CHAPTER - I

INTRODUCTION

1.1 Background of the Study

Globalization, liberalization, privatization, modernization and competition are the pillars for strengthening the financial sectors. These concepts should be adhered at all the time in developing the strategy for the financial system. These five pillars give opportunities as well as risks to the financial sectors in the country. To minimize the risk of all banking industry is new a challenge for bank supervision department. So, supervision department have developed new methods for monitoring and assessing banks on an ongoing basis.

Banking sector plays vital role in the economic development of any country. An effective banking system leads to the effective mobilization of sources like saving and investment which in turn leads to the sound economic health of the country. Banks offer the various types of services to their customers to facilitate the economic transactions. "Banks are those financial institution that offers the wider ranges of financial services-especially credit, saving and payments services-and perform the widest range of financial functions of any firm in an economy. This multiplicity of banking services and functions has led to banks being labeled "financial department stores" (Rose, 2002:8).

Bank failures have stronger adverse effects on economic activities than other business failure. So banking is one of the most closely supervised industries.

Commercial banks are major financial institutions which occupy an important place in the economy. It performs various functions such as payments, financial intermediation between depositors and borrowers and other financial services. In the same way commercial banks operation records the economic pulse reflecting economic situation of the country. Commercial Banks, by playing active roles, have changed the economic structure of the world. Thus, they have become the heart of financial system.

The dominant privately owned financial institution in the United States and in the economies of most major countries is the commercial banks. This institution offers the

public both deposit and credit services, as well as a growing list of newer and more innovative services such as investment advice, security underwriting and financial planning. The name commercial implies that banks devote most of their resources to meeting the financial needs of the business firms. In recent years, however, commercial banks have significantly expanded their offerings of financial services to consumers and units of government. The result is the emergence of financial institutions that has been called a financial departmental store because it satisfies the broadest range of financial service needs in the economy. (Gupta and Kolari, 2005:8)

1.1.1 Historical Development of Banking Industry in Nepal

The growth of banking in Nepal is not so long. In comparison with other developing or developed country, the institutional development in banking system of Nepal is far behind. Nepal had to wait for a long time to come to this present banking position. Now, the banking system is still in the evolutionary phase. Even though, the specific date of the beginning of money and banking deal in Nepal is not obvious, it is speculated that during the reign of different king, the evidence of minted gold and silver coins. Landlord, merchants and other individual moneylender have acted as lender in an un-organized money market.

At the beginning of 8th century Gunakama Dev had borrowed money to rebuild the Kathmandu valley and at the end of the same century, a merchant named, Shankhadhar, has started the "New year" (Nepal Sambat) after freeing all the people of Kathmandu from the debt. This record proves the existence of money lender function at that time. In 11th century, during Mallaregime, there are an evidence of professional money lenders and bankers. In 12th century, Sadashiva Dev introduced silver coins. However, due to the absences of regulatory bodies, the moneylender to change high rate of interest and other extra dues on loans extended.

During the course of development of borrowing, they further come across the term "Tanka Dhari "at the ends of the 14th century, meaning moneylenders, which is one of the sixty four castes classified in the basis of occupation. In 1877 A.D. "Tejarath Adda" was

established by then government. The main purpose of this institution was to provide credit facilities to the general public at minimum interest rate of five percent. The establishment of this institution marked the beginning of organized financial institution in Nepal.

After establishment of NRB, a number of financial institutions are established. In 1957 A.D, Industrial Development Bank was establish to promote the industrialization in Nepal, which was latter converted into Nepal Industrial Development Corporation (NIDC). In 1959 A.D., Rastriya Banijya Bank was established. In 1966 A. D. as 'the second commercial bank of Nepal' which fully owned by government. As the agriculture is the basic occupation of major Nepalese, the development of this sector plays the prime role in the economy. So, separate Agriculture Development Bank was established in 1968 A.D. This is the first institution in agriculture as financing; and it was established with the objectives of providing facilities and financial support to the public by bringing about dynamism in agricultural development of the nation and to provide the capital and loan to the agricultural field. It also gives the technological advice to the farmers. The process of the development of banking system in Nepal was not satisfactory up to 1980s. The country cannot change its status by using only its own capital in the country without importing the new technology from foreign country. So, in mid 1980s, the financial liberalization policy was introduced by the government. After declaring free economy and privatization policy, the then Nepal government encouraged the establishment of private banks including the foreign joint ventures.

From this date, the real form of the development of the banking system started in Nepal. The banks began to offer their valuable services to the people through new technologies.

This was the great significant event in the history of banking sector. Thus, Nepal Arab Bank Limited (NABIL) established in 1984 A.D. This is the first modern bank, with latest banking technology, and then one after another several joint venture banks are established in the country. Nepal Indosuez Bank Limited (Later has been called Nepal Investment Bank Ltd.), Nepal Grindlays Bank Limited (now became Nepal Standard

Chartered Bank Limited) are established under joint venture in 1985, 1986 AD respectively. NRB adopted a more liberal economic policy in establishing the commercial banks, as a result number of commercial banks come into existence like as Himalayan Bank Limited, Nepal SBI Bank Limited, Nepal Bangladesh Bank Limited, Everest Bank Limited, Bank of Kathmandu, and Nepal Bank of Ceylon etc. Thereafter, local, national and regional level banks also came into existence. As a result, thirty one commercial banks are in operation (including the commercial banking wing of the Agriculture Development Bank) out of thirty one commercial banks. Nine bank were established in joint venture, however, at present there are six joint venture banks after withdrawals of foreign investment in three banks. Nepal Investment bank, Bank of Kathmandu, and bank of Ceylon (Later has been named as Nepal Credit and Commerce Bank Ltd) do not have foreign investment now. They have Nepalese shareholders.

Nepal Bank Limited (NBL), the first commercial bank of the country, was established in 1937 A.D with an objective of attracting people to formal banking system from the costly services of pre-dominant moneylenders. Similarly, another commercial bank, Rastriya Banijya Bank (RBB) was established on 23 January 1966 A.D with full government ownership. In the early 1970s, NRB encouraged both NBL and RBB to expand their branches to various parts of the country. For this purpose, NRB itself had conducted feasibility study and adopted the policy to subsidize the banks on their losses on any new branches for three years of their operations. In 1975 A.D, NRB achieved its target of having at least one branch of commercial bank in each district head quarter.

The public sector banks, which are three in numbers and have large branch networks throughout the country, have still got substantial share in the total assets of the industry. Adopting the economic liberalization in the country in early 1990s, there has been tremendous growth in the number of private sector banks. The share of these banks on total deposits, loans, and total assets has been increasing gradually. The banks are becoming efficient in terms of capital, technologies, products and services and overall management. The competition in the market is getting tougher as the number of these institutions is increasing rapidly and the market size being the same. Therefore, it is felt

necessary to strengthen their capacity in terms of product innovation, service delivery and public accountability. The banks should work together for raising public confidence and becoming competitive enough to retain the customers and mobilize the resources from non-banking sector to banking sector. Adequate public disclosure has become the worldwide issue and banks should properly manage varied banking risks with an assurance of safety and soundness in their operations and assurance on public deposit. Nepalese banks cannot be exception.

1.1.2 Concept of "CAMELS" Bank Rating System

Federal Reserve Bank of New York (1997 A.D) has defined the component of CAMEL as rating system which produces a composite rating of an institution's overall condition and performance by assessing five components: Capital adequacy, Asset quality, Management Administration, Earnings, and Liquidity. The CAMEL was later updated with inclusion of sixth component, Sensitivity to Market Risk, now is referred to as the core component.

Bank Supervision Department (BSD) has been following the international supervisory practices along with tailor-made Nepalese relevant laws while supervising the commercial banks. BSD has been following compliance based supervision practice; but its efforts are directed at moving towards Risk Based Supervision.

The cornerstone of supervisory review is thorough, regularly scheduled, on-site examinations. These examinations focus on six components of bank safety and soundness, known together as CAMELS (Capital Adequacy, Asset Quality, Management, Earning, Liquidity, Sensitivity to Market risk). The banks are assigned a grade of 1 (best) through 5 (worst) on each component. Supervisors use these six scores to award a composite CAMELS rating, also expressed as a 1 through 5 scales. The scores and ratings are kept confidential and used for supervisory response.

The component of bank's management cannot be assessed only in terms of the returns submitted by the bank. Thus, the off-site supervision does not analyze by using CAMELS

rating. A separate rating has been devised for the off-site supervision, which uses the components of CAMELS except for the "M" representing management, and the rating is, thus, labeled CAELS. On the basis of these components, Off-site supervision unit ranks the banks regularly. The result of the ranking remains confidential and used only for supervisor's information (www.nrb.org.np).

CAMELS Rating System

CAMEL was originally developed by the Federal Deposit Insurance Corporation(FDIC) for the purpose of determining when to schedule an on-site examination of a bank. The Federal Financial Institution Examination Council (FFIEC) is revised in January 1997 A.D, the UFIRS, which is commonly referred to as the CAMEL rating system. This system was designed by regulatory authorities to quantify the performance and the financial condition of the banks which it regulates. The CAMELS rating system is subjective. Benchmarks for each component are provided, but they are guidelines only, and present essential foundations upon which the composite rating is based. They do not eliminate consideration of other pertinent factors by the examiner. The uniform rating system provides the groundwork for necessary supervisory response and helps institutions supervised by all three US supervisors to be reasonably compared and evaluated. Ratings are assigned for each component in addition to the overall rating of a bank's financial condition. The ratings are assigned on a scale from 1 to 5. The CAMELS ratings are commonly viewed as summary measures of the private supervisory information gathered by examiners regarding banks' overall financial conditions, although they also reflect available public information.

The most important criteria for determining the appropriateness of Financial Institutions (FIs) to act as a financial intermediary are its solvency, profitability, and liquidity. In this respect, the Basel Committee on Banking Supervision(BCBS) of the Bank of International Settlements (BIS), since 1988 A.D, has recommended. The most common supervisory methods used by the regulatory agencies in promoting safety and soundness are on-site supervision and off-site supervision (Keefe, 2007).On-site examination ratings like CAMELS are useful in the analysis of the bank examination. The CAMELS rating

ranges from 1 to 5, lower rating representing better and well managed bank. CAMEL's framework is a common method for evaluating financial performance. This method is developed to assess not only of the financial performance of banks but also to manage risk. This CAMELS rating of banks is not disclosed to concerned banks and other external parties.

Bank supervisory authorities assign each bank a score on a scale of one (best) to five (worst) for each factor. If a bank has an average score less than two it is considered to be a high-quality institution, while banks with scores greater than three are considered to be less-than-satisfactory establishments. The system helps the supervisory authority identify banks that are in need of attention.

NRB central office prepared a working paper in 2006 A.D about supervisory provision for foreign bank branches in Nepal. NRB supervises joint venture banks of financial information and compliance of applicable rules regulations and legal provisions including NRB directives. Performance of joint venture banks has been better than domestic banks reflected in profitability position, non-performing assets levels and capital adequacy position.

The commercial banks in Nepal can be broadly classified into two categories: public banks and private banks. The banks which are owned by the government are called as public banks while the banks owned by the private sector are categorized as private banks. The private banks can be further regrouped into the domestic banks and joint venture banks. Nepal has adopted most liberal economic policies since 1990 A.D. The country is open to foreign investment and a numbers of joint venture banks came into existence. Out of 32 commercial banks six are joint venture as of mid-July 2011 Licensed by NRB. Joint venture is a contractual business under taking between two or more parties and Joint venture bank is bank own by the joint investment of domestic investors and foreign banks. Joint venture banks have been increasing with an aim to provide modern banking services and facilities with more effectives.

1.1.3 An Introduction of Sample Banks

Himalayan Bank

Himalayan Bank was established in 1993 A.D in joint venture with Habib Bank Limited of Pakistan. Despite the cut-throat competition in the Nepalese Banking sector, Himalayan Bank has been able to maintain a lead in the primary banking activities- Loans and Deposits.

Legacy of Himalayan lives on in an institution that's known throughout Nepal for its innovative approaches to merchandising and customer service. Products such as Premium Savings Account, HBL Proprietary Card and Millionaire Deposit Scheme besides services such as ATMs and Tele-banking were first introduced by HBL. Other financial institutions in the country have been following its similar products and services. Therefore, they stand for the innovations that they bring about in this country to help our Customers besides modernizing the banking sector. With the highest deposit base and loan portfolio amongst private sector banks and extending guarantees to correspondent banks covering exposure of other local banks under our credit standing with foreign correspondent banks, they believe they obviously lead the banking sector of Nepal. The most recent rating of HBL by Bankers' Almanac as country's number 1 Bank easily confirms our claim.

All Branches of HBL are integrated into Globus (developed by Temenos), the single Banking software where the Bank has made substantial investments. This has helped the Bank provide services like 'Any Branch Banking Facility', Internet Banking and SMS Banking. Living up to the expectations and aspirations of the Customers and other stakeholders of being innovative, HBL very recently introduced several new products and services. Millionaire Deposit Scheme, Small Business Enterprises Loan, Pre-paid Visa Card, International Travel Quota Credit Card, Consumer Finance through Credit Card and online TOEFL, SAT, IELTS, etc. HBL also has a dedicated offsite 'Disaster Recovery Management System'. Looking at the number of Nepalese workers abroad and their need for formal money transfer channel; HBL has developed exclusive and proprietary online money transfer software- Himalremit. By deputing our own staff with

technical tie-ups with local exchange houses and banks, in the Middle East and Gulf region, HBL is the third biggest inward remittance handling Bank in Nepal. All this only reflects that HBL has an outside-in rather than inside-out approach where Customer's needs and wants stand first (www.himalayanbank.com)

Everest Bank

Everest Bank Limited (EBL) started its operations in 1994 A.D with a view and objective of extending professionalized and efficient banking services to various segments of the society. The bank is providing customer-friendly services through its Branch Network. All the branches of the banks are connected through Anywhere Branch Banking System (ABBS), which enables customers for operational transactions from any branches. With an aim to help Nepalese citizens working abroad, the bank has entered into arrangements with banks and finance companies in different countries, which enable quick remittance of funds by the Nepalese citizens in countries like UAE, Kuwait, Bahrain, Qatar, Saudi Arabia, Malaysia, etc.

Bank has set up its representative offices at New Delhi (India) to support Nepalese citizen remitting banking related money and advising services .Punjab National Bank (PNB), our joint venture partner (holding 20% equity in the bank) is the largest nationalized bank in India. With its presence virtually in all the important centers at India, Punjab National Bank offers a wide variety of banking services which include corporate and personal banking, industrial finance, agricultural finance, financing of trade and international banking. Among the clients of the Bank are Indian conglomerates, medium and small industrial units, exporters, non-resident Indians and multinational companies. The large presence and vast resource base have helped the Bank to build strong links with trade and industry (www.everestbankltd.com).

Nabil Bank

Nabil Bank Limited, the first foreign joint venture bank of Nepal, started operations in July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, Nabil

provides a full range of commercial banking services through its 47 points of representation across the kingdom and over 170 reputed correspondent banks across the globe. Nabil, as 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. Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology which includes ATMs, credit cards, state-of-art, world-renowned software from Infosys Technologies System, (Bangalore, India), Internet banking system and Telebanking system (www.nabilbank.com).

Standard Chartered Bank

Standard Chartered Bank Nepal Limited has been in operation in Nepal since 1987 A.D when it was initially registered as a joint-venture operation. Today the Bank is an integral part of Standard Chartered Group having an ownership of 75% 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 has a history of over 150 years in banking and operates in many of the world's fastest-growing markets with an extensive global network of over 1750 branches (including subsidiaries, associates and joint ventures) in over 70 countries in the Asia Pacific Region, South Asia, the Middle East, Africa, the United Kingdom and the Americas. As one of the world's most international banks, Standard Chartered employs almost 75,000 people, representing over 115 nationalities, worldwide. This diversity lies at the heart of the Bank's values and supports the Bank's growth as the world increasingly becomes one market. With 18 points of representation, 23 ATMs across the country and with more than 350 local staff, Standard Chartered Bank Nepal Ltd. is in a position to serve its customers through an extensive domestic network. In addition, the global network of Standard Chartered Group gives the Bank a unique opportunity to provide truly international banking services in Nepal. Standard Chartered Bank Nepal Limited offers a full range of banking products and services in Consumer banking, wholesale and Banking catering to a wide range of

customers encompassing individuals, mid-market local corporate, multinationals, large public sector companies, government corporations, airlines, hotels as they as the segment comprising of embassies, aid agencies, NGOs and INGOs. The Bank has been the pioneer in introducing 'customer focused' products and services in the country and aspires to continue to be a leader in introducing new products in delivering superior services. It is the first Bank in Nepal that has implemented the Anti-Money Laundering policy and applied the 'Know Your Customer' procedure on all the customer accounts.

Corporate Social Responsibility is an integral part of Standard Chartererd's ambition to become the world's best international bank and is the mainstay of the Bank's values. The Bank believes in delivering shareholder value in a socially, ethically an environmentally responsible manner. Standard Chartered throughout its long history has played an active role in supporting those communities in which its customers and staff live. It concentrates on projects that assist children, particularly in the areas of health and education. Environmental projects are also occasionally considered. It supports non-governmental organizations involving charitable community activities The Group launched two major initiatives in 2003 A.D under its 'Believing in Life' campaign-'Living with HIV/AIDS 'and' Seeing is Believing. (www.standardcharted. com.np)

1.2 Focus of the Study

Nepal Rastra Bank (NRB) as a regulator and supervisor of the banking sector has been effortful to ensure a healthy and efficient financial sector by improving regulation on par with international standard. Bank supervision department of NRB bases its evaluation of financial performance of commercial banks on a CAMELS rating system. An effective performance measurement system presents both financial results and operating data on a responsibility basis. The study focuses on the financial performance of joint venture commercial banks in Nepal by using descriptive cum analytical research design. Many countries are applying CAMELS monitoring tools, which is designed by United Financial Institutions Ratings System (UFIRS) to supervisory controls in the commercial banks operation and helps to find the critical deficiencies faced by such banks. More specifically the study focuses on the trend of capital adequacy ratio and non-performing

loan ratio relative to NRB standard and industrial average respectively. The study basically focuses on the past financial performance (from fiscal year 2008/09 A.D through 2009/10A.D) of JVB in the framework of CAMELS.

1.3 Statement of the Problem

Profitability position of all commercial banks is generally known through annual reports. But information given in the annual reports is not enough to look into the performance of the commercial banks. Investors should analyze the performance on one hand and on the other hand regulatory body should carry out off-site and on-site supervision of commercial banks and keep their sound financial health. The major problem of the study is to check up to the financial health of all joint venture banks of Nepal in the framework of CAMELS. Therefore this study has attempted to solve the following specific research questions:

1. How the Joint Ventured sampled banks are managing their Capital Adequacy?
2. What is the trend of non-performing assets and loan loss provision in Joint Venture sampled banks?
3. How Joint Venture sample banks are managing their expenses with respect to revenues?
4. What is the trend of earnings of Joint Venture sampled banks?
5. What is the trend of liquidity position of the JVBs?
6. What is the sensitivity analysis?

