deposit withdrawals, if so happens can send a very wrong signal about the entier economy.

**Table 4.19**  
**Liquidity Quality Analysis**

(Amount in Million)

S.N.	Bank	Liquid Assets To Total Deposits	Rank	NRB Balance/Total Deposits (%)	Rank	Cash at Vault to Total Deposit(%)	Rank	Group Average
1	SCBNL	14.47	3	8.16	4	2.04	7	5
2	NABIL	10.56	7	10.79	2	2.27	5	5
3	HBL	12.19	6	7.98	6	1.62	9	7
4	NIBL	16.95	1	11.01	1	4.57	1	1
5	BOK	13.41	4	8.03	5	3.43	4	4
6	SBI	6.810	9	2.54	9	3.73	3	7
7	SBL	12.86	5	6.45	8	1.77	8	7
8	NCC	15.04	2	8.75	3	3.8	2	2
9	NIC	9.37	8	6.51	7	2.26	6	7

*Sources: Annual Report of the respective Banks for the year 2065/66 and  
NRB Directives*

Above table shows the component of the liquidity quality of the participating bank and the average rank for the final grading of the liquidity quality of the banks. Here in this component NCC is better. Commercial banks are directed by NRB to maintain 5.5% of their deposit as CRR in NRB's account to ensure adequate liquidity. While going through the analysis, imperfection in CRR disclosure norms was found out. If a public depositor goes by the published annual report, he will find some banks, as mentioned in the above table, have not maintained the minimum CRR requirement of 5%. When further analysis was conducted, it was found that in reality all the banks have been maintaining requisite CRR as per NRB guideline. It is only the reporting method that they have been using is the major causing this confusion. Actually, NRB wants the banks to maintain CRR on a weekly basis. Therefore, if a bank has maintained higher NRB balance in other days of the week, it can afford to maintain lower than 5.5% balance on the year-end day. Therefore, we feel that rather than

disclosing the CRR of year-end, banks should report the exact CRR ratio maintained during the week, in which year-end falls. Deposit organization like bank, showing lower than regulatory CRR in their annual accounts, might lead to depositors mistrust towards the bank. NRB should ensure that the banks report correct CRR ratio in their annual accounts. It is not mandatory for banks to maintain minimum percentage of their deposits as investment in Government Securities in Nepal. This means, the only mandatory liquidity ratio that a bank has to maintain is CRR (which is also currently at a low level of 5.5%). In India, currently RBI has made it mandatory for the banks to maintain at least 25% of their deposit in Government Securities.

Cash and Bank balance to total Deposit ratio is designed to measure the bank's ability to meet the immediate obligation, mainly cash withdrawal by depositors. Lower ratio indicates that banks might face a liquidity crunch while paying its obligations; whereas a very high ratio points out that the bank has been keeping idle funds and not deploying them properly. From the above, table we can see that all the banks have set aside reasonable fund to meet their payment obligations. Banks around the world invest significant portion of their deposits in government securities because maintaining adequate CRR and C&B Balance only cannot be considered sufficient for liquidity maintenance. There are occasions when a bank may need to face unexpected withdrawals. In such cases, as banks are run from depositor's money, they need to maintain adequate investment in government securities as such investments can be liquidated at any point in time. Although in general, we have excess liquidity in the market due to increasing flow of remittance in the country, there might be few financial institutions, as can be witnessed in the above table, who might be maintaining a very low percentage of their deposits as investment in government securities.

#### **4.6 Sensitivity to Market Risk**

**Sensitivity to market risk refers to the risk that changes in market conditions could adversely affect earning and/or capital. Market risk encompasses exposure associated with changes in interest rate, foreign exchange rates, commodity price, equity price etc. while all of these items are important, the primary risk in most banks is the interest rate risk (IRR), which is the focus of this study. Exchange risk is simple in concept: a potential gain or loss that occurs as a result of an exchange rate change. Exchange risk is the effect that unanticipated exchange rate changes have on the value of the firm. What exchange risk does the firm face, and what methods are available to measure currency exposure? Second, based on the nature of the exposure and the firm's ability to forecast currencies, what hedging or exchange risk management strategy should the firm employ? Finally, which of the various tools and techniques of the foreign exchange market should be employed: debt and assets; forwards and futures; and options. When a bank has more liabilities re-pricing in a rising rate environment then assets re-pricing , the net interest margin (NIM) shrinks. Conversely, if the banks are assets sensitive in the rising interest rate environment, NIM will improve because the bank has more assets re-pricing at higher rates. There are many ways to monitor to exposure to IRR. Measurement system varies in complexity from very simple methods such as gap model, to very sophisticated models such as a simulation or duration analysis. This study is worked with gap model, which simply measures the net quantity of assets or liabilities re-pricing within a given period to estimate the likely impact that changes in interest rates will have on earnings. With a view to minimize the IRR, NRB requires the bank to adopt gap analysis adopted for minimization of liquidity risk shall also be applied in respect of minimization of IRR. Banks shall classify the time interval of the assets and liabilities on the basis of maturity period of 0-90 days, 91-180 days, 181-270 days, 271-365 days and over one year. The effect on the profitability is measured by**