1.4 Objectives of the Study

The fundamental objective of this study is to analyze the financial performance analysis of all joint venture banks in the framework of CAMELS. The specific objectives of the study are given below: To analyze the capital adequacy of JVBs.

1. To analyze the trend of capital adequacy ratio of JVBs.
2. To analyzes the trend of non performing assets and loan loss provision in JVBs.
3. To analyze operating efficiency of management of JVBs.
4. To analyze the trend in earning of JVBs.
5. To analyze liquidity position of JVBs.
6. To analyze the sensitivity of the sampled banks.

1.5 Significance of the Study

The study is the financial performance of joint venture banks in Nepal in the framework of the CAMELS. It will help to know the existing problem of banks and give recommendation for their sound financial health. This research would help the managers to evaluate performance of their banks. CAMELS rating system will be crucial and convenient technique to assess the financial performance of any financial institutions and it will provide a framework for the supervisory authority. On the other hand, the study is important for the commercial banks, researchers, scholars, students and many other partners. At last it will add little worth to those who want to conduct a research work in the related topic.

1.6 Limitation of the Study

- The study has been done on the basis of the data provided by the organization. So the output of the study is highly depended on the data provided by the relevant bank.
- As the study focuses on the financial aspect of the bank, it does not cover all the other aspect.
- The study fully depends upon the secondary data provided by the bank (i.e., Annual reports, NRB publication, working papers and dissertations).
- The time-period of only 6 years have been taken for the study so the data has been mostly based on that particular time period. The bank's audited annual reports from the period 2008/09 to 2009/10 are the main source of information and treated as authentic
- The evaluation made herein is taken of only 4 sample banks. It is focused on the financial analysis of the study unit in the frame work of the six components of CAMELS system.

1.7 Organization of the Study

This study is organized into following five chapters which are as follows:

Chapter I: Introduction

This chapter includes the general introduction of the research work, historical development of banking industry in Nepal, short description of sampled banks, Concept of CAMELS, Focus of the study, statement of the problem, objective of the research, significance and limitations of the research.

Chapter II: **Literature Review**

This chapter contains Conceptual Review, Concept of Commercial Bank, functions of Commercial banks, concept of Bank supervision, Supervisory and monitoring System of the NRB, Fundamental Concept and Background regarding Basel Accord, Need for Supervision and Monitoring, Method of Bank Supervision and Monitoring System, Bank Supervision types, Definition of CAMELS, CAMEL plus Corporate Governance, Research Review, Research Gap

Chapter III: Research Methodology

This chapter contains Research Design, Population and Sample, Nature and Sources of Data, Data Collection Procedure, Data Processing, Data Analysis Tools, Limitation of the research Methodology

Chapter IV: Data Presentation and Analysis

The acquired data are analyzed and presented through the way of designed methodology in this chapter to accomplish the research objective. It includes Presentation and Analysis of Data, Capital Adequacy, Management Quality, Earnings, Liquidity, Sensitivity to Market Risks, Major Finding.

Chapter V: Summary, Conclusion and Recommendations

The last chapter provides the summary, recommendation and conclusion of the overall study.

At the end an extensive bibliography and appendices are also included as a part of this research work.

CHAPTER - II

LITERATURE REVIEW

This chapter basically is concerned with review of literature relevant to the financial performance analysis of commercial banks, bank supervision, CAMELS rating system and review of research papers and dissertations. Conceptual review and research review is most important part of this chapter. Conceptual review deals with various component of financial performance of commercial bank. Research review presents the dissertation, articles and other related published and unpublished materials.

2.1 Conceptual Review

This section presents the conceptual aspect of the study. It includes the concept of commercial banks, functions of commercial banks, historical development of commercial banks in Nepal, supervision system of NRB, and method of financial performance analysis.

2.1.1 Concept of Commercial Bank

The concept of commercial bank evolved from the concept of commerce. The name commercial implies that banks devote most of their resources to meeting the financial needs of business firms. The commercial sectors development of a country is largely depended upon services of commercial banks. (Rose, 1982:82)

The commercial bank is that financial institution which deals in accepting deposits of persons and institution, and giving loans against securities. These banks also provide technical and administrative assistance to industries, trades and business as well as provides growing list of newer and more innovative services, such as investment advice, security underwriting and financial planning. The commercial banks accept the deposit from unproductive sectors and channelize them in the productive sectors. They provide the working capital required by trade and industry in their day to day transactions. Apart from financing, they also render services like collection of bills and cheque, safe keeping of valuables, finance advising etc. to their customers.

In recent years, however, commercial banks have significantly expanded their offerings of financial services to consumers and units of government. Commercial banks "borrow money" at a low rate of interest and lend it with the other at a higher rate of interest. The difference between the borrowings and lending rate is the margin of profit of the bank. Although these banks are truly inspired with the objective of gaining profit, these commercial banks are established to accelerate common people's economic welfare and facility to provide the banking services to the public and the state.

The success of such a bank depends on the confidence it creates in the minds of the public. In this context, 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 forms of deposit, lending debts by discounting valuable goods in security, acting an agent of the client etc. Commercial banks deposit and provide loans primarily to business firm according to the Bank and Financial Institutional Act 2063, under section 47 relating to section 31, Bank and financial institutions is classified under four categories according to paid up capital. The "A" classes financial institutions are called bank which should have two hundred cores paid up capital for national level and other "B", "C" and "D" classes of financial institutions are called non-bank financial institutions such as development banks, finance company respectively. The number of Financial Institutions (FIs) in Nepal seems high in proportion to its economic activities and population size. Of late, there are 32 commercial banks, 88 Development banks and 82 finance companies in Nepal. All of them are urban-centric and providing service only to 30% of the total population. Economic growth rate is below 5%. Some FIs named Capital Merchant & Finance, Nepal Share Market, Nepal Bikash Bank and Gurkha Development Bank fell prey to the weak supervision and mis-corporate governance. Moreover, state-owned FIs such as Nepal Bank Ltd (NBL), Rastriya Banijya Bank (RBB) and Agricultural Development Bank(ADB) are overwhelmed with excessive operating expenses.

To operate such institutions in a new pattern with operating efficiency and cost effectiveness and improved current financial market are indispensible for Nepal for the

stability of its financial system. Merger, as a consolidation means of these institutions may be an instrument to keep them in right size and protects the financial sector from system risk. Nepal Rastra Bank (NRB), the regulatory and supervisory body of banks of Nepal has, therefore, begun initiation the consolidation process among FIs. There is no separate act and law yet. However, company act 2063 article 177, BAFIA 2063 article 68 and 69 and Merger and Acquisition Regulation 2068 have already come up. Though such provisions have referred to merger and acquisition, they have not mentioned their appropriateness to particular institutions that need to be consolidated. What type of consolidation-merger or acquisition should be in particular institutions is still unclear.

Universal practices of consolidation have shown that it can be done in term of Merger, Acquisition and Strategic Alliance. It is, therefore, important to recognize the difference between bank merger, and acquisition and a strategic alliance in the context of Nepal.

A bank merger is a combination of two banks in which only one survives and other goes out of existence. All assets and liabilities of the merging company get transferred to the surviving company. So far, some FIs in Nepal have merged with each other. For example, the First merger in Nepal happened between High-safe Finance and Laxmi Bank Ltd in 2057A.D. Similarly, a merger of Nepal Bangladesh Finance & Leasing into Nepal Bangladesh Bank Ltd occurred in 2007A.D. Narayani Finance merged into Narayani National Finance in 2009A.D, Moreover, there are a number of banks undergoing merger. For example, Everest Bank and KIST bank have already proposed merger in their AGMs, Birgung Finance and Himchuli Finance have already signed an agreement for merger, Machhapuchre Bank and Standard Finance have moved a little further to be merged with each other. Not only private sector banks, but also state run FIs such as Rastriya Banijya Bank (RBB) and Nepal Industrial Development Corporation (NIDC) are on line of merger as per NRB's suggestion. The capital adequacy, capital plan, credit problem and improvement in operation and working efficiency are the root causes behind merger of these institutions. By contrast, in a bank acquisition, the target (merging) bank retains its bank charter, CEO and BOD. It becomes just an affiliate member of its Banks Holding Company (BHC) to which the buying bank belongs. In case of Nepal, bank

acquisition has not taken place so far. However, the chairperson of Khetan Group of Industries, had expressed his desire to go for acquisition between the firms of the same group .This is normally done by one company buying the share capital of another company with the consent of the exiting shareholders or in a hostile shareholders or in a hostile manner. In this regard, the U.S practices have found mergers as favored means of consolidation, because they are much less expensive than BHC acquisition.

However, in Nepal, voluntary merger is facing many problems such as the interest of the promoters and managers in the post-merger scenario, reconciliation of share capital and branch, appointment of a new CEO and board and human resource structure. NRB may have, therefore, to take up a forced merger policy by means of other instrument. In view of such problems, Nepalese banks should also think of 'Alliance' that can create tremendous value as an alternative to merger and acquisition.

Strategic alliance and collaborative approaches can be attempted to reduce transaction costs through outsourcing, leverage synergies in operation and thus avoid problem of cultural integration. One example of successful alliance can be cited from the Indian context, where Indian Bank, Corporation Bank and Oriental Bank of Commerce has entered into a strategic alliance since 2006 A.D. To wrap up, it is high time for Nepalese FIs to choose the best form of consolidation either merger, acquisition or strategic alliance.

This must realize a value through revenue enhancement, operating economies, and more effective management that gives rise to synergy. In contrast to the merger initiation on the part of regulators, the trend of market-led merger between FIs may gain momentum and thereby maintain financial stability in Nepal (Gautam, 2012: 9).Anew pattern with operating efficiency and cost efficient. They also should maintain the paid up capital by doubling for existing capital provision (Government of Nepal, Bank and Financial Institution Act 2063).Commercial banks have played a very significant role in creating banking habits among the people, widening the area in business communities and the government in varies ways.

These banks are controlled and regulated by central bank of the nation. In Nepal, Nepal Rastra Bank, as a central bank, controls and regulates all the commercial banks in the country.

2.1.2 Functions of Commercial Banks

Commercial banks are directly related with the people and financial institutions. In the past, banks used to collect deposit from savers and provide loans to the businessmen and others. Now the services provided by banks have been expanded to many areas as human wants and the development of technology has increased. In Nepal, the commercial banks perform the following functions:

- **Accept Deposits**

The primary function of bank is to accept the deposits from savers. Banks accept deposits from those who save money but do not utilize them in profitable sectors. The bank allows for opening the three types of accounts to accept deposit for their customers. The first is the "current deposits" on which the bank does not pay interest. Especially, businessmen open the current account and make a number of payments every day. Money from these accounts can be withdrawn as many times as desired by the depositors. There is no limit on the amounts of cheque issued as to the limit agreed upon. This account is a safe custody of deposit and provides unlimited drawing facility to the account holders.

- **Advancing of Loans**

Commercial bank is a profit oriented business organization. So banks have to advance loans to public and generate interest from them as profit. After keeping certain cash reserves, banks provide short medium and long term loans to needy borrowers. For security, banks generally provide loan on mortgage.

Now-a-days, banking business is also facing sharp competitions. So, bankers, sometime, provide loans without mortgage, too. Such loans are advanced on the basis of goodwill and relationship with the party.

- **Cash Credit**

Banks advance loan as cash credit to businessman against certain specified securities. The amount of the loan is created to the current account of the borrower in case of a new customer a loan account for the sum is opened. The borrowers can withdraw money through cheques according to his requirement. Interest is charged only the amount actually withdrawn from the account.

- **Term Loans**

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

- **Hire Purchase Loan**

In simple term we can say that it is the loan, banks provide to its customer for the purchase. These are also the long term loan. Repayable generally on monthly basis in equal installment.

- **Call Loans**

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

- **Overdraft**

Generally, business and organizations open current account in bank. They deposit all receipts in the account and pay all dues through cheque. Bank provides overdraft facilities to such account holders; overdraft facility allows the customer to withdraw more than their deposits. The account holders have to go in a special contract with bank to get such facility.

- **Discounting Bills of Exchange**

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

- **Money at Call**

It is a very short term loan provided by bank at a very short notice. Generally, loan under money at call has time duration of only one day to fourteen days. After that period, the money should be refunded. Such loan is useful especially for other financial institutions and traders.

- **Discounting Bills of Exchange**

If a creditor holding a bill of exchange wants money immediately the bank provides him money by discounting bills of exchange. It deposits the amount of the bill in the current account of the bill holder after deducting its rate of interest for the periods of loan. The length is generally 90 days. When the bills of exchange mature the bank gets its payment from the banker of the debtor who accepted the bill.

- **Credit Creation**

Credit creation is one of the most important functions of the commercial banks. By the credit creation commercial banks become able to grant more loan than it has own capacity. Banks accept deposit in the different forms and advance loans on credit to customers. When a bank advances loan, it does not pay the amount in cash. However, it opens a current account in his name and allows him to withdraw by cheques. Thus the granted loan again is deposited in the bank. For the next customer also it is repeated the similar process in which advance loan on credit to customers however opens current account by maintaining small cash in reserve and allows him to withdraw the required sum by cheques. This process is continued to other customer also because there are numerous transitions from taken place. Bank is also create credits or deposits by keeping small cash in reserve and lending the remaining amount of deposits. Therefore, the loan creation increases the total amount of deposits.

- **Financing Foreign Trade**

Commercial banks finances foreign trade of its customer by accepting foreign bills of exchange and collecting them from foreign banks. It also transacts other foreign exchange business buying and selling of foreign currency.

- **Agency Services**

Bank is an agent of its customers while collecting and paying cheque, bills of exchange, drafts dividends etc, it also buys and sells shares, securities debentures etc. for its customers. Further, it pays subscription, insurance premium customer bills and other similar charges on behalf of its clients. It also acts as a trustee and executer of the property and will of its customers. Moreover, the bank acts consultants to its clients. For these services, the bank charges a normal fee while its renders others free of charges.

- **Miscellaneous Services**

Besides the above noted services, the commercial bank performs a number of other services. It acts as the custodian of the valuables of its customers by providing these lockers where they can keep their jewelry and valuable documents. It issues various forms of credit instruments such as cheque, drafts and travelers chequeetc which facilitate their transactions. It renders underwriting services to companies and helps in the collection of funds from the public.

2.2 Concept of Bank Supervision

Tuning with the present scenario of globalization and increased economical activities in the country, commercial banks are now introducing complex and innovative banking products. This has amplified as well as diversified the functions to be performed by the Bank Supervision Department. This section deals with the 1. Concept of bank supervision, 2. Objective of bank supervision and 3. The process of supervision. Banks play crucial role in the economy.

They are the special institutions in the financial market, which channelize the resources from surplus sector to the deficits sector of the economy. In this process, banks collect huge volume of resources from general public. In mobilizing resources from surplus to deficit sectors they operate with high leverage ratio. This inherent imbalance between 'own' funds and 'borrowed' funds in total capital structure is a peculiar feature of banking institution that ultimately arises concern by supervisory authority. Banks' shareholders have only a small amount of their own funds at stake. Therefore, there is an underlying

incentive for banks to tend toward risk taking activities with the fund of depositors and outsiders. Therefore, supervision is necessary to protect the interest of depositors and other stakeholders.

In the absence of close supervision of banks, there may be a chance of arising shareholders' position “if head, I win, if tail, you lose”. Banks are an important source of liquidity for an economy. They serve as financial intermediaries to allocate funds and risks among individuals and firms by extending loans or buying securities with funds that they receive as deposits.

A bank failure may have an adverse impact in the financial system, which can interfere the operation of the payments system as well as it could impact on overall economy. The contagion effects of a bank failure can have a huge systemic impact. Due to the special nature of activities, financial institutions are being supervised all over the world by the supervisory authority. Supervisory function is also a costly one. Although the cost of supervision is high, the cost of no supervision or poor supervision is even higher. The cost of bank failure to the society as a whole is higher than the private cost (the loss to the shareholders). Depositors are generally not well informed to monitor the portfolio behavior of banks nor to enforce compliance as they have got negligible covenant regarding control of the bank.

Some of the major validations behind bank 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 prudent way and they hold sufficient capital to support the risks that arise in the business
- To foster an efficient and competitive banking system that is responsive to the public need for good quality and an easy access of financial services at a reasonable cost

These risks are defined as follows:

- **Credit Risk** arises from a potential borrower failing to perform on an obligation.
- **Market Risk** is the risk to a FI's condition resulting from adverse movements in market interest rates or prices.
- **Liquidity Risk** is the potential that an institution will be unable to meet its obligations as they come due because of an inability to liquidate assets or obtain adequate funding.
- **Operational Risk** arises from the potential that inadequate information systems, operational problems, breaches in internal controls, fraud or unforeseen catastrophes will result in unexpected losses.
- **Legal Risk** arises from the potential that unenforceable contracts, lawsuits or adverse judgments can disrupt or otherwise negatively affect the operations or condition of a banking organization.
- **Reputational Risk** is the potential that negative publicity regarding an institution's business practices, whether true or not, will cause a decline in the customer base, costly litigation or revenue reductions.

The framework can be interpreted as comprising four distinct yet complementary sets of arrangements:

- Legal and institutional arrangements for the formulation and implementation of public policy with respect to the financial sector, and the banking system in particular;
- Regulatory arrangements regarding the formulation of laws, policies, prescriptions, guidelines or directives applicable to banking institutions (e.g. entry requirements, capital requirements, accounting and disclosure provisions, risk management guidelines);
- Supervisory arrangements with respect to the implementation of the banking regulations and the monitoring and policing of their application;

Objective of Bank Supervision

With respect to the supervisory arrangements, the *Core Principles* describe what could be termed a "cradle to grave" approach covering the licensing of individual banks, the

process of ongoing supervision and mechanisms for taking prompt corrective actions in case institutions do not meet regulatory or supervisory requirements (the latter would also include exit arrangements for institutions facing serious losses or default and the possible resulting activation of safety net arrangements). The overall objective of this comprehensive process of supervision is to guarantee that banks can be established, operated and restructured in a safe, transparent and efficient manner.

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

Over the last few years supervisors have adopted new approaches and developed new systems for ongoing banking supervision in order to be better equipped to face the many challenges presented by financial innovation and globalization. These new systems seek to assess and track changes in a bank's financial condition and risk profile and to generate timely warning for the supervisor to help initiate warranted action. G10 countries have developed recently supervisory risk assessment and early warning systems and are currently in use or being developed. Some other systems that were developed but subsequently not put to use, or used but subsequently discontinued for one reason or another. While some of the systems are able to provide *ex post* indication of existing problems, other systems try to generate *ex ante* warnings of potential problems that may emerge or develop in the future on account of the current risk profile of the banking institution. Overall, supervisory risk assessment and early warning systems assist in:

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

- Identification of institutions and areas within institutions where problems exist or are likely to emerge;
- Prioritization of bank examinations for optimal allocation of supervisory resources and pre-examination planning, Initiation of warranted and timely action by the supervisor.