**multiplying the changes in interest rate,  $R_i$  in the  $i^{\text{th}}$  maturity bucket annualized with cumulative gap (NRB directives manual 2004).**

If the interest rate raise on RSAs and RSLs, the positive CGAP ( $RSA > RSL$ ) would project the increase in the expected annual NII. However if interest rate falls when CGAP is positive, NII will fall. As, rates, fall interest revenue falls by more than interest expenses. Thus NII falls approximately by  $(CGAP) * (-R)$ . In general when CGAP is positive the change in NII is positively related to the changes in interest rates. Thus, banks would want to keep CGAP positive when interest rate expected to rise. Conversely, when the CGAP or the gap ratio is negative ( $RSA < RSL$ ) if interest rate rise by equal amount RSAs and RSLs, NII will fall. Similarly, if interest rate fall equally for RSAs and RSLs, NII will increase when CGAP is negative. As, rates fall interest expenses decreases by more than the revenue. In general when CGAP is negative, the changes in NII are negatively related to the changes in interest rates. Thus, banks are expected to keep CGAP negative when interest rate is expected to fall.

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





**Table 4.20**  
**Gap Analysis**

**SCBNL**

<b>Days</b>	<b>1-90</b>	<b>91-180</b>	<b>181-270</b>	<b>271-365</b>	<b>&gt;365</b>	<b>Total</b>
<b>RSAs</b>	20,064	5,756	2,260	3,364	9,143	40587
<b>RSLs</b>	15,968	763	100	588	23,168	40587
<b>GAPi (RSA-RSL)</b>	4,096	4,993	2,160	2,776	-14,025	0
<b>CGAPi (RSA-RSL)</b>	4,096	9,089	11,249	14,025	-	-
<b>RSA/RSL</b>	1.25	18.13	15.44	6.8	0.42	1
<b>CGAPi Ratio (CGAP/ Total RSA)(%)</b>	20.41	86.74	95.57	82.52		0
<b>R(%)</b>				1%	1%	
<b>NII = CGAP* R</b>				0.82	-	
<b>% Changes in NII</b>				0.01	-	

**NABIL**

<b>Days</b>	<b>1-90</b>	<b>91-180</b>	<b>181-270</b>	<b>271-365</b>	<b>&gt;365</b>	<b>Total</b>
<b>RSAs</b>	8,396	2,922	2028	3992	26988	43867.39
<b>RSLs</b>	8280	1215	2116	2858	29856	43867.39
<b>GAPi (RSA-RSL)</b>	116	1707	-88	1133	(2868)	-
<b>CGAPi (RSA-RSL)</b>	116	1823	1735	2868	-	-
<b>RSA/RSL</b>	1.01	2.40	0.95	1.39	0.90	1
<b>CGAPi Ratio (CGAP/Total RSA)(%)</b>	1.38	62.38	85.55	71.84	-	-
<b>R(%)</b>				1%	1%	
<b>NII = CGAP* R</b>				1.23	-	
<b>% Changes in NII</b>				0.00	-	

**HBL**

<b>Days</b>	<b>1-90</b>	<b>91-180</b>	<b>181-270</b>	<b>271-365</b>	<b>&gt;365</b>	<b>Total</b>
<b>RSAs</b>	16,385.00	5,523.00	3,959.00	3,946.00	10,942.00	39320.32
<b>RSLs</b>	11,539.00	6,398.00	3,095.00	6,935.00	12,787.00	39320.32
<b>GAPi (RSA-RSL)</b>	4,846.00	-875.00	864.00	-2,989.00	-1,845.00	0.00
<b>CGAPi (RSA-RSL)</b>	4,846.00	3,971.00	4,835.00	1,846.00	-	-
<b>RSA/RSL</b>	1.41	0.86	1.27	0.568	0.85	1
<b>CGAPi Ratio (CGAP/Total RSA)(%)</b>	29.57	71.89	122.21	46.78		
<b>R(%)</b>				1%	1%	
<b>NII = CGAP* R</b>				1.22	-	
<b>% Changes in NII</b>				0	-	