Process of Bank Supervision

Ongoing banking supervision consists of a differentiated mix of Off-Site monitoring procedures and On-Site examinations. Off-site monitoring is the minimum tool for ongoing supervision. Supervisory authorities, which do not have the mandate or resources to carry out periodic on-site examinations, rely extensively on this method to monitor the financial condition and performance of banks and to identify those institutions that may need closer scrutiny.

The process involves analyzing and reviewing periodic financial and other information received by the supervisor relating to banks' activities. Supervisors typically subject regulated banks to reporting requirements covering, for instance, balance sheet and profit and loss statements, business profile, loans, investments, liabilities, capital and liquidity levels, loan loss provisions, etc.

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

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

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

2.2.1 Supervisory and Monitoring System of the Nepal Rastra Bank

As a regulator, Nepal Rastra Bank has been enacting various policies, directives and circulars in line with international standards with necessary customizations considering local needs. As a supervisor, it supervises on the activities of the banks and financial institutions based on existing legal framework and policy sources. There are three departments, namely, 1. Bank Supervision Department, 2. Financial Institutions Supervision Department and 3. Micro Finance Promotion and Supervision Department, established for the purpose of supervising the activities of the concerned bank and financial institutions.

Central bank is the regulator of banks and financial institutions. Its' liability and obligation is to promote and maintain the safety, soundness and integrity of the financial system. An important function of a central bank is supervision and monitoring of banks and financial company to find out the solvency position and take corrective action in time when needed. Monitoring system is a check and follow-up system. It conforms that suggestion and direction is given while supervision is properly conducted or not. Central bank monitors commercial banks and financial institutions after supervision and inspection. There is a separate monitoring department in Nepal Rastra Bank. Based on the findings of supervision, the supervisory and inspection department gives advice and instructions to the banks and financial institutions to regulate their performances. In order to see whether these advices and instructors have been properly followed or not, bank monitors them. This is conducted through monitoring departments.

Before the establishment of the Nepal Rastra Bank, the function of the inspection and supervision of the bank were carried out by the officials of then His Majesty government of auditor general office. With liberalization of financial sector in mid 1980s, a number of

banks and financial institutions have been increased. These institutions provide services of varied nature by using advance technologies, in this context, supervisory function of the Nepal Rastra Bank has become more challenging. As a result, supervision of financial institutions was established in 1984 A.D. as a separate department. Legal basis for supervision and monitoring of banks and financial institutions are under the Nepal Rastra Bank Act 2002, Section 29 of the commercial Bank Act 1974 section 34 of the financial company Act 1968.

At present there are separate departments for supervision of commercial banks and financial institutions namely banks supervisions department and financial institutions supervision departments. Bank supervision department is responsible for executing the supervisory policies to ensure effective supervision of commercial banks of the country. Trained examiners and analysts in the bank supervision department supervise and monitor the activities of commercial banks.

Strong and effective banking supervision contributes in enhancing effective macroeconomic policy along with financial stability in any country. A weak regulatory framework and poor supervision provide grants for inefficient and unsafe banking practices which increase the risk of bank failure. However, the nature of the supervision and its detailed application varies greatly from country to country depending upon principally, the characters of its industry, its size, complexity and the objectives and priorities. Generally, every bank has a separate supervision department. Recently, supervision department adopted a modern method of supervision and inspection, newly developed by Bank for International Settlement (BIS). This method is found more effective in comparison to the traditional systems. It is known as "CAMEL Rating" method."Nepal Rastra Bank (NRB) has adopted two approaches to monitor and supervise the financial health of the financial institution through off-site and on-site supervision. CAMELS ratings of the commercial bank should be done after completion of on-site inspection and same should be used for internal purpose for further monitoring and necessary action in the areas of problems. In the case of Nepal, NRB has also introduced

the system for rating all the banks every year on the basis of CAMELS rating system" (Pradhan, 2005).

Therefore, the banks and financial institutions are provided with adequate level of freedom in their regular managerial and operational issues. However, it does not mean that they are allowed to exercise completely regulations free banking system. Of course, observing the market situations and the trends in the international supervisory practices, Nepal Rasta Bank makes necessary adjustment in the banking regulations. They are required to abide by the directives and circulars issued from time to time by Nepal Rastra Bank covering different aspects. The underlying philosophy is that banks should have discretion to offer the banking products and services in a competitive manner but they should comply with the minimum rules and regulations to protect the interest of the stakeholders. Pursuant to this, the objectives of bank supervision in Nepal are to promote and maintain the safety, soundness, and integrity of the Nepalese banking and financial system and boosting up public confidence towards this system through the implementation of appropriate policies of international standards.

To achieve such objectives Nepal Rastra Bank has issued a number of regulations and prudential norms that have to be complied with by banking institutions. Such regulations are designed for bank and financial institutions to limit excessive risk taking to manageable levels.

The NRB while issuing the regulations for banking sector from time to time takes strong references of the following documents or sources:
Some of the major validations behind bank 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 prudent way and they hold sufficient capital to support the risks that arise in the business.

- To foster an efficient and competitive banking system that is responsive to the public need for good quality and an easy access of financial services at a reasonable cost.

These reasons call for an independent and autonomous supervisory authority to conduct direct assessment of the overall banking system.

2.2.2 Fundamental Concept and Background Regarding Basel Accord

1. Definition of Basel Capital Accord

Basel Capital accord is a capital adequacy framework developed by the Basel Committee. In 1988, the Basel Committee decided to introduce a capital measurement system commonly referred to as the Basel Capital Accord. This system provided for the implementation of a credit risk measurement framework with a minimum capital requirement of 8% on banks Risk Weighted Assets (RWA). The 1988 framework is also known as "**Basel – I"**. Since 1988, this framework has been progressively introduced not only in member countries but also virtually in all other countries.

2. Definition of Basel – II

The “International convergence on capital measurement and capital standard -2004" is popularly known as Basel-II. It is a capital adequacy related standard framed by Basel committee. After the successful implementation of 1988 accord in more than 100 countries, the Basel Committee on Banking Supervision reached an agreement on a number of important issues for promoting best and uniform banking practices as well as setting standards and guidelines for supervisory function. Following extensive interaction with banks, industry groups and supervisory authorities that are not members of the Committee, the revised framework was issued on 26 June 2004, which is being regularly revised. The Basel-II aims to replace Basel I and to make the capital framework more risk sensitive.

Basel II has recommended major revision on the international standard on bank's capital adequacy, which requires banks to implement risk management policies that closely align

banks capital with its economic capital. The Basel II has been introduced basically for the protection of depositor's interest by preserving the integrity of capital in Banks.

3. Definition of Basel Committee

The Basel committee on Banking Supervision (BCBS) is popularly referred as Basel Committee. It was established by the central bank Governors of the Group of Ten Countries (G-10) at the end of 1974 and meets regularly four times a year. It has about twenty-five technical working groups and task forces, which also meet regularly. Now the Committee's members come from Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. Countries are represented by their central bank and also by the authority with formal responsibility for the supervision of banking business where this is not the central bank. The Basel Committee provides a forum for regular cooperation on banking supervisory matters.

Over recent years, it has developed increasingly into a standard setting body on all aspects of banking supervision, including the Basel II regulatory capital framework. The Committee encourages contacts and cooperation between its members and other banking supervisory authorities. It circulates to supervisors throughout the world both published and unpublished papers providing guidance on banking supervisory matters. The Committee does not possess any formal supranational supervisory authority, and its conclusions do not, and were never intended to, have legal force. Rather, it formulates broad supervisory standards and guidelines and recommends statements of best practice in the expectation that individual authorities will take steps to implement them through detailed arrangements - statutory or otherwise - which are best suited to their own national systems. In this way, the Committee encourages convergence towards common approaches and common standards without attempting detailed harmonization of member countries' supervisory techniques.

4. Mandatory of Basel-II

Basel-II has been designed to provide options for banks and banking systems worldwide, the Basel Committee acknowledges that moving towards its adoption in the near future may not be the first priority for all central banks in all non-G10 countries interims of what is needed to strengthen their supervision.

Basel II aims to build on a solid foundation of prudent capital regulation, supervision, and market discipline, and to enhance further risk management and financial stability.

As such, the Committee encourages each national supervisor to consider carefully the benefits of the new Framework in the context of its own domestic banking system and in developing a timetable and approach to implementation. Given resource and other constraints, these plans may extend beyond the Committee's implementation dates. That said, supervisors should consider implementing key elements of the supervisory review and market discipline components of the new Framework even if the Basel II minimum capital requirements are not fully implemented by the implementation date. It is said that the national supervisors should also ensure that banks that do not implement Basel II are subject to prudent capital regulation and sound accounting and provisioning policies.

5. Approaches of Basel II

A major innovation of the Basel II is the introduction of distinct options for the calculation of key types of banking risk. For credit, operational and market risk, there are different approaches of increasing risk sensitivity to allow banks and supervisors to select the approach or approaches that they believe are most appropriate to the stage of development of banks' operations and of the financial market infrastructure. The following table identifies primary approaches available by risk type.

SN Credit Risk Operational Risk Market Risk

1. Standardized Approach Basic Indicator Approach Standardized Approach
2. Foundation IRB Approach Standardized Approach Internal Model Approach
3. Advanced IRB Approach Advanced Measurement Approaches (AMA)

6. Basic Characteristics of Basel-II

Basel-II captures the risk through its three pillar minimum capital requirement, Supervisory review process and market discipline. It addresses not only the credit &market risk but also the operational risk. The risk is computed based on the actual risk profile of the counter part. It is not ad hock or general. Hence the capital is truly risk based.

7. Adaption of Advanced Approaches

We understand that the new framework developed by the Basel committee is a product of long exercise in the globe. It is mainly the outcome of sophistication in to developed economy and complex product introduced in to the global market. The approach to Basel II in Nepal is to confirm to best international standards with local context. We plan to adopt advance approaches gradually as the market attains maturity and emerge as more sophisticated. Those banks planning for the advance approaches are requested to collect loss data and also adhere to the sound practice for risk management. Banks will be encouraged to move along the advance approaches as they achieve increasing sophistication in their risk management systems and processes.

However, banks must obtain prior approval of the Nepal Rastra Bank if they intend to use any one of the advanced approaches namely Standardized Approach, IRB Approach, Advanced Measurement Approach.

8. Is "New Capital Adequacy Framework (NCAF)" of Nepal different from Basel Capital Accord?

Nepal Rastra Bank has developed and enforced capital adequacy requirement based on international practices with appropriate level of customization based on domestic state of market developments. The existing regulatory capital is based on the Basel committee's 1988 recommendations. The NCAF outlines the Nepal Rastra Bank's guidelines for domestic commercial banks, which is based on the simplest approaches of Basel II framework.

9. Regarding Applicability NCAF to All Financial Institutions

Only "A" Class financial institutions, licensed by Nepal Rastra Bank under the Bank and Financial Institution Act-2063 are subject to this new capital adequacy framework.

10. Definition of Tier I Capital and Tier II Capital

Capital that is fully paid up and having no fixed servicing or dividend costs attached to it and freely available to absorb losses qualify as Tier-I capital. Tier I capital is also termed as core capital. Core Capital also needs to have a very high degree of permanence if it is to be treated as Tier 1.

Tier 2 Capital consists of general loan loss provision, revaluation reserve, and exchange equalization reserve, investments adjustment reserves, and other reserves, redeemable preference share and subordinated term debt. Tier-II capitals shall be subject to the certain limitations and restrictions. Amount of tier-2 capital shall not exceed tier 1 capital Sum of Tier I and Tier II capital is Total Capital.

11. Description of Risk Weighted Exposure

Risk weighted exposure is the maximum amount of risk attached to a portfolio or a transaction or underlying assets. It is the sum of risk weight for credit risk, market risk, operational risk and any supervisory adjustments on such risk weigh.

12. Regarding Basel-II Practicable to Our Context

The true Basel-II is almost impracticable for the numbers of years in our context.
However the journey should be started and should keep in touch to the international developments and be prepared to capture the principle in full when the need is arises .It is encouraged by the different simplest options available in the framework. The simplest approaches are practicable and it has been enforced to the commercial banking industry. The destination to advance approaches is really a long one in our context.

13. Regarding commitment from the NRB for Adoption

There is no any commitment for the adoption of Basel-II. The initiation towards theBasel- II is voluntary one and to follow the international best practice in time. NRBhas

decided to go for the Basel-II in a simplified way to be practicable in our circumstances. Based on that policy, NRB's intention and adoption plan is communicated to the FSI/BIS for their reference.

14. Challenges for the NCAF Implementation

The Basel-II is challengeable to supervisor as well as banking industry. The Supervisory capacity building, Market discipline, issue of poor governance in to the industry, poor governance in to the market, poor data base, lack of credit rating agencies, Re-capitalization of negative net worth bank and lack of adequate, accurate and reliable financial data are some of the challenges ahead for effective implementation of New capital adequacy framework.(www.nrb.org.np)

2.2.3 Need for Supervision and Monitoring

The world of finance has undergone profound changes as evidenced by the rapid technological development for processing and transmitting data, the growing internationalization of financial system, an increasing phenomenon of financial innovations coupled with competition and deregulation. The new financial environment has necessitated the development of new and the adaptations of existing supervisory policies, practices and procedures. The difficult economic environment has reduced earnings capacity of many sectors in the economy, there by affecting the overall performance of commercial banks. These challenges deal with through effective banking supervision.

The banks and financial institutions are established with the permission of the central bank. When the central banks permit to carry out transaction, it fixes various terms and conditions. In addition to it issues necessary directions from time to time about loan, deposits, liquidity, re-finance, capital fund, rate of interest and spread etc. It is very necessary to inspect their activities after investigating whether or not the banks and financial institutions have followed the current law and the direction and instruction of the central bank to move them in to the directed track.

The common people, the central bank and the government do have deep interest in the well running of them because the banks and the financial institutions collect the amount from the public as deposits. Therefore, to secure the interest of the depositors and the investors to manage the strong and competent financial system regulation, inspection and supervision of the banks and financial intuitions is considered compulsory.

Although, cost of supervision is high, there are a number of reasons why supervision is important of commercial bank. So, the need for supervision and monitoring can be described as follows:

- To investigate regulatory whether the banks and financial institutions have performed the functions within the limitation of the present laws and the direction or not.
- To evaluate whether the present laws and regulation are sufficient or not.
- To maintain stability and confidence in the financial system resulting into reduced risk of loss to depositors and other stakeholders.
- To find out the effectiveness of the internal control system and rules.
- To be aware whether the management information system is certain or not.
- To ensure that banks have resources appropriate to undertake risks, including adequate capital, sound management capabilities and effective control systems and accounting records.
- To ensure that banks operate in a safe and sound manner and they hold capital and reserve sufficient to support the risk that arise in their business.
- To decide whether the strategy of risk management has been followed or not, to lessen the possible risk in the banking and financial business.
- To give necessary information to the banks.

There are also the key objectives behind the supervision of banks in Nepal. The basic objectives of supervision of NRB is to conduct a direct assessment of the overall condition of the banking institutions based on off-site and on-site evaluation of the institutions capital, assets, management, earnings, liquidity and a review of their records,

systems and internal control and to determine whether the institutions has complied with relevant mandatory and regulatory requirements.

2.2.4 Method of Bank Supervision and Monitoring System

The most common supervisory tools used by the regulatory agencies in promoting safety and soundness are on site examination and off site examinations approach. Each serves a unique purpose. The ideal approach could vary for supervisors operating in different environment. However, the optimal approach lies somewhere between the two extremes since neither approach is a substitute for another.

A mix of the two approaches would appear to yield the best result. Bank supervision department has been using a combination of these various approaches to supplement its supervision process. Generally, the supervision can be made in the following ways;

On-site Examinations

On-site examination to evaluate effectively the safety and soundness of the commercial banks and the banks are operating in line with prudential banking practice and complying with applicable laws and regulations. It is effective which cannot be covered in off-site supervision. Especially, the documents about loan accounts expenses, letter of credit, bank guarantee, remittance should be checked properly while on-site supervision which is made by visit to the place of the bank by the team of inspections of the central bank.

Although, on-site examination is the most effective safety measure tool for supporting, it is costly and burdens some. On-site examination is costly to supervisors because of the examiner resources required and burdensome to bankers because of the intrusion into daily operations. In fact, physical inspection of banks books is often the only way to detect irregularities in the operation of the bank that may indicate illegal or ill-advised actions by bank employees.

In sum, on site examinations are the best way for supervisors to track the condition of banks, however, since examinations cannot be continuously on-site, regulators also use

off-site supervision to help span the gap between regulatory scheduled on site examinations.

Off-site Supervision

Bank supervisors support on-site examinations with offsite supervision. Off-site supervision is performed by studying the documents provided by commercial banks. An inspection carried out without visiting the places of the banks. The function includes the analysis of financial statement other necessary documents, annual report, and information received from the commercial banks. Generally, documents and reports are received on a weekly, monthly, quarterly, annually basis.

The off-site supervision is continuous process. From it we can get true picture of the problems of the bank. It makes easy to devise the way for protection from the possible future crisis. The objective of off-site supervision is to quickly identify negative trends and emerging problems and to resolve the issues before they become so serious that they could negatively effect of commercial banks. Moreover, as the cost and complexity of examine banks have risen it has become increasingly more difficult for the bank regulators to attract and retain quality bank examiners. On the other hand, advances in computer technology give bank regulators the ability to monitor the condition of banks without conducting an on-site examination. Therefore, off-site monitoring of banks has become an important part of the regulatory examination umbrella (Whalen and Thomson, 2007).