**NIBL**

<b>Days</b>	<b>1-90</b>	<b>91-180</b>	<b>181-270</b>	<b>271-365</b>	<b>&gt;365</b>	<b>Total</b>
<b>RSAs</b>	25,007.00	8,134.00	5,906.00	5,047.00	7,988.00	53,600
<b>RSLs</b>	33,509.00	3,536.00	627	4,775.00	4,609.00	53,600
<b>GAPi (RSA-RSL)</b>	-8,502.00	4,598.00	5,279.00	272.00	3,379.00	0.00
<b>CGAPi (RSA-RSL)</b>	-8,502.00	-3,904.00	1,375.00	1,647.00	5,026.00	-
<b>RSA/RSL</b>	0.74	2.30	9.41	1.05	1.73	1
<b>CGAPi Ratio (CGAP/Total RSA)(%)</b>	-33.99	-47.99	23.28	32.63	62.91	
<b>R(%)</b>				1%	1%	
<b>NII = CGAP* R</b>				0.1	0.51	
<b>% Changes in NII</b>				0	0	

**BOK**

<b>Days</b>	<b>1-90</b>	<b>91-180</b>	<b>181-270</b>	<b>271-365</b>	<b>&gt;365</b>	<b>Total</b>
<b>RSAs</b>	9,128.00	1,941.00	1299	2,065.00	5,693.00	20,496
<b>RSLs</b>	11,165.00	365	1815	485	4,551.00	20,496
<b>GAPi (RSA-RSL)</b>	-2,037.00	1,576.00	-516.00	1,580.00	1,142.00	0.00
<b>CGAPi (RSA-RSL)</b>	-2,037.00	-461.00	-977.00	603.00	1,745.00	-
<b>RSA/RSL</b>	0.81	5.31	0.71	4.25	1.25	1
<b>CGAPi Ratio (CGAP/Total RSA)(%)</b>	-22.31	-23.75	-75.21	29.20	30.65	
<b>R(%)</b>				1%	1%	
<b>NII = CGAP* R</b>				-0.05	0.23	
<b>% Changes in NII</b>				0	0	

**SBI**

<b>Days</b>	<b>1-90</b>	<b>91-180</b>	<b>181-270</b>	<b>271-365</b>	<b>&gt;365</b>	<b>Total</b>
<b>RSAs</b>	10,346.00	2,539.00	4995	7,230.00	5,664.00	30,916.68
<b>RSLs</b>	6,395.00	2,577.00	6935	5,186.00	7,790.00	28,884.00
<b>GAPi (RSA-RSL)</b>	3,951.00	-38.00	-1,940.00	2,044.00	-2,126.00	2,032.68
<b>CGAPi (RSA-RSL)</b>	3,951.00	3,913.00	1,973.00	4,017.00	1,891.00	-
<b>RSA/RSL</b>	1.61	0.98	0.72	1.39	0.72	1.07
<b>CGAPi Ratio (CGAP/Total RSA)(%)</b>	38.18	154.11	39.49	55.56	33.38	
<b>R(%)</b>				1%	1%	
<b>NII = CGAP* R</b>				1.59	0.38	
<b>% Changes in NII</b>				0.01	0	

**SBL**

<b>Days</b>	<b>1-90</b>	<b>91-180</b>	<b>181-270</b>	<b>271-365</b>	<b>&gt;365</b>	<b>Total</b>
<b>RSAs</b>	3,843.00	270	742	3,211.00	9,990.00	17881.75
<b>RSLs</b>	4,052.00	70	54	3742	10,138.00	17881.75
<b>GAPi (RSA-RSL)</b>	-209.00	200.00	688.00	-531.00	-148.00	0.00
<b>CGAPi (RSA-RSL)</b>	-209.00	-9.00	679.00	148.00	0.00	-
<b>RSA/RSL</b>	0.94	3.85	13.74	0.85	0.98	1
<b>CGAPi Ratio (CGAP/Total RSA)(%)</b>	-5.43	-3.33	91.50	4.60	0	
<b>R(%)</b>				1%	1%	
<b>NII = CGAP* R</b>				0.05	0	
<b>% Changes in NII</b>				0	0	