Off-site supervision can often identify potential problems, particularly in the interval between on-site supervision, thereby providing early detection and prompting corrective action. This supervision also identify potential problems of the commercial banks and monitoring compliance of various prudential regulations issued by NRB to ensure long term stability of commercial banks. In the course of supervision when inspectors find minor mistakes they provide suggestion and guidelines for correction. The inspectors should prepare a report containing all the findings after conducting supervision, if a bank is found violating the rules and regulations, the central bank, on the recommendation of

supervision departments may be a simple warning to tuff penalty like inaction license, penalty charges etc. The major shortcomings as well as non-compliance observed in the banks during the on-site examinations of 2009/10 were as follows

Areas of Inspections to Find Major Areas where Deviation and Non-Deviation exist in Respect to Commercial Banks in Nepal:

Areas of Inspections	**Major areas where deviations and non-compliance were observed**
Capital Adequacy	• Heavy accumulated loss and capital below prescribed limit in public banks • Cases on accounting treatment of Debt Instruments • Improper calculation of risk weighted exposure • Redemption reserve not created • Weak overall risk management • Disclosure policy not formulated • Credit Risk Mitigation Criteria not fulfilled • Loan provide by banks exceeded the Single Obligor Limit(SOL) • Weak infrastructure to implement Capital Adequacy Framework
Assets Quality	• Lack of sound credit risk management practice (e.g., credit department lacking separate line of reporting for marketing and control) & poor credit documentation issues(e.g. credit information report, tax clearance, audited financial statements of the borrower, stock inspection report, valuation report, inadequate insurance of collateral and assets etc.) • Lack of formulation and implementation of Write-Off policy. • Non-compliance of the terms and conditions mentioned in the offer- letter. • Irregular credit monitoring • Inadequate borrower's information • Borrower's separation not the basis of legal separation only for SOL purpose-credit concentration issues. • Issues on assessment of borrower's future cash flows for the repayment of loan • Improper valuation of fixed assets • Overdraft limit overdrawn • Securities not insured • Credit Limits provided to other Banks and Financial Institutions • Creation of new loan limit to repay existing loans. • Consortium meetings are not regular

	• Non-compliance of NRB Directives on Blacklisting. • Discretionary power to CEO to override Credit Policy Guidelines(CPG) • Loan approved before getting credit information. • Lack of proper monitoring of deprived sector loan • Board and management inactive in recovering problem loans. • Weak appraisal of loan like loan already taken from other bank, defaulted. • Know Your Customer(KYC) directives not followed • Conflict between management and bank employees • Short-term loan extended time and again • Non-compliance of loan classification directives • Purpose of personal large loan not identified • Loan disbursed before approval • Loan disbursed against local Letter of Credit(LC) • Weak credit control mechanism • Credit concentration in real estate sector • Issues in multiple banking(Paripassu not done) • Loan provided to promoter group • Non-compliance of Anti-Money Laundering directives
Management	• Lack of Compliance of Personnel Policy Guidelines of the bank(Issues on job description, authority delegation, transfer and promotion) • Disclosure policy not formulated • Formulation of strategic and business plan • Issues of high staff turnover and lack of proper staff retention policy. • Independence and importance of Audit Committee undermined. • Lack of Board of Directors' oversight on sectoral credit concentration. • Inadequate MIS, IT, Disaster Recovery, Information security policy, weak data access control • Unjustifiable abroad visit of Board of Directors • Medium term strategy not formulated and relied on one year business plan. • Weak outsourcing risk management • Lack of comprehensive risk management guidelines • Lack of backup link in disaster recovery site • Lack of successor plan

	• Bank's financial statement does not show the true picture of the bank • Unprofessional decisions of the BOD • Weak BOD oversight in loan issues • Lack of adequate oversight on risk appetite and new capital adequacy framework. • BAFIA not fully complied • Operational lapses • Mechanism not prepared to monitor single obligor limit and related parties • Board of Directors unaware on bank activities • Crossholding not divested
Earning	• Improper classification • Income Recognition
Liquidity	• No discussion on agendas and very low frequency of ALCO meeting • Weaknesses in monitoring of liquidity profile and gap analysis • High credit to deposit ratio • Heavy gap in short term asset and liabilities and no plan to revive it
Sensitivity To Market	• Poor analysis of rate sensitive assets and liabilities • ALCO lacking regular meeting • Investment Policy not formulated/ implemented

Source: www.nrb.org.np

2.2.5 Financial Performance Analysis in the Framework of CAMELS Bank Rating System

The CAMEL rating system is an internal supervisory tool for evaluating the safety and soundness of financial institutions using by capital adequacy, assets quality, management quality, earnings and liquidity. In fact, the rating system initially emerges as CAMEL covering the first five parameters only. The six components Sensitivity to market risk(s) has only been used since January 1, 1997. The most notable change to the system is the proposed addition on an "S" to make "CAMELS".

Federal and state regulations regularly assess the financial condition of each bank and specific risks faced on site examination and periodic report. Based on these methodologies the bank's operations are assessed in respect of the components of

CAMELS and the individual ratings of the component and a consolidated. The Uniform Financial Institutions Rating System (UFIRS) was adopted by the Federal Financial Institutions Examination Council (FFIEC) on November 13, 1979. UFIRS was revised in 1997. This rating is the UFIRS designed to evaluate banks condition on a uniform basis.

CAMELS rating system is used in three federal banking supervisors (Federal Reserve, the FDIC, the office of the comptroller of the currency) and other financial supervisory agencies for supervision and examination time to time of bank.

The CAMELS ratings range from 1 to 5. CAMELS framework is common method for analyzing the health of financial institutions. All financial statements are highly confidential.

These ratings are not release to the public but only to the top management and the appropriate supervisory staff.

This rating system is common method for analyzing the health of financial institution. This system was originally developed by the FDIC. CAMELS are an ideal rating system practiced worldwide by central banks and rating agencies to evaluate and analysis safety and soundness of a bank. Reserve Bank of India has been using CAMELS ratings in its supervisory regulations of the banking system. In Nepal CAMELS rating system is still in its initial phase. NRB has introduced the system for rating all the banks every year.

Composite Ratings

Composite ratings is an international bank rating system with which bank supervisory authorities rate institutions according to six factors. The six factors are represented by the acronym 'CAMELS'. The six key components used to assess an institution's financial condition and operations are:

1. Capital adequacy
2. Asset quality
3. Management capability

4. Earnings
5. Liquidity and
6. Sensitivity to market risk.

This rating is based on financial statements of the bank and on-site examination by three federal banking supervisors (the Federal Reserve, the FDIC, and the OCC) and other financial supervisory agencies to provide a convenient summary of bank conditions at the times of exam. The banks for this rating are the Uniform Financial Institutions Rating System (UFIRS) designed to evaluate banks condition on a uniform basis and to identify banks requiring special attention or concern. Bank supervisory authorities assign each bank a score on a scale from one to five, with 1 being strongest and 5 being weakest. If a bank have an average score less than 2 it is considered to be in a high quality institutions while banks with scores greater than 3 are considered to be less than satisfactory establishments. The system helps the supervisory authority to identify banks that are in need of attention.

Bank with ratings of 1 or 2 are considered to present few if any supervisory concerns while banks with ratings of 3,4&5 present moderate to extreme degrees of supervisory concern. The composite ratings from 1 to 5 are as follows (FIDC: Regulations and Examination, 2005).

Composite 1: The composite rating one is thought to indicate strong FIs that could defend adverse economic condition. These FIs have highest rating performance and risk management practices and the least degree of supervisory concern is required. These FIs are in substantial compliance with laws and regulations.

Composite 2: The composite rating of two means that the FIs could be severely weakened by adverse economic conditions. FIs in the group are fundamentally sound but may reflect modest weakness correctable in the normal courses of business. Overall risk management practices are satisfactory relative to the institutions size, complexity, and risk profit.

Composite 3: The three rated FIs are thought to be at risk in unfavorable economic environment. The FIs in this category exhibit financial operational or compliance weaknesses rating from moderately severe to unsatisfactory.

Composite 4: Four rated FIs are considered to be banks that are danger of failing unless corrective actions are taken. These FIs generally exhibit unsafe and unsound practices or condition. These have serious financial and managerial deficiencies that result in unsatisfactory performance. There may be significant non compliances with laws and regulations.

Composite 5: The FIs in this category indicates that the bank is likely to fail in the near future. These FIs have lowest rating performance, inadequate risk management principles and therefore the highest degree of supervisory concern is needed by the central bank and concerned authority.

2.3 Definition of Components of CAMELS

2.3.1 Capital Adequacy (C)

The first component of the CAMELS rating is Capital adequacy. A key principle in bank supervision which regards capital as the cornerstone of a banks' strength. Bank capital is a source of financial support to protect an institution losses arising out of the unexpected risks. Strong capital base is the prerequisite for the safety and soundness of any bank. Commercial bank should have adequate capital to support the stability and sustainability of its operation. A financial institution, which has adequate capital can flow more loan and has the capital to bear the possible risk in future. Adequate capital helps to gain faith of the depositors, investors and the loan donors to increase the loan investment capacity to make defective property bearable and to raise the credit of the bank. Bank capital serves three basic roles. The second function of capital is to serve as a cushion to absorb unexpected operating losses. The third functions of bank capital bears on the question of minimum requirements of capital the bank regulators establish to promote safety and soundness in banking system.

Nepal Rastra Bank has ultimate power to decide how much capital is needed for a bank or non-bank financial institutions. Adequacy and inadequacy of bank capital directly affects the banking transactions. The adequacy of bank capital is the most important aspect of a bank. If there is inadequacy of capital, the bank should take step for the adequacy of capital as per legal requirements. The bank should remove the inadequacy of bank capital through the medium of collecting of ownership and borrowed capital.

For the Payments of all Types of Deposits

Adequacy of bank capital is necessary for a bank, to give the payment of the amount of all types of deposits to its customers. Hence, the adequacy of bank capital is needed to gain trust from its customers.

To Meet the Demand of All Types of Cash Reserve Funds

A bank should deposit the amount in different types of funds and reserve either in the Nepal Rastra Bank or in its own bank. The commercial bank should deposit cash in such funds.

This is a legal obligation, which is created in two ways. One obligation occurs by the provision of law and another obligation takes place due to circulars, policy and directives issued by the Nepal Rastra Bank time to time.

Investment for Banking Transaction and Business

With the lack of an adequate bank capital, the bank cannot meet daily administrative expenditure and the investment in different sectors to earn profit. So, to perform the above given functions the bank needs an adequate bank capital. Directly, the above mentioned functions affect to be adequacy of bank capital.

Absorbs Losses

Capital allows institutions to continue operating as going concerns during periods when operating losses or other adverse financial results are experienced.

Promotes Public Confidence

Capital provides a measure of assurance to the public that an institution will continue to provide financial services even when losses have been incurred, thereby helping to maintain confidence in the banking system and minimize liquidity concerns.

Restricts Excessive Asset Growth

Capital, along with minimum capital ratio standards, restrains unjustified asset expansion by requiring that asset growth be funded by a commensurate amount of additional capital.

Provides Protection to Depositors

Placing owners at significant risk of loss, should the institution fail, helps to minimize the potential "moral hazard" and promotes safe and sound banking practices.

Capital is necessary for the bank to operate. While many areas of a bank are important and subject to scrutiny, capital adequacy is the area that triggers the most regulatory action. This action is largely based on the three major ratios used in the assessment of capital adequacy, which are:

- The Tier 1 Risk-Based Capital Ratio
- The Total Risk-Based Capital Ratio
- The Tier 1 Leverage Ratio

The capital adequacy ratio of an institution is based upon, but not limited to, an assessment of the following evaluation factors:

- Size of the bank
- Volume of inferior quality assets
- Bank’s growth experience, plans and prospects
- Quality of capital Retained earnings
- Access to capital markets
- Non-ledger assets and sound values not shown on books (real property at nominal values, charge-offs with firm recovery values, tax adjustments).

Well-Capitalized

To be considered well-capitalized, a bank will meet the following conditions:

- Total risk-based capital ratio is 10 percent or more,
- Tier 1 risk-based capital ratio is 6 percent or more, and
- Tier 1 leverage ratio is 5 percent or more.

In addition to these ratio guidelines, to be well capitalized a bank cannot be subject to an order, a written agreement, a capital directive or a PCA directive.

Adequately Capitalized

To be considered well capitalized, a bank will meet the following conditions:

- Total risk-based capital ratio is at least NRB minimum capital adequacy ratio requirement.
- Tier 1 risk-based capital ratio is at least NRB minimum Tier I capital ratio requirement.
- Tier 1 leverage ratio is at least 4 percent.

Undercapitalized

To be considered undercapitalized, a bank will meet the following conditions:

- Total risk-based capital ratio is less than 8 percent,
- Tier 1 risk-based capital ratio is less than 4 percent, or Tier 1 leverage ratio is less than 4 percent.

Significantly Undercapitalized

To be considered significantly undercapitalized, a bank will meet the following conditions:

- Total risk-based capital ratio is less than 6 percent,
- Tier 1 risk-based capital ratio is less than 3 percent, or
- Tier 1 leverage ratio is less than 3 percent.

Ratings Capital Component

- A rating of **1** indicates a strong capital level relative to the institution's risk profile.
- A rating of **2** indicates a satisfactory capital level relative to the FI's risk profile.
- A rating of **3** indicates a less than satisfactory level of capital that does not fully support the institution's risk profile. The rating indicates a need for improvement, even if the institution's capital level exceeds minimum regulatory and statutory requirements.
- A rating of **4** indicates a deficient level of capital. In light of the institution's risk profile, viability of the institution may be threatened. Assistance from shareholders or other external sources of financial support may be required.
- A rating of **5** indicates a critically deficient level of capital such that the institution's viability is threatened. Immediate assistance from shareholders or other external sources of financial support is required.

A FI is expected to maintain capital commensurate with the nature and extent of risks to the institution and the ability of the management to identify, measure, monitor, and control these risks. The effect of credit, market, and other risks on the institution's financial condition should be considered when evaluating the adequacy of capital.

According to the NRB directive, minimum paid- up capital requirement for establishment of commercial banks is as under:

- Rs. 250 million to operate all over Nepal except Kathmandu Valley.
- Rs. 1000 million to operate all over Nepal.
- All existing commercial banks are required to raise capital base to Rs. 1000 million by mid July, 2009 through minimum 10 percent paid- up capital increment every year.

2.3.2 Assets Quality (A)

This is one of the most critical factors in determining overall condition of any bank. Primary factors that can be considered are the quality of loan portfolio, mix of risk assets

and credit administration system. The assets quality means the capacity of assets to generate income as well as the recover ability of the principal amount.

This component is based on an assessment of both the quality of the current portfolio and the quality of the associated management process that substantially impact the quality of assets. An assessment of assets relies on many factors such as loan portfolio management, investment portfolio trends, risk identification process, and other factors that affect the quality performance, income producing capacity and stability of assets. Examiner judgment is to the quality of each borrowers and his ability to repay the loan.

It is necessary to study the quality of assets to maintain the sound economic condition of the financial institutions. For this purpose, it should be checked up whatever the risk found, which is fixed by the NRB is maintained or not by the commercial banks and FIs. For this provision it helps the FIs to save for losing the various types of financial risk with the provision of keeping the risk fund according to the quality of the assets as per the rules regulation and policy of the central bank. Loans are usually the largest of the assets items and can also carry the greatest amount of potential risk to the bank's capital account.

Non-Performing Assets / Loan (NPA)

Non-performing loan means an outstanding loan not repaid, i.e. neither payment on interest or principle are made. In case of the banks the loans and advances are the assets as the banks flow loans for the funds generated through shareholders equity ,money deposited by the people and fund having through the borrows . Hence the term NPA means the loans and advances that are not performing well. Thus all the irregular loans can be termed as NPA. Generally, non-performing loans/assets include all loans in the portfolio more than 90 days overdue on interest or principle payments.

The definition of NPA differs with countries of the Asia pacific economic cooperation (APEC) forum: loan is classified as non-performing only after it has been in arrear for at least six months. In India, after three months from the date of deemed commercial

production to release interest income, any default or reschedule are considered as an NPA on the book of accounts.

Implications of NPAs

Financial crisis emerged from Thailand in South East Asian countries largely is considered to be due to higher level of NPAs existed with the FIs. The situation was grave when the assets stopped to repay loans to credit agencies which was borrowed from overseas capital market.

Evaluation of Asset Quality

The evaluation of asset quality should consider the adequacy of the Allowance for Loan and Lease Losses (ALLL) and weigh the exposure to counter-party, issuer, or borrower default under actual or implied contractual agreements. All other risks that may affect the value or marketability of an institution's assets, including, but not limited to, operating, market, reputation, strategic, or compliance risks, should also be considered.

Prior to assigning an asset quality rating, several factors should be considered. The factors should be reviewed within the context of any local and regional conditions that might impact bank performance. In addition, any systemic weaknesses, as opposed to isolated problems, should be given appropriate consideration. The following is not a complete list of all possible factors that may influence an examiner's assessment; however, all assessments should consider the following:

- The adequacy of underwriting standards, soundness of credit administration practices, and appropriateness of risk identification practices,
- The level, distribution, severity, and trend of problem, classified, on accrual, restructured, delinquent, and non-performing assets for both on- and off-balance sheet transactions,
- The adequacy of the allowance for loan and lease losses and other asset valuation reserves,

- The credit risk arising from or reduced by off-balance sheet transactions, such as un-funded commitments, credit derivatives, commercial and standby letters of credit, and lines of credit,
- The diversification and quality of the loan and investment portfolios,
- The extent of securities underwriting activities and exposure to counter-parties in trading activities,
- The existence of asset concentrations,
- The adequacy of loan and investment policies, procedures, and practices,
- The ability of management to properly administer its assets, including the timely identification and collection of problem assets,
- The adequacy of internal controls and management information systems,
- The volume and nature of credit documentation exceptions.

As with the evaluation of other component ratings, the above factors, among others, should be evaluated not only according to the current level but also considering any ongoing trends. The same level might be looked on more or less favorably depending on any improving or deteriorating trends in one or more factors.

Rating the Asset Quality Factor

The Asset Quality Rating definitions are applied following a thorough evaluation of existing and potential risks and the mitigation of those risks. The definitions of each rating are as follows:

- A rating of **1** indicates strong asset quality and credit administration practices. Identified weaknesses are minor in nature and risk exposure is modest in relation to capital protection and management's abilities. Asset quality in such institutions is of minimal supervisory concern.
- A rating of **2** indicates satisfactory asset quality and credit administration practices. The level and severity of classifications and other weaknesses warrant a limited level of supervisory attention. Risk exposure is commensurate with capital protection and management's abilities.

- A rating of **3** is assigned when asset quality or credit administration practices are less than satisfactory. Trends may be stable or indicate deterioration in asset quality. The level and severity of classified assets, other weaknesses, and risks require an elevated level of supervisory concern.
- A rating of **4** is assigned to FIs with deficient asset quality or credit administration practices. The levels of risk and problem assets are significant, inadequately controlled, and subject the FI to potential losses that, if left unchecked, may threaten its viability.
- A rating of **5** represents critically deficient asset quality or credit administration practices that present an imminent threat to the institution's viability.

Directives Relating to Assets Quality by NRB

NRB classified of loan and advances and provision for loan losses on the basis of its time period.

Loans are classified as performing and non performing loans. According to NRB directives, performing loan means pass loan, remaining sub standard, doubtful and loss loan is non performing loan.

The provision of allowance issued by NRB is 1%, 25%, 50% and 100% for pass sub-standard, doubtful and loss respectively. NRB issued the unified directive for Banks & Non-Bank FIs with the inclusion of the unified Directives, 2009 and the Circulars/ Directives/Guidelines until (July 16, 2010) through directive number E. Pra.Ni.No 02/061/62, requires the banks to classify outstanding loans and advances on the basis of aging of Principal amount. As per the directive the Loans and Advances should be classified into the following four categories:

Pass

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

Substandard

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

Doubtful

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

Loss

All loans and advances which are past due for more than 1 year and have least or thin possibility of recovery or considered unrecoverable shall included in this category.

Besides this, any loan whether past due or not, in situations of inadequate security, borrower declared insolvent, no whereabouts of the borrower or misuse of borrowed fund, are to be classified as Loss category. The directive further requires banks to provision for loan loss, on the basis of the outstanding loans and advances and bills purchased classified as above. Loan loss provision set aside for performing loans is defined as General Loan Loss Provision and that set aside for non-performing loan as

Specific Loan Loss Provision.

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

Provided that in case of the insured loans, it would be required to make provision of only. With the objectives of lowering the concentration risk of bank loans to a few big borrowers and to increase the access of small and middle size borrowers to the bank loans, NRB through directive number E. Pra.Ni.No 03/061/62 limits commercial banks to extend credit to a single borrower or group of related borrowers up to 25% of its core

capital for fund based credit facilities and not more than 50% of its core capital for Non fund based credit facilities like letters of credit, guarantees, acceptances, commitments.
The facilities extended against bank's own fixed time deposit, Nepal Government securities, NRB Bonds, counter guarantees of World Bank/Agricultural Development Bank/International A+ rated banks (as per list of top 1000 world international banks published by the London based magazine, "The Banker"), are excluded from the restriction. Likewise advances and facilities to be used for the purpose of importing specified merchandise by the following public corporation are also excluded:

2.3.3 Management Quality (M)

The quality of management is probably the single most important element in the successful operation of a bank. For the purpose of this section, management includes both the board of directors and executive officers. Board of director is elected by the shareholders and executive officers who are appointed to their position by the board. It is evaluated by checking the effectiveness of the board of directors, the quality of the qualification, the manpower and official management operating expenditure customer relationship between the official and institution, management information system, organization and working method, control system, power decision process, policy, rules etc. Sound management is the key to bank performance but is difficult to measure.

It is primarily a qualitative factor applicable to individual institutions. As management quality is subjective measure, it is very difficult to prescribe any specific ratings method for this parameter, leaving this parameter open to subjective judgments.

The capability of the board of directors and management, in their respective roles, to identify, measure, monitors, and controls the risks of an institution's activities and to ensure a FI's safe, sound, and efficient operation in compliance with applicable laws and regulations is reflected in this rating. Depending on the nature and scope of an institution's activities, management practices may need to address some or all of the following risks: credit, market, operating or transaction, reputation, strategic, compliance, legal, liquidity, and other risks.

Sound management practices are demonstrated by: active oversight by the board of directors and management; competent personnel; adequate policies, processes, and controls taking into consideration the size and sophistication of the institution; maintenance of an appropriate audits program and internal control environment; and effective risk monitoring and management information systems.

The capability and performance of management and the board of directors is rated based upon, but not limited to, an assessment of the following evaluation factors:

- The level and quality of oversight and support of all institution activities by the board of directors and management.
- The ability of the board of directors and management, in their respective roles, to plan for, and respond to, risks that may arise from changing business conditions or the initiation of new activities or products.
- The adequacy of, and conformance with, appropriate internal policies and controls addressing the operations and risks of significant activities.
- The accuracy, timeliness, and effectiveness of management information and risk monitoring systems appropriate for the institution's size, complexity, and risk profile.
- The adequacy of audits and internal controls to: promote effective operations and reliable financial and regulatory reporting; safeguard assets; and ensure compliance with laws, regulations, and internal policies.
- Compliance with laws and regulations.
- Responsiveness to recommendations from auditors and supervisory authorities.
- Management depth and succession.
- The extent that the board of directors and management is affected by, or susceptible to, dominant influence or concentration of authority.
- Reasonableness of compensation policies and avoidance of self-dealing.
- Demonstrated willingness to serve the legitimate banking needs of the community.
- The overall performance of the institution and its risk profile.

Rating the Management Factor

- A rating of **1** indicates strong performance by management and the board of directors and strong risk management practices relative to the institution's size, complexity, and risk profile. All significant risks are consistently and effectively identified, measured, monitored, and controlled. Management and the board have demonstrated the ability to promptly and successfully address existing and potential problems and risks.
- A rating of **2** indicates satisfactory management and board performance and risk management practices relative to the institution's size, complexity, and risk profile. Minor weaknesses may exist, but are not material to the safety and soundness of the institution and are being addressed. In general, significant risks and problems are effectively identified, measured, monitored, and controlled.
- A rating of **3** indicates management and board performance that need improvement or risk management practices that are less than satisfactory given the nature of the institution's activities. The capabilities of management or the board of directors may be insufficient for the type, size, or condition of the institution. Problems and significant risks may be inadequately identified, measured, monitored, or controlled.
- A rating of **4** indicates deficient management and board performance or risk management practices that are inadequate considering the nature of an institution's activities. The level of problems and risk exposure is excessive.
- Problems and significant risks are inadequately identified, measured, monitored, or controlled and require immediate action by the board and management to preserve the soundness of the institution. Replacing or strengthening management or the board may be necessary.
- A rating of **5** indicates critically deficient management and board performance or risk management practices. Management and the board of directors have not demonstrated the ability to correct problems and implement appropriate risk management practices. Problems and significant risks are inadequately identified, measured, monitored, or controlled and now threaten the continued viability of the

institution. Replacing or strengthening management or the board of directors is necessary.

2.3.4 Earnings Quality (E)

This parameter lays importance on how a bank earns its profit. This also explains the sustainability and growth in earnings in the future. Earnings are rated on both recent performance and the historical stability of the earnings stream. The earnings of the banks should be able to absent normal and expected losses in given period. It also provides a source of financial support by contributing to the intuition's internal generation of capital.

Earning quality is the ability of a bank to continue to realize strong earnings performance. It is based on an evaluation of the quantity, quality and sustainability of the banks earning performance. An evaluation of earning considers factors, composition and quality of net income, stability of earnings performance, relationship to portfolio risk and quality of earning management etc. Earning quality is quite possible for a bank to register impressive profitability ratio and assuming unacceptable degree of risk.

Return on assets, return on equity, interest spread ratio, gross margin operating profit margin and net profit margin are commonly used for profitability measurement.
Under the UFIRS, in evaluating the adequacy of a FI's earnings performance, consideration should be given to:

- The level of earnings, including trends and stability,
- The ability to provide for adequate capital through retained earnings,
- The quality and sources of earnings,
- The level of expenses in relation to operations,
- The adequacy of the budgeting systems, forecasting processes, and management information systems in general,
- The adequacy of provisions to maintain the ALLL and other valuation allowance accounts,
- The earnings exposure to market risk such as interest rate, foreign exchange, Price risks.

From a bank regulator's standpoint, the essential purpose of bank earnings, both current and accumulated, is to absorb losses and augment capital.

Earnings are the initial safeguard against the risks of engaging in the banking business, and represent the first line of defense against capital depletion resulting from shrinkage in asset value. Earnings performance should also allow the bank to remain competitive by providing the resources required to implement management's strategic initiatives.

Evaluation of Earnings Performance

An analysis of earnings comprise of examiner reviewing each component of the Earnings Analysis Trial and Ratio Analysis. Generally, the analysis of earnings begins with the examiner reviewing each component of the earnings analysis trail. The earnings analysis trail provides a means of isolating each major component of the income statement for individual analysis. The earnings analysis trail consists of the following income statement components: net interest income, non-interest income, non-interest expense, provision for loan and lease losses, and income taxes.

Each component of the earnings analysis trail is initially reviewed in isolation. Typically, ratios are examined to determine a broad level view of the component's performance.

The level of progression along the analysis trail will depend on a variety of factors including the level and trend of the ratio(s), changes since the previous examination, and the institution's risk profile.

Earnings Ratio Analysis

Several key ratios used in the earnings analysis are used as shown below:

- Net Income to Average Assets Ratio [Return on Assets (ROA) ratio]
- Net Interest Income to Average Assets Ratio
- Net Interest Income to Average Earnings Assets Ratio
- Non-interest Income to Average Assets Ratio
- Non-interest Expense to Average Assets Ratio

- Provision for Loan and Lease Losses (PLLL) to Average Assets Ratio
- Realized Gains/Losses on Securities to Average Assets Ratio(s)

For example, bank management may have taken on loans or other investments that provide the highest return possible; Earnings quality is the ability of a bank to continue to realize strong earnings performance. It is quite possible for a bank to register impressive profitability ratios and high volumes of income by assuming an unacceptable degree of risk.

An inordinately high ROA is often an indicator that the bank is engaged in higher risk activities. But are not of a quality to assure either continued debt servicing or principal repayment. Seeking higher rates for earning assets with higher credit risk will boost short-term earnings. Eventually, however, earnings may suffer if losses in these higher-risk assets are recognized. In addition, certain of the bank's adversely classified and non-performing assets, especially those upon which future interest payments are not anticipated, may need to be reflected on a non-accrual basis for income statement purposes. If such assets are not placed on a non-accrual status, earnings will be overstated. Similarly, material amounts of troubled debt restructured assets may have an adverse impact on earnings.

Rating the Earnings Factor

- Earnings rated **1** are strong. Earnings are more than sufficient to support operations and maintain adequate capital and allowance levels after are given to asset quality, growth, and other factors affecting the quality, quantity and trend of earnings.
- Earnings rated **2** would be satisfactory and sufficient to support operations and maintain adequate capital and allowance levels after consideration is given to asset quality, growth, and other factors affecting the quality, quantity and trend of earnings. Earnings that are relatively static, or even experiencing a slight decline, may receive a 2 rating provided the institution's level of earnings is adequate in view of the assessment factors listed above.

- Earnings rated **3** may need to improve. Earnings may not fully support operations and provide for the accretion of capital and allowance levels in relation to the institution's overall condition, growth, and other factors affecting the quality, quantity, and trend of earnings.
- A rating of **4** indicates earnings that are deficient. Earnings are insufficient to support operations and maintain appropriate capital and allowance levels. Erratic fluctuations in net income or net interest margin, the development of significant negative trends, nominal or unsustainable earnings, intermittent losses, or a substantive drop in earnings from the previous years may characterize institutions so rated.
- A rating of **5** indicates earnings that are critically deficient. A FI with earnings rated 5 is experiencing losses that represent a distinct threat to its viability through the erosion of capital.

2.3.5 Liquidity (L)

Liquidity management is a critical factor influencing the financial health of the banks. It is the extent to which the bank has funds available to meet cash demands for loans and deposit withdraws. This is an important area of risk facing banks because a liquidity crisis many result in the failure of a solvent bank. Examiners look at the banks funding sources as well as the liquidity of assets in determining the rating.

Banks must be able to manage demand and supply of funds. Cash balance bank, bank balance and investment in government bonds are the most liquid form of assets. Optimum liquidity is achieved by balancing risks and returns. In banks liquidity needs to be high enough to meet even unexpected changes in liquidity needs and sources.

Thus, the bank must trade off the cost of maintaining excessive liquidity and the cost of insufficient liquidity.

Banks are also concerned about the danger of not having sufficient cash and borrowing capacity to meet deposit withdraws loan demand and other cash need. Liquidity risk is

danger of having insufficient cash to meet a bank's obligation when due. It affect the health of commercial bank adversely affects the profitability of financial institutions. NRB directive (2062B.S) number E.Pra.Ni. 05/061/062 requires the banks to classify the assets and liquidity on the basis of maturity period classification different time interval for liquidity risk minimize.

NRB Directives Related to Liquidity

According to NRB, every commercial bank has maintained minimum balance of cash reserve ratio 5% of their total deposit liabilities compulsory. Under sub-section (1) they should be bears the following penalty for not sufficient of minimum requirement balance.

a. First time insufficient balance is exiting interest rate
b. For second times of under balance is double interest rate
c. For third times of under balance is triple interest rate.

Practices should reflect the ability of the institution to manage unplanned changes in funding sources, as well as react to changes in market conditions that affect the ability to quickly liquidate assets with minimal loss. In addition, funds management practices should ensure that liquidity is not maintained at a high cost, or through undue reliance on funding sources that may not be available in times of financial stress or adverse changes in market conditions. Liquidity is rated based upon, but not limited to, an assessment of the following evaluation factors:

- The adequacy of liquidity sources compared to present and future needs and the ability of the institution to meet liquidity needs without adversely affecting its operations or condition.
- The availability of assets readily convertible to cash without undue loss.
- Access to money markets and other sources of funding.
- The level of diversification of funding sources, both on- and off-balance sheet.
- The degree of reliance on short-term, volatile sources of funds, including borrowings and brokered deposits, to fund longer-term assets.
- The trend and stability of deposits.
- The ability to securitize and sell certain pools of assets.

- The capability of management to properly identify, measure, monitor, and control the institution's liquidity position, management information systems, and contingency funding plans.

Rating the Liquidity Factor

- A rating of **1** indicates strong liquidity levels and well-developed funds management practices. The institution has reliable access to sufficient sources of funds on favorable terms to meet present and anticipated liquidity needs.
- A rating of **2** indicates satisfactory liquidity levels and funds management practices. The institution has access to sufficient sources of funds on acceptable terms to meet present and anticipated liquidity needs. Modest weaknesses may be evident in funds management practices.
- A rating of **3** indicates liquidity levels or funds management practices in need of improvement. Institutions rated 3 may lack ready access to funds on reasonable terms or may evidence significant weaknesses in funds management practices.
- A rating of **4** indicates deficient liquidity levels or inadequate funds management practices. Institutions rated 4 may not have or be able to obtain a sufficient volume of funds on reasonable terms to meet liquidity needs.
- A rating of **5** indicates liquidity levels or funds management practices so critically deficient that the continued viability of the institution is threatened. Institutions rated 5 require immediate external financial assistance to meet maturing obligations or other liquidity need.

Liquidity Management Concepts

There are several principles which the economists have propounded to resolve the conflicts between objectives of liquidity, safety and profitability. These concepts are discussed as under:

- **The Real Bills Doctrine**

The Real Bills doctrine states that a commercial bank should extend only short-term self-liquidating productive loans to business firms. Self liquidating loans are those meant to

finance the production, storage, transportation, and distribution. When such goods are ultimately sold, the loans are considered to liquidate themselves automatically.

- **The Shiftability Theory**

H.G. Moulton propounded the shiftability theory of bank liquidity. According to this view, an asset to be perfectly shiftabilty must be immediately transferable without capital loss when the need for liquidity arises. But in a general crisis requires that all banks should possess such assets which can be shifted on to the central bank which is the lender of the last resort. This theory has certain elements of truth.

- **The Anticipated Income Theory**

The Anticipated Income Theory was developed by H.V. Proch in 1944 based on term loan practices by USA commercial banks. According to this theory, the bank plans for liquidation of long term loans from the anticipated income of the borrower regardless of the nature and character of a borrower's business. The bank puts restrictions on the financial activities of the borrower while granting this loan. Consequently, the bank takes into consideration not only the security but with major consideration, the anticipated earnings of the borrower. This theory is superior to the bills doctrine and the shift ability theory because it fulfills the three objectives of liquidity, safety, and profitability.

- **The Liabilities Management Theory**

This theory was developed in the 1960s. According to this theory, there is no need for banks to grant self-liquidating loans and keep liquid assets because they can borrow reserve money in the money market in case of need. A bank can acquire reserves by creating additional liabilities against it, from different sources. These sources includes the issuing of time certificates of deposit, borrowing from the other commercial banks, borrowing from the central bank, raising of capital funds by issuing shares, and by plowing back of profits.

Liquidity Management Techniques

Techniques for liquidity assessment have evolved over the years with the significant changes in the monetary policy operating procedures. Despite the uncertainty in predicting liquidity conditions, econometric models could be used to provide first indicative forecasts, given the estimated structure of inter-relationships based on past information. The treasury or fund manager of any banks and FIs should adopt following techniques for effective liquidity management.

Liquidity Planning

The liquidity planning entails the accurate estimation of liquidity needs and the structuring of the portfolio to meet the expected liquidity needs. To ensure that funds are available to meet the liquidity needs at the lower cost, the treasury manager of the banks and FIs must manage its money position to comply with the reserve requirements as well as managing its liquid sources.

Managing the Cash Position

A cash position refers to the amount in the process of collection and currency and demand balances due from other banks and the central bank. Numerous transactions that cause an inflow or outflow of cash during a day continually change the cash position of the banks and FIs. Because cash yields no income, cash holdings must be limited to a minimum. The treasury/ fund manager may invest any excess cash or may acquire additional cash sources from interbank loans or from discount window at the central bank.

Managing the Liquidity Position

Once the liquidity needs of the banks and FIs have been estimated, the treasury manager must decide how these needs are to be funded. The banks and FIs must choose between two general liquidity management strategies, namely, asset management and liquidity management. In the asset management, assets are sold to meet liquidity needs. In the liability management, money is borrowed to meet liquidity needs. A combination of these

strategies is normally employed. The following guidelines must be kept in mind by the treasury manager when managing the liquidity position of the banks and FIs:

- The treasury manager must coordinate and keeps track of the activities and strategies of the funds-raising and funds-using departments within the banks and FIs.
- The treasury managers should know the timing of large withdrawals from big credit clients or depositors in order to plan.
- The priorities and objectives of liquidity management should be clear and properly communicated.
- The needs and decisions must be evaluated on a continuous basis to invest access liquidity and avoid liquidity shortages.

Controlling Liquidity Risk

To assess how well the banks and FIs are managing its liquidity position, the management should be cautious on the following signals from the marketplace that indicate a pending liquidity problem:

- Public confidence in terms of withdrawal of deposits from the banks and FIs.
- Share price behavior, falling share prices indicate perceived liquidity problems.
- Risk premiums on money market borrowings.
- Losses because of the hasty sale of assets for liquidity purposes.
- Inability to meet the demands of new credits customers.
- More frequent and larger borrowings from the central bank.

Considering the aforementioned technique, the treasury manager must also consider the purposes of the liquidity need, the length of time for which funds are needed, the access to liability markets, the costs and characteristics of various liquidity sources and interest rate forecast. It is revealed that the large banks have better access to liability liquidity sources due to the better quality assets and a broader capital base. The small banks have to rely more on assets for liquidity. Thus, an effective liquidity management is essential to reduce costs.

NRB Directives Related to Liquidity

NRB had given the instruction to the commercials banks since 2023 B.S. to deposit the amount the amount ratio of 8 percent from their deposit liability. In the beginning of 2047 B.S. the increase in the quantity of internal credit was very high and began to show negative effect on economy. (NRB Unified Directive Number E.Pra Ni. No. 13/061/62)

The deflation grew up to 21 percent. So, high liquidity appeared in economy, hence, control of the negative effect that may fall on economy to improve the growth of price rate and improvement of the position of loss of running account and control the capacity of flowing the loan of the commercial banks, was necessary and the NRB second time prescribed liquidity ratio. It made compulsory to invest 24 percent the amount of the total deposit of the commercial bank in Government Bond, treasury bills, or NRB Bonds. With some signs of improvement of economy, the investment ratio was revised accordingly, since Poush 2049 B.S.