**NCC**

<b>Days</b>	<b>1-90</b>	<b>91-180</b>	<b>181-270</b>	<b>271-365</b>	<b>&gt;365</b>	<b>Total</b>
<b>RSAs</b>	4107	1955	781.00	867.00	2,372.00	10590.84
<b>RSLs</b>	2,643.00	77	299	359	5,748.00	10590.84
<b>GAPi (RSA-RSL)</b>	1,464.00	1,878.00	482.00	508.00	-3,376.00	0.00
<b>CGAPi (RSA-RSL)</b>	1,464.00	3,342.00	3,824.00	4,332.00	956.00	-
<b>RSA/RSL</b>	1.55	25.38	2.61	2.41	0.41	1
<b>CGAPi Ratio (CGAP/Total RSA)(%)</b>	35.64	170.94	489.62	499.65	40.30	
<b>R(%)</b>				1%	1%	
<b>NII = CGAP* R</b>				1.1	2.32	
<b>% Changes in NII</b>				0.01	0.02	

**NIC**

<b>Days</b>	<b>1-90</b>	<b>91-180</b>	<b>181-270</b>	<b>271-365</b>	<b>&gt;365</b>	<b>Total</b>
<b>RSAs</b>	3,609.00	1,561.00	2,785.00	6,722.00	4,073.00	18750.63
<b>RSLs</b>	3,686.00	3,407.00	1,492.00	1,462.00	8,766.00	18750.63
<b>GAPi (RSA-RSL)</b>	-77.00	-1,846.00	1,293.00	5,260.00	-4,693.00	0.00
<b>CGAPi (RSA-RSL)</b>	-77.00	-1,923.00	-630.00	4,630.00	-63.00	-
<b>RSA/RSL</b>	0.97	0.45	1.86	4.59	0.46	1
<b>CGAPi Ratio (CGAP/Total RSA)(%)</b>	-2.13	-123.19	-22.62	68.87	-1.54	
<b>R(%)</b>				1%	1%	
<b>NII = CGAP* R</b>				0.87	0	
<b>% Changes in NII</b>				0.01	0	

*Sources: Annual Report of the respective Banks for the year 2065/66 and NRB Directives*

Table 4.20 represents the market sensitivity due to interest rate risk of the participating banks in short term period and long term period. Here gap analysis is used to evaluate the interest rate sensitivity. As we see in the table that all the banks except NCC have no effect of changes in the interest rate in the long term period but NABIL, HBL, BOK and SBL are less sensitive to the changes in the interest rate for the short term period than any other banks. Nepalese Banking sector is exposed to Interest Rate Risk and the Exchange rate risk.

#### Interest Rate Risk

**The interest rate offered by various banks range from low range of 2.5% to high as 7.5%. Needless to say, there are several other financial institutions like finance companies and cooperative organization who are offering as high as 15% interest on deposit. Similarly, on the lending side, banks with low cost of funds can manage to offer very low and attractive interest, where as those banks with high cost of funds will have to quote higher lending rates in no choice basis. This generates an ample room for arbitrage. Further, all borrowers will be attracted towards the banks offering lower interest rate. These banks have been cherry picking the most fruitful and sound loan proposals. Residual problematic proposals may be financed from lower-class financial institutions. This creates a fear that banks with higher cost of funds end with piling up of relatively poor asset portfolios (Portfolio Risk).**

#### Exchange Rate Risk

**This risk comes into picture while trading between two or more currencies. Banks accept foreign currency deposits. The movement in the international exchange rate may impose such banks to excessive exchange rate risk. In the Nepalese banking scenario, there are some banks, which are flushed with foreign currency. Some of them are holding too much of foreign currency than what they actually require. Such banks should**

immediately think to mitigate exchange rate risk by applying proper hedging techniques. In this year's monetary policy, NRB has allowed banks to deal in derivative products. This will help banks to hedge their exchange risks.

**Table 4.21**  
**Composite Ranking**

S.N.	Bank	Capital Adequacy Ratio	Assets Quality	Management Quality	Earning Quality	Liquidity	Sensitivity to Market	Group Average
1	SCBNL	3	4.33	1	3.75	4.66	3	3.29
2	NABIL	8	3.66	2.5	3.5	4.66	1.5	3.97
3	HBL	5.5	6.66	6.5	5.5	7	1.5	5.44
4	NIBL	5.5	5.66	5	5.75	1	2	4.15
5	BOK	3.5	4.66	7	4	4.33	1.5	4.16
6	SBI	6	5.66	8.5	8	7	3.5	6.44
7	SBL	8	3	5	5.25	7	1	4.87
8	NCC	3.5	7.33	4	2.75	2.33	5	4.15
9	NIC	2	4	6.5	6.5	7	2.5	4.75