With effective from, 2054, Chaitra 31st, commercial banks were required to maintain liquidity of 8% of the total Current & Saving deposits and 6% of the fixed deposits, in addition to 3% of total deposit in cash at vault. Since then the NRB reserve requirement has been changed.

To ensure adequate liquidity, following arrangements have been put into force by NRB effective from 22 July 2002 (2059/04/06).

Prevailing Directives as to Cash Reserve Ratio Requirement

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

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

a. The CRR maintained by the banks will be examined on the basis of average weekly balance of deposit liability immediately preceding 4th week. A week shall comprise from each Sunday through Saturday.

b. CRR will not be calculated for the week which is fully off.
c. Weekly statement of deposit balances to be submitted to NRB inspection and Supervision department within 15 days from the date of end of the week.
d. Weekly average of Monday to Friday of Total Deposit, Cash in Vault and NRB balance is calculated by dividing by 5.

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

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

The applicable rate of penalty is as follows:
First time shortfall = Equivalent to bank rate/highest refinance rate
Second time shortfall = Equivalent to 2 times of bank rate
Third time shortfall and all subsequent shortfalls = Equivalent to 3 times of bank rate.

2.3.6 Sensitivity to Market Risk

Market risk is the current and potential risk to earnings and stockholder's equity resulting from adverse movements in market rates or price. The sensitivity to market risk is assessed to determine the bank's ability to monitor and manage its exposure to market risk; it reflects the degree to which changes in the interest rates, foreign exchange rates and equity prices can adversely affect a bank's earnings and capital. For most FIs market risk primarily reflects exposing to changes in interest rates. The sensitivity to market risk components focuses on an institution's ability to identify, monitor, manage and controls market risk and provides FIs management with a clear and focused indication of supervisory concern in this area.

Equity prices risk examines how changes in market prices, interest rates and foreign exchange rates affect the market values of any equities, fixed income securities, foreign exchange currency holdings, and associated derivative and other off-balance sheet contracts. Foreign exchange risk arises from changes in foreign exchange rates that affect the values of assets liabilities and off-balance sheet activities denominated in currencies different from the banks domestic currency.

Interest rate risk analysis compares the sensitivity of interest income to change in assets yields with the sensitivity of interest expense to changes in the interest lost of liabilities. Dollar gap, duration gap and simulation are three techniques of measuring interest rate riskwherethe dollar gap is the oldest technique. The most commonly used measure of the interest sensitivity position of a financial institution is duration gap analysis. Duration is defined as the elasticity measure that indicates the relative price sensitivity of different securities. The duration gap is the difference between the duration of a bank's assets and liabilities. It helps to explain how changed in interest rates affect the market value of a bank assets and liabilities. Thus, the focus of gap analysis is on net interest income or net worth the number of years of the duration of assets and liabilities.

Net Worth = Assets-Liabilities

If duration gap is positive lie, the duration of assets exceeds the duration of liabilities then increases in interest rates will reduce the value of net worth and decrease in interest rates will increase the value of net worth.

Conversely the duration gap is negative with the duration of asset less than the duration of liabilities, raising interest rate will increase the value of net worth, whereas falling interest rates will lead to a reduction in it.

An aggressive interest rate risk management strategy would alter the duration gap in anticipation of changes in interest rates. If interest rates were expected to increase management would want to shift from positive to a negative gap position. It could do this by reducing the duration of asses or increasing the duration of liabilities.

Simulation analysis determines the effect of interest rate changes on short-term net interest income net income. It also measure risk presented by non-parallel yield curve shift. Simulation models are often not “user friendly” and may require more data and expertise than other interest rate risk measurement system. According to NRB directive every commercial bank should classified of risk and provision for minimizes the risk. There are liquidity, interest rate, foreign exchange, loan and investment risk to monitoring on related of banking and financial institutional risk.

The sensitivity to market risk component reflects the degree to which changes in interest rates, foreign exchange rates, commodity prices, or equity prices can adversely affect a FI's earnings or economic capital. When evaluating this component, consideration should be given to: management's ability to identify, measure, monitor, and control market risk; the institution's size; the nature and complexity of its activities; and the adequacy of its capital and earnings in relation to its level of market risk exposure.

For many institutions, the primary source of market risk arises from non-trading positions and their sensitivity to changes in interest rates. In some larger institutions, foreign operations can be a significant source of market risk. For some institutions, trading activities are a major source of market risk.

Market risk is based upon, but not limited to, an assessment of the following evaluation factors:

- The sensitivity of the FI's earnings or the economic value of its capital to adverse changes in interest rates, foreign exchanges rates, commodity prices, or equity prices.
- The ability of management to identify, measure, monitor, and control exposure to market risk given the institution's size,
- Complexity and risk profile.
- The nature and complexity of interest rate risk exposure arising from non-trading positions.
- Where appropriate, the nature and complexity of market risk exposure arising from trading and foreign operations.

Rating the Sensitivity to Market Risk Factor

- A rating of **1** indicates that market risk sensitivity is well controlled and that there is minimal potential that the earnings performance or capital position will be adversely affected. Risk management practices are strong for the size, sophistication, and market risk accepted by the institution. The level of earnings and capital provide substantial support for the degree of market risk taken by the institution.
- A rating of **2** indicates that market risk sensitivity is adequately controlled and that there is only moderate potential that the earnings performance or capital position will be adversely affected. Risk management practices are satisfactory for the size, sophistication, and market risk accepted by the institution. The level of earnings and capital provide adequate support for the degree of market risk taken by the institution.
- A rating of **3** indicates that control of market risk sensitivity needs improvement or that there is significant potential that the earnings performance or capital position will be adversely affected. Risk management practices need to be improved given the size, sophistication, and level of market risk accepted by the institution. The level of earnings and capital may not adequately support the degree of market risk taken by the institution.
- A rating of **4** indicates that control of market risk sensitivity is unacceptable or that there is high potential that the earnings performance or capital position will be adversely affected. Risk management practices are deficient for the size, sophistication, and level of market risk accepted by the institution. The level of earnings and capital provide inadequate support for the degree of market risk taken by the institution.
- A rating of **5** indicates that control of market risk sensitivity is unacceptable or that the level of market risk taken by the institution is an imminent threat to its viability. Risk management practices are wholly inadequate for the size, sophistication, and level of market risk accepted by the institution.

Interest Rate Risk Measurement System Approaches

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

- **The Earnings Approach**

The Earnings Approachfocuses on risks to reported earnings, usually over a shorter-term time horizon. Typically, earnings systems estimate risk for up to two years. In addition, estimating future earnings permits regulatory capital forecasts. The earnings approach traditionally focuses on net interest income. However, many systems now incorporate components that measure the price risk from instruments accounted for at market value or lower-of-cost or market value. Maturity gap analysis and simulation models are examples of earnings approaches to IRR measurement.

- **The Economic Value Approach**

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

viability. Despite using different methodologies, the two approaches generally should provide a consistent view of interest rate risk exposures.

Gap Analysis

Gap systems use an accrual approach to identify risk to net interest income. Typically, gap systems identify maturity and repricing mismatches between assets, liabilities, and off-balance sheet instruments.

Gap schedules segregate rate-sensitive assets, rate-sensitive liabilities, and off-balance sheet instruments according to their repricing characteristics. Then, the analysis summarizes the repricing mismatches for each defined time horizon. Additional calculations convert that mismatch into risk to net interest income.

Gap analysis may identify periodic, cumulative, or average mismatches. The most common gap ratio formula is:

$$\frac{\text{Rate} - \text{Sensitive Assets} - \text{Rate} - \text{Sensitive Liabilities}}{\text{Average Earning Assets}}$$

Occasionally, average assets or total assets may be used in place of average earning assets. However, those denominators can underestimate interest rate risk. The gap ratio can and should be used to calculate the potential impact on interest income for a given rate change. This is done by multiplying the gap ratio by the assumed rate change. The result estimates the change to the net interest margin. For example, a bank has a 15% one-year average gap.

If rates decline 2%, then the net interest margin will decline by 30 basis points (15% x .02). This estimate assumes a static balance sheet and an immediate, sustained interest rate shift. Gap analysis has several advantages.

Specifically, it:

- Does not require sophisticated technology.
- May be relatively simple to develop and use.
- Can provide clear, easily interpreted results.

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

- Generally captures only repricing risk.
- May not identify intra-period repricing risk.
- Does not measure EVE.
- Generally cannot analyze complex instruments.

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

Simulation Analysis

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

Duration Analysis

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

Macaulay Duration

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

Modified Duration

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

Effective Duration

Effective duration estimates price sensitivity more accurately than modified duration for instruments with embedded options and is calculated using valuation models that contain option pricing components.

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

2.4 CAMEL Plus Corporate Governance

After following economic liberalization policy since mid 1980s, the establishment of joint stock Company in Nepal has been speeded up. Competition in the banking sector is being more intense. Banks are required to compare in the domestic market as also in the international market in the context of liberalization and globalization. Adoption of corporate governance practices assumes greater importance in this context. A corporate governance system is expected to provide protection to shareholders and creditors and to assure them of getting return on their investment.

Corporate governance is defined as a set of rules and the relationships between a company’s management and its board of director’s shareholders and other stakeholders. These rules help setup mechanisms of attaining good governance. Globalization and liberalization policies also play a decisive role increasing the demand for good governance. Effective corporate governance may be described as reconciliation between the power and obligations of the board of directors to ensure good performance

awareness of the rights and duties of stakeholders and the expectation of the society. Good corporate governance feature such as transparency, accountability, information disclosures, and stringent ethics.

It helps ensure the business corporations undertake their operations to maximize shareholders value, which will eventually bring benefits to other stakeholders from a long term perspective. The poor governance practices including inadequate disclosures, lack of independent over right directors and weak minority shareholders tend to discourage investment and weaken incentives for efficient management. Good corporate governance will enhance the company's image.

It helps to introduce good practice in corporate behavior with a view to rebuilding and maintaining public trust in company. In Nepalese banking industry, lack of proper corporate governance, we had also faced lots of problem and loss of public faith on banking system in past days. (Banks as intermediaries play a significant role in economic growth provide funds for investment and keep the cost capital low. In Nepal banks have a significant role to play against the backdrop of 15.1 % of the people still relying on local money lenders at the present, even though it is certainly a great improvement in view of more than 39.7 per cent of the people participating this traditional mode of borrowing 15 years back. On one hand, it has incredibly increased the access of people, as can be seen from the result of Nepal Living Standard Survey 2011 with 53.9 per cent of the people enjoying the services of the co-operatives, and 39.9 per cent that of the commercial bank at present versus only 25.9 per cent and 20.7 per cent in 1995/96 respectively.

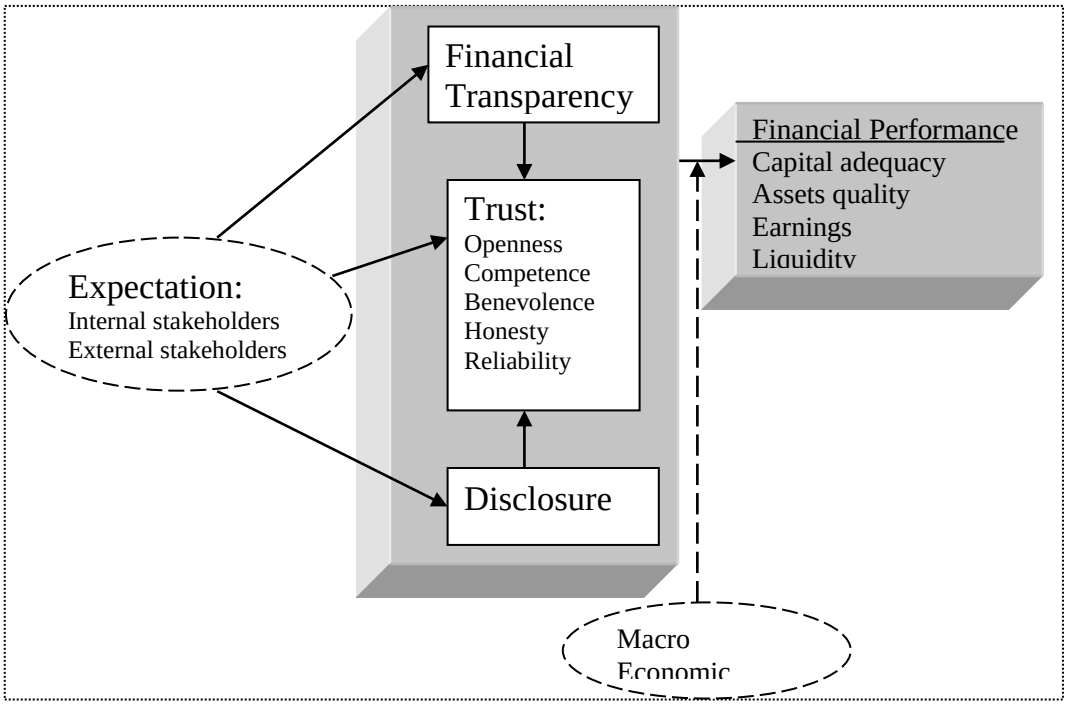
The problems are manifest mainly in the form of a number of them falling victim to insolvency and financial distress, huge levels of non-performing loans, over-lending to the unproductive real estate sector and imprudent exposure to share-based lending particularly during the earlier boom period. As a result, countries worldwide have embarked on a campaign of reducing the number of banks because their large number does not bode well for the banking administration. For instance, the United Kingdom and Australia each have four major banking groups and Singapore has five, with the latter

intending to reduce their number to even two. Nepal has also initiated the merger of the banks virtually as a last straw in view of the collapse of several of them in the recent past. We have to wait to know whether this exercise will be a star performer or an embryonic state in Nepal. But one has to make confirmed that the forced merger among these banks should succeeded in protecting the interest of the depositors of weak banks) (Pokheral, 2012:9). Merger of the Banks, The Himalayan Times) But we can see a ray of hope with the stringent supervision system adoption by NRB on banking supervision with the implementation of Basel II framework recommended by Basel Committee of Banking Supervision (BCBS). Basel II framework has recommended various suggestions policies to address corporate governance in banking institution would be the great help for the commercial banks operation in Nepal.

Effective corporate governance practices are essential to achieving and maintaining public truth and confidence in the banking system. Poor corporate governance can lead market to lose confidence in the ability of a bank to properly manage its assets and liability, including deposits with could in turn liquidity crises.

To understand corporate governance and financial Performance variables in relation to commercial banks, the major corporate governance pillars i.e. financial transparency, discloser and trust are dissected. Financial performance especially relating to commercial banks is also reviewed based in the performance dimensions comprising capital adequacy, assets quality, earnings and liquidity. The significance of stakeholders in commercial banks is also highlighted.

Corporate Governance and Financial Performance Conceptual Framework



Numerous stakeholders (internal and external) exist in any business enterprises some of these include; customers, stakeholders, government among others. Internal stakeholders such as the employees and external stakeholders like stakeholders, customers, tax authorities and bank supervisors. Transparency, disclosure and trust, which constitute the integral part of corporate governance, can provide pressure for improved financial performance. Macro economic variables through factors such as inflation and changes in interest rates may either enhance or distress commercial banks financial performance. Awareness of the importance of corporate governance is growing.

The NRB has introduced higher corporate governance standards for banks and other financial companies as part of a wider program of financial sector reform. Effective control system and strong corporate governance are the basic foundation of a sound and stable bank. Realizing the importance of this facet NRB has issued a directive on corporate of director and employees.

Basic Principle of Corporate Governance in Banking Organization

There are major 8 principles formulated and evolved by BCBS for enhancing corporate governance of banking institutions. These principles if practiced honestly, banking institution could be run very efficiently and effectively with controlled management resulting good financial health of the organization practicing of these principles is very much essential for the banking industry of the developing countries like Nepal. These principles have briefly discussed below in the Nepalese perspectives.

Principle 1

Board members should be qualified of their positions, have a clear understanding of their positions. In most of the banking and financial institutions of Nepal it has been observed that the board of directors have been nominated according to their share investment in the banks where their qualification and understanding capabilities about the core functions of the bank have been almost neglected. The minimum qualification for being member of the board of directors has been raise as one of the important principles requirement for a bank and financial institution.

Principle 2

The board of directors should approve and oversee the banks strategic objectives and corporate values that are communicated throughout the banking organization.

Generally, board of directors without mark accepts the policies and strategic objectives of the bank recommended by the employees or the consultant. But formulation of the strategic objectives and the corporate values of a bank is the main task of the board of directors. Where ensuring full implementation of such formulated policies is another must important to oversee by the board of directors.

Principle 3

The board of directors should set and enforce clear lines of responsibility and accountability through the organization.

It is third principle the board of directors must set and enforce the lines of responsibility and accountability of the each part of the banking organization including individual element of the functioning team and departments. Performance of the task according to the set responsibility has to be measured and accountably rewarded and punished for the good and bad doings respectively. So, that a clear understanding of the responsibility and their accountability is communicated throughout the banking organization.

Principle 4

The board should ensure that there is appropriate oversight by senior management consistent with board police.

It is another principle of corporate governance that the board of directors must have proper and effective review process and controlling mechanism that the senior management is working according to the policy set by the board all the time.

Principle 5

The board and senior management should effectively utilize the work conducted by the internal audit function, external auditors and internal control functions. The board of directors and the senior management of bank should study deeply the report submitted by the internal auditors, external auditor's regulators instructions and utilize their recommendations and should be committed to follow.

Principle 6

The bank should be governed in a transparent manner.

Transparency is the most important principle of the corporate governance that all the discloser of a bank is published transparently and operation of the bank is conducted in transparent manner. It is different for shareholders, other stakeholders and the market participates to effectively monitor and properly hold accountable the board of directors and the senior management when there is lack of transparency.

Principle 7

The board should ensure that compensation policies and practices are consistent with the bank's corporate culture, Long term objectives and strategy and control environment.

Compensation and remuneration to the board of directors and the senior management of the bank should be controlled and regulated by the appropriate policy and accordingly practiced throughout the banking organization. Executive or non executive board of directors should not take any compensation of remuneration deviating to the norms of the policy set out and they should very much conscious for such compensation to be taken by other senior managers. This commitment and compliance is most important for the enhancement of the better corporate governance of a banking organization.

Principle 8

The board and senior management should understand the bank's operational structure including where the bank operates in jurisdictions.

Banks may choose to operate in a particulars jurisdiction or may establish complex structures often for legitimate and appropriate business purpose. However, operating in such jurisdiction may pose financial, legal and reputation risks to the banking organization. Clear understanding of such possible risk by the board of directors and the senior management is very much important for the effective corporate governance in a banking institution.

Commercial Banks should be committed to high standards of corporate governance, business integrity and professionalism in their activities that assures all stakeholders that the banks are being managed ethically in compliance with best practices and applicable legislation and within predetermined risk parameters, and is also adding value to and protecting their investment.

2.5 Research Review

This section contains the review of different research works are carried out by different scholars within the different countries including dissertations by Nepalese scholars, which is related with financial performance analysis of commercial bank.

2.5.1 Review of Related Studies and Papers

The research studies and work papers carried out by different scholars within various geographical region including dissertations conducted by Nepalese scholars are reviewed in this section, which are related with financial performance analysis of commercial bank and/or the area of the study. Several academic studies have examined whether and to what extent private supervisory information is useful in the supervisory monitoring of banks and developing bank failure-prediction models. It is very crucial for such analysis to identify variables that reliably predict future bank failure. The studies use variables that reflect asset quality, liquidity, capital adequacy, and management quality. Most studies find that capital adequacy, earning ability, and asset quality, measured by the concentration of certain loan types, help to predict bank failure.

Furthermore, they find that supervisors are more likely to uncover unfavorable private information, which is consistent with managers' incentives to publicize positive information while de-emphasizing negative information.These results indicate that supervisors can generate useful information about banks, even if those banks already are monitored by private investors and rating agencies.

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

The authors attribute this difference to the fact that supervisors and rating agencies, as representatives of debt holders, are more interested in default probabilities than the stock market, which focuses on future revenues and profitability. This rationale also could explain the authors' finding that supervisory assessments are much less accurate than market assessments of banks' future performances.

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

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

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

Kolari et al. (2000) developed models and predicted bank failure, where the models initially included three measures of loan default disclosure along with 25 other financial measures. The loan default measures included allowance for loan losses to total assets, net loan charge-offs to total assets and provision for loan losses to total.

In the final analysis, the allowance for loan losses to total assets was significant in row of the six predictions. As with many other studies, there was a lack of theory for the choice of variables, as stepwise logic was utilized for the decision of inclusion or elimination.

Volatility in the depositor (and creditor) base depends on the type of depositor, insurance coverage, and maturity. Banks that rely on a narrow or highly volatile funding base are more prone to liquidity squeezes. Household deposits are typically more stable than, for instance, the deposits of institutional investors or corporate entities. Deposit concentration (i.e., fewer, larger-size deposits) can also be indicative of volatility. Deposit insurance increases the stability of the deposits it covers, with the important caveat that insurance schemes that are not credible may not have this effect. On the external front, foreign financing, for instance through commercial credit lines, and deposits of nonresidents (either in foreign or domestic currency) can become highly volatile in situations of distress and make the financial system vulnerable to external shocks or adverse developments in the domestic economy. As regards instrument maturity, the longer the time before the liability matures (in terms of remaining maturity), the more stable is the funding; however, in countries where banks are required to meet early withdrawal requests with only minor penalties, maturity may be less relevant to determining funding stability.

Sahajwala and Van den Bergh (2000)based their work paper of Basel Committee on Banking Supervision on a study of a number of new bank monitoring systems currently in use or under development in various G10 countries. Such systems are collectively termed “supervisory risk assessment and early warning systems”. The objective of the paper was to provide an overview of the different approaches taken by bank supervisors and to make a preliminary general assessment of the methods that are being used or developed. The study reveals that supervisory authorities are now clearly moving towards putting in place more formal, structured and risk focused procedures for ongoing banking supervision.

Baral (2005), using the annual reports data set of joint venture banks and NRB supervision reports, published his paper abstract in the Journal of Nepalese Business Studies (Volume II No.1, December 2005). The paper examined the financial health of joint venture banks in the CAMEL framework for a period ranging from FY 2001 to FY 2004. The health checkup which was conducted on the basis of publicly available financial data concludes that the financial health of joint venture banks is better than that of the other commercial banks. The study further indicates that the CAMELS component indicators of the joint venture banks are not much encouraged to manage the possible shock.

2.5.2 Review of Articles

Dziobek, Hobbs and Marston develop a framework for assessing the adequacy of managements for market liquidity in 2000. The components of a balanced liquidity infrastructure are largely institutional in nature including the existence of legal contract rights and information disclosure. Prevailing monitory arrangements, design aspects of central bank instruments ad arrangements, for payments and money market operations also bear directly on bank's ability to manage short term liquidity. For instance, high transactions costs resulting from rigid instrument design and trading rules can discourage trades and contribute to price volatility. Foreign exchange regulations such as capital controls and prudential controls on open foreign currency positions can effects access to foreign currency, liquidity.

For example, overly tight limits on net positions in foreign exchange can constrain banks ability to manage liquidity through currency conversion. Restriction on the use of currency derivatives also limits the incentive for developing hedging mechanisms that can improve management of liquidity and other types of risks.

A. Cole and W. Gunter have prepared paper on predicting bank failure through comparison of one and off-site monitoring system in 2004. They find on site examination re regulators primary tools for monitoring the financial condition of federally insured depository institutions. In this paper they assess the speed with which the information

content of the supervisory rating assigned during bank exams the CAMEL Rating-decays. This is an important issue because cost and regulatory burden considerations often cause CAMEL rating to be assigned relatively infrequently. As a benchmark for information content they use econometric forecasts of bank failures generated by applying a profit model to publicly available accounting data. When compared with all CAMEL ratings available at a given point in time, the econometric forecast provide a more accurate indication of failure.

Further analysis reveals that this overall finding reflects the tendency for a CAMEL ratings information content of deteriorate noticeable begging in the second and third quarter after the rating initially was assigned.

Gordon-Hart has conducted a research work on Basel II, the risk to the global consensus in 2004. Basel II has been the subject of intense debate amongst bankers around the world, it will replace the original Basel accord of 1988, but unlike the latter it looks as if the new accord will undermine the global consensus. It is a costly exercise and the heightened risk of regulatory arbitrage may yet distort the competitive landscape. In particular, the completely different ways in which Basel II will be implementing in the USA and EU post a change for institutions that operate on a global scale.

This article is a brief examination of the key difference and challenges posed by the draft accord the prospects for a final drat being truly final seems remote and Basel III may well have to be on the agenda before the ink in dry on Basel II.

Derviz and Podpiera prepared paper on predicting Bank CAMEL and S&P Ratings at Czech Republic in 2005. They investigate the determinants of the movements in the long term standards and poor and CAMELS bank ratings in the Czech Republic during the period when the three biggest banks representing approximately 60% of the Czech banking sectors total asserts. Were privatized (i.e. the time span 1998-2001). The same list of explanatory variables corresponding to the CAMELS rating inputs employed by the Czech National banks, banking sector regulators was examined for both ratings in

order to select significant predictors among them. They employed an order responds logic model to analyze the monthly long run S&P ratings and panel data framework for the analysis of the quarterly CAMEL rating.

2.5.3 Review of Dissertation

Previous several dissertation works have been conducted by various researchers regarding different aspects of commercial banks such as financial performance, capital structure, investment policy, non-interest.

Some of them has presented as follows:

Chand (2006), in his thesis, *"Financial Performance Analysis of Nabil bank Limited in the framework of CAMELS",* has the main objective of analyzing the financial condition of NABIL. The other specific objective is;

a. To measure the liquidity ratios of the selected bank.
b. To examine the capital strength and assets quality of the bank.
c. To evaluate the profitability position and management of the bank

The major findings of the study are:

a. The capital adequacy of the bank was generally above the NRB standards in all the years.
b. The non-performing loan to loan ratios were all below the industrial average and the international standard. The loan loss provision of the bank is decreasing constantly in each year.
c. The management proxy ratios, total expense to total income ratio and earning per employees were favorable to the bank.
d. The earning quality ratios were generally above the benchmark prescribed by the World Bank. The overall liquidity position of the bank was in good condition.
e. The cumulative gap of risk sensitive assets and risk sensitive liabilities, re-pried 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.

Shrestha(2007), in his thesis, *"A Comparative Analysis of Financial Status and Performance Evaluation of HBL and NABIL Bank in the framework of CAMELS Rating System."*He has used different financial tools to meet the following relevant objectives.

- To analyze capital adequacy & liquidity position of HBL & NABIL and compare with regulatory minimum capital requirement.
- To analyze quality of asset and evaluate risk weighted assets of HBL & Nabil.
- To evaluate the level, trend and stability of HBL & NABIL earning,

His main findings were as follows:

The capital adequacy ratio of both banks is generally above than NRB standard which shows that both banks are running with adequate capital and sufficient to meet the banking operation as per NRB standard. The decreasing trend of non-performing loans and advances ratio of both banks helps to conclude that the bank is aware of non-performing loans and adopting the appropriate policies to manage this problem and to increase the quality of asset. The management proxy ratios are favorable of the bank. Decreasing trend on the ratio of total expenses to total revenue and increasing trend of EPS shows that NABIL has effective management soundness but in the case of HBL both total expenses to revenue ratio and earning per employee are is in decreasing trend, which implies. Overstaffing in the bank. Overall, both banks are managed and operating efficiently.

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

The major findings of the study were;

- 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.

Wagley(2009) conducted the *"Study on Financial Performance Evaluation of Listed Commercial Banks in the Framework of CAMELS"*. He has taken NIBL bank as the sample of the study to analyze the publicly available data and compared with the benchmark as prescribed by the NRB with the following objectives:

- To find out the financial health to find out the liquidity position of NIBL.
- To find out the liquidity position of NIIBL.

The major findings of the study are as follows:

- NIBL bank was found to be financially of sound health in the framework of all CAMLES components.
- In overall the liquidity position of the bank was found to be affected by the current liquidity crunch on going on the financial market.

Subedi(2009), has conducted a study on, *"NRB Unified Directives on Capital Adequacy Norms and its Impact-A case study of Nepal Industrial and commercial Bank Ltd."* The main objectives of the study were;

- To analyze the significance and impact of NRB capital adequacy Norms on NIC Bank.
- To examine the Capital Adequacy of NIC bank.
- To examine the relation of Capital Fund to the other stakes of the bank.

The major findings of the study were;

- Capital Fund of NIC bank has grown consistently over the study period comprising of FY 2059/60 to FY 2063/64.During the year, Unsecured Subordinated Term Debt amounting to Rs 200 million had been issued forming part of the supplementary capital, which made huge difference in the overall increment rate of the capital fund during that year.
- It is found that the bank is quite successful in maintain capital adequacy as prescribed by NRB. During the FY2060/61, the bank had highest capital adequacy ratio of 13.75%
- The capital to deposit ratio of NIC bank is found to be satisfactory. The ratio was 18.91% during FY 2059/60 and 12% during the FY 2063/64.

Shrestha (2012), has conducted a study on, "*Capital Adequacy & Its Significance to Commercial Banks(With Special Reference to Selected Commercial Banks)".*

Objective of the study:

- To analyze the implementation status of the directives given by NRB.
- To evaluate capital adequacy of the Commercial banks(NABIL, EBL,BOK)
- To examine the efficiency and weakness of capital adequacy ratio.

The major findings of the study were;

- Comparative study of capital adequacy of banks shows that the entire bank taken as sample exceeds the mandatory requirement of core capital of 6% as per the present NRB directives.
- The deposit components of a bank are positively correlated with the Bank's Capital Fund. So that the increase in capital causes the increase on deposit.
- During the analysis it has been found that the capital adequacy ratio is positively correlated to Return on Equity. So, the bank enjoying more return on equity may enjoy the higher capital adequacy ratio.

- Risk weighted Assets of the banks are positively correlated with the Bank's Capital Fund. We can say that the increase in capital adequacy ratio causes the increase in risk weighted assets.
- Non-performing loan is directly correlated to the capital adequacy ratio. This phenomenon should be kept in regard while fixing the capital adequacy ratio the banks should maintain.
- In every fiscal year the Total Capital Fund of every sample banks have been increasing.

2.6 Research Gap

Efficient banking system is not only the output of the rules and regulations imposed by the regulators. Banks and financial institutions can do a lot by imposing self governance rather than corporate governance. In this regard this research has tried pretty more to reflect the self governance practices adopted by Everest Bank, NABIL Bank ltd. and Himalayan Bank Ltd. and Standard Chartered Bank by means of CAMELS rating, which is quite new and challenging in it but is an opportunity to learn and identify the strength and weaknesses of the abovementioned commercial banks. This research work is different than of other researches carried out in this regard because of the new directives of NRB regarding the paid up capital of commercial Banks.

NRB has directed all the banks and financial institutions to upgrade their paid up capital as 2000 million by the year 2009 in one hand and most of the banks and financial institutions has already started to implement BASEL II by this year on the other hand. This research work is probably the first one to reflect the capital adequacy, trend of asset composition, and trend of earnings, risk weighted assets and liquidity position of the sample commercial banks.

CHAPTER - III

RESEARCH METHODOLOGY

This chapter is concerned with the procedures and techniques, research design, justification for the selection of study unit, nature and sources of data used in the objectives of the study. It includes research design, population and sample, nature and sources of data, methods of data collection, data analysis, tools and limitations of methodology. The research procedures are adopted comprehensively to accomplish the objectives set in Chapter 1.

3.1 Research Design

This study is based on descriptive cum analytical research approach to achieve the desired objectives. This study examines and evaluates of performance of joint venture banks in the framework of CAMELS. Hence, the research is conducted on a 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 selected four banks, some financial and statistical tools and descriptive techniques are applied. Financial ratios are applied to examine facts and descriptive techniques are adopted to evaluate financial performance of joint venture banks.

3.2 Population and Sample

There are 32 commercial banks in operation by the end of Ashadh 2012 A.D. Out of this 3 are public and 28 are private banks. Among these private banks, 6 are joint venture banks. For the purpose of this study, those joint venture banks are taken as the population which has completed their six years operation by the end of fiscal year 2005/06. From the population 4 commercial banks were sampled randomly. This represents 66.67% of the population. Simple random sampling method was used to select sample banks. The sampling frame is closely related to population. It is given in Appendix 1.

3.3 Nature and Sources of Data

This study is fully based on the secondary data. Therefore, the main sources of data are historical data disclosed by published reports of commercial bank especially annual report of sampled banks. The regulatory data were collected form NRB directives and reports.

The basic conceptual information was collected through BASEL, FDIC and NRB publications and working papers which are available in website. The major sources of data used in this study are:

- NRB Reports, Bulletins, and its' website information.
- Various articles published in journals and financial magazine;
- Basel committee publications through its official website;
- Nepal Stock Exchange Reports;
- Research paper and dissertations of website of the sample bank in addition supportive qualitative information was collected by formal and informal discussions with the senior staff of the banks.

3.4 Data Collection Procedure

The research used two types of data collection procedure:

- Primary Data
- Secondary Data

"Data originally collected for the process of the investigation are known as primary data; those collected by other persons are called secondary data. If secondary data are employed, the source from which the information is taken may itself had conducted the original investigation; in this case it is known as primary data. If on the other hand, the source did not itself collect the data but took them for there own purpose then it is secondary data" (Chand and Sons, 1998:91).

In some case, for the purpose of the research work Primary data are also taken (i.e. Personal Interview with the bank staff, face to face communication), but the study is

mainly based on the secondary data. So the main source of study is based on Secondary data.

- Annual reports of the concerned banks
- Published & Unpublished bulletin, report of the concerned banks
- Published & Unpublished report of Nepal Stock Exchange
- Previous study and research work
- "Bank and Financial Supervision report" of Nepal Rastra Bank
- Journal and Magazines, Working papers
- Various internet Websites etc.

Conceptual review and research review has been through related text books. Reviews of working paper written by various international scholars were downloaded from the related websites respectively.

The required information was collected by conducting visit to Head offices of each bank at Kathmandu, consulting library at Shanker Dev Campus and Tribhuvan University, Internet Surfing and related text books.

The annual reports of each Bank for the study period were obtained from their Head offices through personal approach and internet surfing to the banks' official website. NRB regulatory directives, Statistics of the Commercial Banks of Nepal and other related publication were obtained through internet surfing to NRB's official website and periodicals. Existing literature on the subject matter was collected from various research papers placed in Central Library (T.U.), Library of Nepal Commerce Campus and Shanker Dev Campus. Related text books available in Central Library Kirtipur Central, Security Board, Thapathali, Shankar Dev Campus Library and NRB publications, different Journals, Magazines and other published and unpublished reports were taken in reference. Likewise, the review of working papers conducted by various international scholars on the related matter was done through internet surfing to various websites.

3.5 Data Processing

At first relevant data were extracted from different sources and recorded in the master sheet. The data were then entered into the spread sheet to workout. The financial ratios were worked out with the help of applicable software such as Microsoft word, Microsoft excel. In addition tables were generated with the help of Microsoft excel. The financial data from the published documents and audited financial statements were manually extracted into the computer files of Microsoft Excel program which acted as master database file. The data was refined further into spreadsheets to carry out financial ratio calculation and graphical illustrations through mathematical functions and Chart program of the Excel program.

3.6 Data Analysis Tools

Financial ratios in the framework of CAMELS have been used to analyze the financial performance of joint venture banks. The relevant ratios used in this study are given in ensuring part of this section.

3.6.1. Capital Adequacy

1. Total Capital Ratio (TCR): Total capital is the sum of Tier I core capital and Tier II supplementary capital. Capital ratio used to measure of capital in the banks. It is determine by the following model.

$$\text{Total Capital Ratio} = \frac{\text{Total Capital Fund}}{\text{Total Risk Weigh ted Assets}} \times 100\%$$

Where,

Total Capital Fund = Core Capital+ Supplementary Capital

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

2. Core Capital Adequacy Ratio

Core ratio shows the relationship between the total core capital or internal sources and total risk adjusted assets.

It is calculated by using the following model;

$$\text{Core Adequacy Capital Ratio} = \frac{\text{Core Capital}}{\text{Total Risk Adjustment Assets}} \times 100\%$$

3. Supplementary Capital Adequacy Ratio

Tier I capital ratio is the expression of numerical relationship between Tier I capital and total risk adjusted assets. It shows the absolute contribution of supplementary capital in capital adequacy. It is calculated by using the following model;

$$\text{Supplement ary Capital Adequacy Ratio} = \frac{\text{Supplement ary Capital}}{\text{Total Risk Adjustment Assets}} \times 100\%$$

3.6.2. Assets Quality

Non-Performing Loan to Total Loan (NPL)

It measures the proportion of Non Performing loan in total loan and advance. The ratio is used to analyze the assets quality of the bank and determine by using the given model.

$$\text{Non Perferming Loan to Total Loan Ratio} = \frac{\text{Non Perferming Loan}}{\text{Total Loans and Advance}} \times 100\%$$

Where, **Non-performing Loan**

These loans which are not recovered with in the given time frame either in the form of interest or principle repayment.

Loan Loss Ratio (LLR)

A loan loss ratio indicates the valuable allowance offset against total loans which represents the amount considered by the management to be adequate to absorb unexpected losses inherent in the loan portfolio. For the purpose of this study following model is used to determine the loan loss ratio.