*Sources: Annual Report of the respective Banks for the year 2065/66*

The Table shows the ranking of all the component of the CAMEL rating system with the average of all the ranking of the participant banks. Here the ranks of the entire component are shown and the group average of all the rank of each component is calculated. The final rating is the group average. Since nothing is perfect in the world no one is ranked at 1 or 9 but all of them lies in between, 1 is considered as the best and 9 is considered as worst. SCBNL has group average of 3.2 with 3 in capital adequacy, 4.3 in assets quality, 1 in management quality, 3.75 in earning quality, 4.7 in liquidity and 3.0 in sensitivity to the market. NABIL has group average of 3.97 with 8 in capital adequacy, 3.66 in assets quality, 2.5 in management quality, 3.5 in earning quality, 4.7 in liquidity and 1.5 in sensitivity to the market. HBL has group average of 5.4with 5.5 in capital adequacy, 6.7 in assets quality, 6.5 in management quality, 5.5 in earning quality, 7 in liquidity and 1.5 in sensitivity to the market. NIBL has group average of 4.15 with 5.5 in capital adequacy,



5.6 in assets quality, 5 in management quality, 5.75 in earning quality, 1 in liquidity and 2.0 in sensitivity to the market. BOK has group average of 4.16 with 3.5 in capital adequacy, 4.66 in assets quality, 7.0 in management quality, 4 in earning quality, 4.33 in liquidity and 1.5 in sensitivity to the market. SBI has group average of 6.4 with 6 in capital adequacy, 5.66 in assets quality, 8.5 in management quality, 8.0 in earning quality, 7 in liquidity and 3.5 in sensitivity to the market. SBL has group average of 4.87 with 8 in capital adequacy, 3 in assets quality, 5 in management quality, 5.25 in earning quality, 7 in liquidity and 1.0 in sensitivity to the market. NCC has group average of 4.15 with 3.5 in capital adequacy, 7.33 in assets quality, 4 in management quality, 2.75 in earning quality, 2.33 in liquidity and 5.0 in sensitivity to the market and Similarly NIC has group average of 4.75 with 2.0 in capital adequacy, 4 in assets quality, 6.5 in management quality, 6.5 in earning quality, 7 in liquidity and 2.5 in sensitivity to the market. Though no one is ranked at 1, SCBNL is the good perform in the fiscal year followed by NABIL, NIBL, NCC, BOK,NIC, SBL,HBL and SBI.

#### **4.7 Major Findings**

1. The total Capital Fund and CAR of most of the commercial banks are satisfactory except for few commercial banks who have failed to maintain it as per the NRB directives. According to NRB, commercial banks have to maintain 11% CAR. From this point of view the above data shows that CAR of most of the banks is above 11% whereas, NCC bank is unable to maintained CAR according to NRB. In the year 2065/66 NIBL maintained the highest CAR than other banks.
2. The main reason for the Banks not being able to maintain minimum capital fund is due to the increased non-performing loans. While such increase in bad loans eat up the profit (decrease, the corresponding provision for such bad loans cannot be counted as capital as NRB has allowed banks only to count their provisions for good loans as supplementary capital.

3. It is found that most of the banks have lower NPL and LPL percentage; however, there are few banks whose NPL percentage is higher. The banks with lower NPL and LLP will have to focus on risk management control and should step forward in order to recover their bad debts.
4. **The management quality cannot be completed, without discussing about the Corporate Governance factor. Management work to maximize Shareholder's value in any organization, there must be a clear line between management and shareholders or board of directors in terms of authority, responsibility and accountability levels.**
5. **A good corporate governance requires policies, procedures and operating manuals to be supreme in any bank, whereby non-other than professional considerations should play any role in strategic decision-making because some of the banks could not perform well due to interference of shareholders in management.**
6. Most of the banks are utilizing their Equity capital to generate profit except SBI, SBL and NIC. These banks really should concentrate on Capital Management for effectively utilization of its equity capital.
7. EPS of some banks are higher than 100, which shows that the profitability positions of these banks are quiet good except SBI, SBL NCC and NIC. It can be concluded that the shareholders of these banks are really going through hard time due to the poor performance of the bank.
8. Most of the banks are utilizing their assets to generate profit except NIBL, HBL, SBI, SBL and NIC. These banks really should concentrate on Asset Management to utilize their assets in order to generate profit.
9. Only SCBNL is able to generate a huge profit along with lower interest spread. For the perfect competition and as per good corporate governance it should be less as possible. The interest spread of SCBNL can be considered as a benchmark.
10. Deposit organization like bank, showing lower than regulatory CRR in their annual accounts, might lead to depositors mistrust towards the bank.

11. It is not mandatory for banks to maintain minimum percentage of their deposits as investment in Government Securities in Nepal. This means, the only mandatory liquidity ratio that a bank has to maintain is CRR (which is also currently at a low level of 5.5%). In India, currently RBI has made it mandatory for the banks to maintain at least 25% of their deposit in Government Securities.
12. It is found that all the participant banks have reasonable fund to meet their payment obligations.
13. The Nepalese banks are facing interest rate risk and foreign exchange risk, which are difficult to evaluate. But the banks treasury always wants to be in zero position in interest rate as well as foreign exchange.
14. As per the analysis of data SCBNL is ranked at 1, NABIL at 2, NCC and NIBL at 3 ,BOK at 4,NIC at 5 SBL at 6 in the composite ranking of the CAMELS rating system.

## CHAPTER - V

### SUMMARY CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary

As per the assets quality analysis the higher ranked banks like NIBL, NIC and NABIL have higher security to depositors, higher internal source and higher ability to cushion operational and unanticipated losses. The inadequacy in capital could show higher earnings ratio. Banks which have higher NPL ratio requires higher provision for the doubtful loan loss provision. As we go through the summary table of the assets composition NIC is ranked at 1 which shows better risk assessment and robust credit management systems in place. Most of the banks have lower NPL and LPL percentage but there are few banks whose NPL percentage is higher and these banks should focus on risk management control and should think to recover their bad debts. Management role is very important in the performance of FIs. Most of the banks are able to sustain its profit, but some banks has to make out their future plans and create a right management team for sustainable profit because only profit making is not enough, banks should be able to sustain it. Earning represents the first line of defense against capital depletion resulting from shrinkage in assets value. Though operating income of some bank is less, total net profit after writing off the provisions is high which fails to analyze the earning efficiency. Most of the banks are utilizing their capital and assets to generate profit but some banks seems inefficient in utilizing their capital and assets at their optimum capacity and these banks really should concentrate on capital and asset management. NIM of most of the banks are above 5% which shows that the banks are managing higher interest margin or interest spread, which should be less. But only SCBNL is able to maintain the lower NIM of 4.77%, which should be even lower for the better customer service.

Commercial banks are directed by NRB to maintain 5.5% of their deposit as CRR in NRB's account to ensure adequate liquidity. While going through the

analysis, there are imperfections in maintaining CRR of some banks. So, if anyone analyzes the published annual report, he/she will find that some banks are not maintaining minimum CRR requirement of 5.5%. When further analysis was conducted, it was found that in reality all the banks are maintaining required CRR as per NRB guideline but due to the reporting method that they are using is the major causes for the confusion. If liquidity ratio is low, banks might face a liquidity crunch while paying its obligations; whereas a very high ratio points out that the bank has been keeping idle funds and not deploying them properly. But all the banks have maintained reasonable fund to meet their payment obligations. We can that all the banks except NCC have no effect of changes in the interest rate in the long run but NABIL, HBL, BOK and SBL are less sensitive to the interest rate for the short run. Nepalese Banking sector are exposed to Interest Rate Risk and the Exchange rate risk with political risk.

## **5.2 Conclusion**

From the analysis we can conclude that CAR of most of the commercial banks is satisfactory except few commercial banks who have failed to maintain as per the NRB directives. According to NRB directives, commercial banks have to maintain 11% CAR. The main reason for the Banks not being able to maintain minimum capital is due to the increasing non-performing loans, such increase in non-performing loan could decrease the profit. Most of the banks have lower NPL and LPL percentage but some bank have even higher. The banks with lower NPL and LLP will have to focus on risk management and should act to recover their bad debts. For the management quality analysis, without addressing the Corporate Governance factor it cannot be completed. Management always works to maximize Shareholder's wealth, but there must be a clear line between management and shareholders or board of directors in terms of authority, responsibility and accountability levels.

**Good corporate governance includes policies, procedures and operating manuals as prime factor, because some of the banks could not perform well due to interference of shareholders in management and fails to make strategic decision. We can safely conclude that management of those banks who have been able to increase their net profits in a constant and sustainable manner over a period of time are considered as efficient and successful, whereas management of the banks who have not been able to grow their earnings in a sustainable manner can be considered as inefficient. Almost all of the banks are utilizing their Equity capital to generate profit except some new banks these banks should concentrate on efficient Capital Management for effective utilization of equity capital even the profitability positions of these banks are not satisfactory and the shareholders of these banks are really going through hard time due to the poor performance of the bank. Some banks are successfully utilizing their assets to generate profit but some banks seem not effective in utilizing their assets. So, these banks really should concentrate on Asset Management to utilize its assets.**

Few banks are able to have a huge profit along with lower interest spread. For the perfect competition and as per good corporate governance the interest spread should be less as possible. The interest spread of SCBNL can be considered as a benchmark. Deposit organization like bank, showing lower than regulatory CRR in their annual accounts, might lead to depositors mistrust towards the bank. It is not mandatory for banks to maintain minimum percentage of their deposits as investment in Government Securities in Nepal. So, only mandatory liquidity ratio that a bank has to maintain is CRR. All the participant banks have reasonable fund to meet their payment obligations since the entire bank poses good liquidity position. The market risk is the inevitable factor in the banking industry. Along with interest rate risk and exchange rate risk, political risks are the main source of market risk. The banks treasury

always wants to be in zero position in interest rate as well as foreign exchange but can do nothing to political risk.

### **5.3 Recommendations**

In the light of worsening political and economic condition in the country the banking sector of the country is still growing at a steady pace. Deposits, loans, investments etc all has shown a increasing trend. With 25 commercial banks operating currently along with other financial intermediaries there is a stiff competition in the financial services sector. There are some recommendations from the research report and they are:

- J The bank with lesser D/E ratio states that the bank is strong enough for the operation. But the organization with higher D/E ratio could earn higher profit, but will not be strong enough for the operation, especially in the banking industry of their own money and playing with others money, but is too much risky in case of default, and is stated as weak and poor and it must be strictly monitored and controlled.
- J The main reason for the Banks not being able to maintain minimum capital fund is due to the increased non-performing loans, so the bank should decrease their non-performing loans and increase the capital.
- J It is recommended that NRB should stipulate banks present with detailed loan and advances exposure for signaling vulnerability of the financial system, economy and inherent credit risks.
- J Loan usually makes the largest portion of the all assets in all the banks. As they are the least liquid form of assets, loan and advances contain the high proportion of potential risks to the banks capital and that should be monitored and controlled and alternative investment should be encouraged.
- J Banks don't like putting their assets into fixed-income securities, low return. However, investment-grade securities are liquid, and they have higher yields than cash, so it's always prudent for a bank to keep securities on hand in case they need to free up some liquidity.

- J Bankers as well as investors should pay attention to asset growth, the composition of assets between cash, securities, and loans, and the composition of the loan.
- J The lower Loan Loss provision depicts the quality of the assets (loans and advances) is of low risk. Lower NPL ratio indicates the better management of assets. So it should be maintained at lower as possible.
- J The key distinct areas that reflect the overall quality of management are corporate governance, general management, human resource policy, management information system, internal control and audit strategic planning and budgeting. So these should be clearly examined.
- J The qualitative assessment of aspect like depth and succession of top management, technical aspects, internal control decisions, operating and lending decisions, involvement of board of directors, willingness to serve community needs etc. illustrate the level of management quality as these decisions are reflected in the final balance sheet. These should be monitored more effectively.
- J Only profit making is not enough, banks should be able to sustain it. A true picture of the management efficiency is reflected upon the sustainability of profit for these banks so the profitability should be continuous.
- J The management work to maximize Shareholder's value, there must be a clear line between management and shareholders or board of directors in terms of authority, responsibility and accountability levels. Nepalese banking need to do a lot more in terms of implementing fair corporate governance practices.
- J The banks should be more concentrated in Capital Management and Equity Management for the better return.
- J In India, Reserve Bank of India has directed all the commercial banks to maintain at least 25% of their deposits as Statutory Reserve Requirement (SRR). In Nepal, there is no mandatory requirement for banks to maintain



this ratio. I strongly recommend that NRB should implement a SRR in Nepal

- ) It seems that some of the banks are not maintaining the minimum CRR as directed by NRB, it is only the reporting method that they have been using is the major causing this confusion. So there should be appropriate measuring mechanism for the CRR.
- ) Banks around the world invest significant portion of their deposits in government securities because maintaining adequate CRR and C&B Balance only cannot be considered sufficient for liquidity maintenance. So in Nepal also NRB should direct the banks to have significant investment in the government securities.
- ) Further more study can be done by increasing the sample size and using the various other tools.
- ) Comparing with other class banks can be carried out.

## BIBLIOGRAPHY

- Adhikari, D.R. (1993). *Evaluating the Financial Performance of Nepal Bank Limited*. Tribhuvan University.
- Bank for International Settlement (1988). *International Convergence of Capital Measurement and Capital Standards*, Basel: BIS.
- Bank for International Settlement (2005). *International Convergence of Capital Measurement and Capital Standards, Revised Version*, Basel: BIS
- Bank for International Settlement (2007). *International Convergence of Capital Measurement and Capital Standards, Comprehensive Version*, Basel: BIS
- Baral, K.J. (2005). *Health check-up of Commercial Banks in the framework of CAMEL: A Case Study of Joint Venture Banks in Nepal*.
- Barker, D., & Holdsworth, D. (1998). *The Causes of Bank Failures in the 1990s*. Federal Reserve Bank of New York.
- Barr, R.S., Seiford, LM. & Siems, T.F. (1998). *An Envelopment-Analysis Approach to Pleasuring the Management Quality of Banks*. Operation Research.
- Berger, A.N. & Davies, S.M. (1998). *The Information Content of Bank Examinations*. Journal of Financial Services Research.
- Bhandari, K. (2008). *The Financial Performance of Himalayan Bank Limited in the Framework of Camel*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, Tribhuvan University.
- Bohora, B.R. (1992). *A Comparative Study of the Financial Performance of Nepal Arab Bank Limited and Indosuez Bank Limited*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, Tribhuvan University.
- Cantor, R. (2003). *A New Capital Adequacy Framework*. Journal of Banking and Finance.
- Deoja, S. (2007). *A Comparative Study of the Financial Performance Between Nepal State Bank of India Limited and Nepal Bangladesh Bank Limited*.

- Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, Tribhuvan University.
- Dhungana, B.R. (BS 2065). *NPLs and its Management*, Banking Pravardhan.
- FDIC (2004, November). *Examination Handbook 070 A.1*. Office of Thrift Supervision, USA.
- Gurung, V.C. (1998). *A Financial Study of Joint Venture Banks in Nepal*. Tribhuvan University.
- Heyliger, W.E., & Holdren, D.P. (1991). *Predicting Small Bank Failure*. The Journal of Small Business Finance
- Jackson, W. (1975, June). *Commercial Bank Regulation Structure and Performance*. The Journal of Finance
- Joshi, A. (2008). *A Comparative Study on Financial Performance of Nepal SBI Bank Ltd & Nepal Bangladesh Bank Ltd*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, Tribhuvan University.
- Joshi, D. (1993). *A Study on Commercial Banks of Nepal With Special Reference to Financial Analysis of Rastrya Banijya Bank*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, Tribhuvan University.
- K.C., R. (1991). *Dividend Policy of Joint Venture Banks in Nepal*. Tribhuvan University.
- Madura, J. (2008). *International Financial Management*. New Delhi: West Publishing Company India.
- Maharjan, R.(2010). *A Financial Analysis of Nabil Bank*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, Tribhuvan University.
- Meyer, P.A. & Piffer, H.W. (1970). September). *Predictions of Bank Failures*. The Journal of Finance.
- Ministry of Finance (BS 2061). *Banking and Financial Institution Ordinance*, Kathmandu.

- Nepal Rastra Bank (1998-2008). *Annual Bank Supervision Report*. Kathmandu: NRB.
- Nepal Rastra Bank (1998-2008). *Bank and Finance Statistics*. Kathmandu: NRB.
- Nepal Rastra Bank (2009). *Capital Adequacy Framework Implementation Group Report. NRB Directive no 6*. Kathmandu, NRB
- Pradhan, N.(2009). *Profit Planning of Commercial Banks with Comparative Study of Everest Bank, Nabil Bank and Bank of Kathmandu*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, Tribhuvan University.
- Sapkota, A. (2009). *Profitability Benchmark of NB Bank*, Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, Tribhuvan University.
- Shakya, D.R. (1995). *Financial Analysis of Joint Venture Banks in Nepal*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, Tribhuvan University.
- Sharma, R. (2008). *Capital Structure of Selected Commercial Banks in Nepal*. Kathmandu: An Unpublished Master Degree Thesis, Submitted to Faculty of Management, Tribhuvan University.
- Shrestha, B.R. (2009). *Measures To Strengthen The Effectiveness of Supervision In The Changed Context*. Kathmandu: NRB.