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

3.6.3 Management Efficiency

Operating Expenses Ratio (OER)

Operating Expenses Ratio is the expression of numerical relationship between total operating expenses and total operating revenue of the bank. The objective of the bank is reducing operating expenses and increase in the total operating revenue. Higher operating expense ratio indicates that financial institutions may not be operating efficiently, following model can be used in calculation of operating expenses ratio.

$$\text{Operating Expenses Ratio} = \frac{\text{Total Operating Expences}}{\text{Total Operating Revenue}} \times 100\%$$

Where,

Total Operating Expenses = Interest expenses + employees expenses + office operating expenses+ exchange fluctuation loss+ provision for possible loss.

Total Operating Revenues= Interest Income + Commission and Discount+ other operating income + Exchange Income.

Earning Per Employees (EPE)

EPE is numerical relationship between net operating incomes and total numbers of employees. Low or decrease earning per employees can reflect in efficiencies as a result of overstaffing, with similar repercussions in terms of profitability. It is calculated by uses of the following models;

$$\text{Earning Per Employees} = \frac{\text{Net Operating Income}}{\text{Number of Employees}} \times 100\%$$

3.6.4. Earning Performance

Return on Equity (ROE)

Return on Equity is a measure of the return on money provided by the firm's owners on equity, higher the investment which the shareholders will undertake. It also measures a firm's efficiency at generating profits from every dollar of net assets. And shows how

well a company uses investment dollars to generate earnings growth. For the purpose of the study following models is used to determine the return on equity ratio.

$$\text{Return on Equity} = \frac{\text{Net Income After Tax}}{\text{Total Equity Capital}} \times 100\%$$

Total Equity Capital= Paid up Capital + Reserve Funds and Surplus

Return on Assets (ROA)

Return on Assets is a measure of the return on money provided by both owners and creditors and is a measure of how efficiently all resources are managed. It indicates how capably the management of the bank has been converting the institutions assets into net earnings.

It is calculated by using the following models.

$$\text{Return on Assets} = \frac{\text{Net Income After Tax}}{\text{Total Assets}} \times 100\%$$

Net Interest Margin (NIM)

It refers to the income generated by banks via their operations. It is the difference between the average interests generated by the bank on loans advances, and total average interest paid by the bank deposits.

Net interest margins of banks may vary depending upon market conditions. For the purpose of the study following model issued to determine net interest margin

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

Where,

Net Interest Income= Interest Income-Interest Expenses

Earning Assets = Loan and Advances+ Investment on securities

Earnings per Share (EPS)

EPS are the earnings returned on the initial investment amount. It provides a direct measure of the returns flowing to the bank's owners-it's stockholder-measured relative to the numbers of share to the public. It gives the strength of the share in the market. Following is the expression of earning per share.

$$\text{Earning Per Share} = \frac{\text{Net Income After Tax}}{\text{No of Share of Common stock}}\%$$

No of Share of Common Stock= Paid up Capital/Rs. 100

3.6.5. Liquidity Position

Liquid Assets to Total Deposits Ratio

It measures the proportion of total liquid assets in total deposits. For more it shows the overall short term liquidity position. The higher liquidity position and lower ratio shows the inefficient liquidity position of the bank.

It is calculated by the using following formula:

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

Where,

Total liquid Assets = Cash in hand + NRB Balance+ Domestic Bank Balance + Foreign Currency Bank Balance + Placement+ Investment in Government Securities

NRB Balance to Total Deposits Ratio

It measures the proportion of NRB balance in total deposits. For the purpose of this study following model is used to determine the NRB balance to total deposits ratio.

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

NRB Balance = Balance with Nepal Rastra Bank

Cash in Vault to Total Deposit Ratio

It shows the percentage of total deposit maintained as vault. It is worked out by using the following model.

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

Where,

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

3.6.6 Interest Rate Sensitivity

Interest rate sensitivity is estimated by GAP Analysis. If ΔR_i is the average interest rate change affecting assets and liabilities that can be repriced within i^{th} maturity bucket, the effect on the bank's net interest income (NII) in the i^{th} maturity bucket is calculated by (Saunders and Cornett, 2004):

$$\Delta NII_i = \left(\sum_{i=1 \text{ DAY}}^{i=1\text{th Maturity Bucket}} RSA_i - \sum_{i=1 \text{ DAY}}^{i=1\text{th Maturity Bucket}} RSL_i\right) X\ \Delta R_i$$

$$= GAP_i\ X\ \Delta R_i$$

Where ΔNII_i=Change in Interest income in the i^{th} maturity bucket

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

Similarly Cumulative GAP (CGAP) of interest is the One-Year repricing gap estimated as: $\Delta NII_i = CGAP_i\ X\ \Delta R_i$

Where,

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

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

Interest Rate Sensitivity

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

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

3.7 Limitations of the Research Methodology

The research is conducted to fulfill the academic requirement of Masters of Business degree. It is focused on the financial analysis of NABIL, HBL, Everest bank and SCBNL in the frame work of all the six components of CAMELS system and is based on the audited financial annual reports of each bank during the period from 2008/09 to 2009/010. 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 4 banks only, hence cannot be reasoned for similar condition of the whole industry. However, it gives a particular direction to the industry.
- The study remains largely in the realms of Offsite Monitoring System hence qualitative assessment may not be reflected by the study. However, the financial tools are helpful to give a close picture of such factors.
- The quarterly financial reports of the bank are not publicly available or if available not adequate whereas the effectiveness of CAMELS assessment requires quarterly financial reports. However, Cole and Gunther (1998) examined that a statistical model using publicly available financial data is a better indicator of bank failure than CAMEL ratings that are more than two quarters old.
- The data figures from different other sources may not be congruent with the bank's published data. However audited data published by the bank are treated as authentic. The study is carried out within the framework of case study research design. So, it is 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:

- The major portion of analysis has been done on the basis of the available secondary data and information. So the consistency of findings and analysis depends upon the reliability of secondary data and information available in the study period.
- Simple random sampling method has been used which method itself is not free from bias. This study is focused on the financial analysis of joint venture banks in the framework of CAMELS system and is based on the audited financial annual reports of sampled joint venture banks during the study period from the FY 2008/09 to 2009/10. NRB had adopted CAMELS rating system to evaluate bank performance in recent year. So, the research work on all six components are little been done in Nepalese economy. The effective of CAMELS ratings assessment requires quarterly financial reports. This study is based on annual report. So the conclusion drawn on the basis of analysis of data published annually may not be accurate as the conclusion draw on the basis of the analysis of quarterly published data.

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

This chapter includes presentation and analysis of data collected from different sources. As stated in the theoretical prescription, the financial performance analysis of joint venture commercial banks in Nepal is concentrated in the six components: Capital Adequacy, Assets Quality, Management Quality, Earnings Quality, Liquidity and Sensitivity to Market Risk. The final portion of this chapter presents the major findings of the study.

4.1 Presentation and Analysis of Data

The data are collected from different sources of four commercial joint venture banks. They are EBL, HBL, NABIL, and SCBNL. Time series data have been used to analyze the financial performance of joint venture banks in the framework of CAMELS.

4.1.1 Capital Adequacy

Capital Adequacy is a measure of a commercial bank's capital as a percentage of its risk weighted assets, such as the loans it has provided and the securities it holds. The capital requirement is a bank regulation, which sets a framework on how commercial banks must handle their capital. The categorization of assets and capital is highly standardized so that it can be risk weighted. Total risk weighted assets comprise the sum of on-balance sheet assets and off-balance sheet items. Capital adequacy component analysis of sampled joint venture banks is used to find out whether banks are maintaining capital adequacy ratio as directed by NRB. Capital adequacy ratio, core capital ratio and supplementary ratio are used to analyze the of capital adequacy of banks.

4.1.1.1 Total Capital Adequacy Ratio

Capital adequacy ratio measures the adequacy of capital for smooth operation of a bank. This ratio is used to protect depositors and promote the stability and efficiency of financial system around the world. A bank should maintain the adequate capital ratio as directed by NRB. Capital adequacy ratio below the NRB standard indicates lower internal sources, lower security to depositors and comparatively weak financial position.

So it is required to maintain depositor's confidence and preventing the bank from going bankrupt. Capital adequacy ratio of sampled banks for the observed fiscal years is given in Table 4.1:

Table 4.1

Total Capital Adequacy Ratio

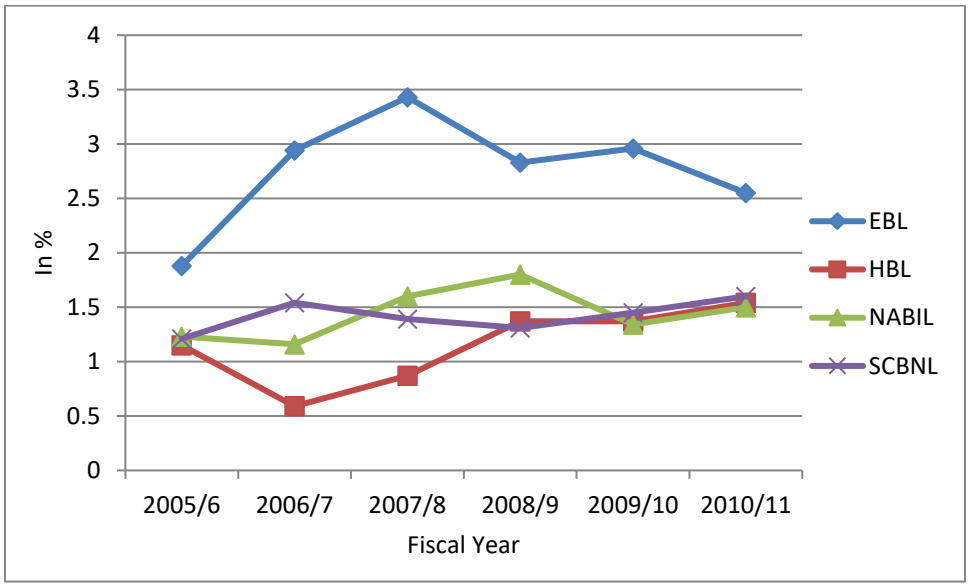
Fiscal Years	Bank	Total Capital Fund(million)	Total Risk Weighted Assets	Total Capital Ratio (%)	NRB Standard (%)	Variance (%)
2005/06	EBL	1391.33	11291.47	12.86	11	1.32
	HBL	2588.90	19762.60	13.10	11	0.26
	NABIL	2307.63	19375.56	12.04	11	1.31
	SCBNL	1844.24	9640.56	19.13	11	3.91
2006/07	EBL	1676.12	14976.74	11.19	11	1.32
	HBL	2651.37	21889.71	11.13	11	0.26
	NABIL	2567.63	17027.79	15.08	11	1.31
	SCBNL	2225.28	14168.42	15.71	11	3.91
2007/08	EBL	2348.39	20974.86	11.19	11	0.19
	HBL	3348.00	26784.00	12.50	11	0.56
	NABIL	3207.70	26932.83	11.91	11	0.71
	SCBNL	3115.40	18544.05	16.80	11	3.99
2008/09	EBL	2875.90	26049.82	11.04	10	0.55
	HBL	3845.21	34905.89	11.02	10	1.02
	NABIL	4065.20	34715.63	11.71	10	0.70
	SCBNL	3190.36	21703.16	14.70	10	4.70
2009/10	EBL	3141.30	29917.14	10.50	10	0.77
	HBL	4218.90	40302.35	8.68	10	0.72
	NABIL	4402.60	41849.80	10.52	10	0.50
	SCBNL	3719.70	21714.54	17.13	10	4.59
2010/11	EBL	3605.84	34583.55	10.42	10	.42
	HBL	4711.24	44124.52	8.88	10	-1.12
	NABIL	6086.74	55273.32	11.01	10	1.01
	SCBNL	3835.59	26974.34	14.22	10	4.22

Source: - Annual Reports of Sampled Joint Venture Banks (Appendix I-IV)

The Total Capital Adequacy Ratio has been shown in the trend line as below:

Figure4.1

Total Capital Adequacy Ratio



As shown in Table &Figure 4.1, in the case of EBL, the maximum capital adequacy ratio is 12.86% in FY 2005/06and minimum of 10.42% in FY 2009/10. The total capital fund and risk weighted assets are in increasing trend over the study period.

The ratio was compared with NRB standard, which shows all ratios above the NRB standard with maximum variance of 4.22% and minimum variance of -1.12 %in FY 2010/11 and 2010/11 respectively. In the case of HBL, the total capital fund and risk weighted assets are also in increasing trend, whereas the capital adequacy ratio is maximum of 13.10% in FY 2005/06 and minimum of 8.88% in FY 2010/11. In the case of NABIL, the capital adequacy ratio is maximum of 15.08% in FY 2006/07 and minimum of 10.52% in FY 2009/10. The capital fund is in increasing trend also risk weighted asset is in increasing trend. The ratio is positive variance in all years. The ratio was found above the NRB standard in all the study period with maximum positive variance of 4.08% in FY 2006/07 and minimum of 0.52% in FY 2009/10. In the case of SCBNL the capital fund is in increasing trend also the risk weighted assets are in increasing trend, whereas the capital adequacy ratio is maximum of 19.13% in FY

2005/06 and minimum of 14.22% in FY 2010/11.The ratio was found above the NRB standard in all the study period with maximum positive variance is 7.13% in FY 2009/10 and minimum positive is 4.70% in FY 2008/09.

Among these sampled joint venture commercial banks the capital adequacy ratio is maximum of 19.13% in FY 2009/10 (in SCBNL) and minimum of 10.22%(in HBL) in FY 2009/10. Capital adequacy ratio having 12% or more shows that the bank has strong capital adequacy.

So capital adequacy of joint venture banks is strong during the study period only EBL in FY2006/7, 2008/09 seems not good and HBL all FYs is satisfactory level due to capital adequacy less than 12% to more than 9% can be considered as satisfactory capital base. The capital adequacy ratio of Nabil Bank and SCBNL seems better in comparison to HBL and Everest. In general, all banks under study period met the capital adequacy ratio as directed by NRB.

4.1.1.2 Core Capital (Tier 1)Adequacy Ratio

Core capital is primary capital, which can absorb losses without a bank being required to cease trading. It includes paid-up capital, share premium, non-redeemable preference share, general reserve, accumulated profit and loss amount and goodwill detectible if any. The key element of capital on which the main emphasis should be placed is the Tier 1 (core) capital, which comprises of equity capital and disclosed reserves. This key element of capital is the basis on which most market judgments of capital adequacy are made; and it has a crucial bearing on profit margins and bank's ability to compete. The BCBS has therefore concluded that capital, for supervisory purposes, should be defined in two tiers in away, which will have the effect of requiring at least 50% of a bank's capital base to consist of a core element comprised of equity capital and published reserves from post-tax retained earnings. In order to rank as Tier 1, capital must be fully paid up, have no fixed servicing or dividend costs attached to it and be freely available to absorb losses ahead of general creditors. Capital also needs to have a very high degree of permanence if

it is to be treated as Tier 1.In this way, the core capital consists primarily of stockholder's equity.

Table & Figure 4.2 presents the observed core capital ratio and its comparison with minimum core capital standard set by NRB during the study period.

Table 4.2

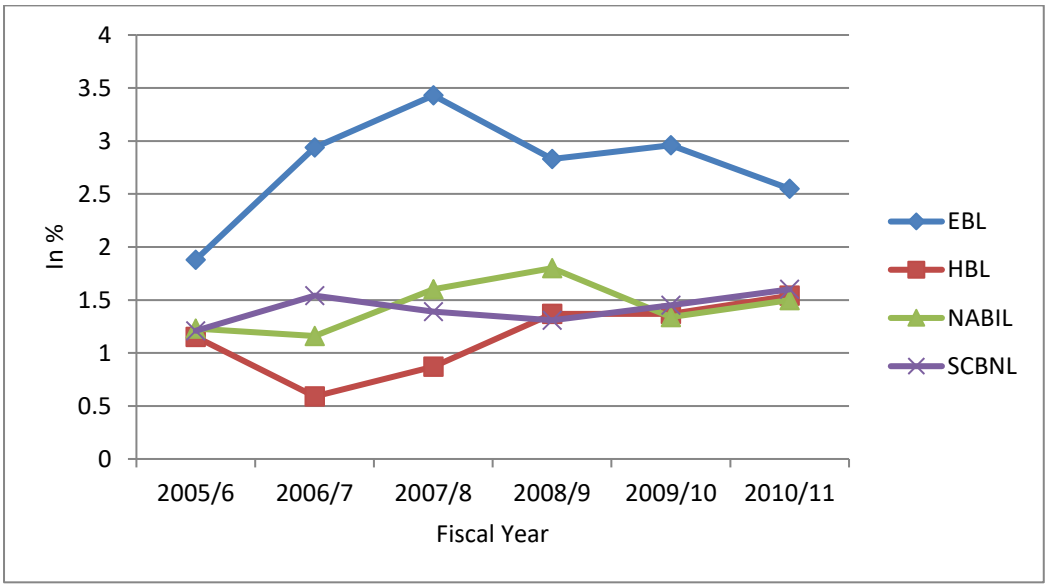
Core Capital Adequacy Ratio

Fiscal Year	Bank	Total Core Capital (Million)	Total Risk Weighted Assets(Million)	Risk Based Core Capital(%)	NRB Standard	Variance (%)
2005/06	EBL	927.55	11291.47	8.21	5.5	2.71
	HBL	1721.94	19762.60	8.65	5.5	3.15
	NABIL	1830.79	19375.56	10.78	5.5	5.28
	SCBNL	1606.9	9640.56	12.99	5.5	7.49
2006/07	EBL	1171.13	14976.74	7.82	5.5	2.32
	HBL	2104.6	21889.71	9.61	5.5	4.11
	NABIL	1992.85	17027.79	10.4	5.5	4.9
	SCBNL	1951.12	14168.42	13.77	5.5	8.27
2007/08	EBL	1560.86	20974.86	7.44	5.5	1.94
	HBL	2469.79	26784.00	9.64	5.5	3.27
	NABIL	2363.59	26932.83	7.31	5.5	1.8
	SCBNL	2304.76	18544.05	12.14	5.5	6.64
2008/09	EBL	1981.58	26049.82	7.73	6	1.73
	HBL	3074.44	34905.89	8.80	6	2.80
	NABIL	3044.34	34715.63	8.74	6	2.74
	SCBNL	3190.36	21703.16	14.70	6	7.70
2009/10	EBL	2537.09	29917.14	8.39	6	2.39
	HBL	3414.64	40302.35	8.68	6	2.68
	NABIL	3667.85	41849.80	8.83	6	2.77
	SCBNL	3050.71	21714.54	12.61	6	6.61
2010/11	EBL	2927.17	34583.55	8.46	6	2.46
	HBL	3916.97	44124.52	8.87	6	2.87
	NABIL	51392.8	55273.32	9.29	6	3.29
	SCBNL	3263.25	26974.34	12.09	6	6.09

Source: - *Annual Reports of Sampled Joint Venture Banks: (Appendix I-IV)*

Figure 4.2

Core Capital Adequacy Ratio



In the case of EBL, the core capital adequacy ratio is maximum (8.46%) in FY 2010/11 and minimum (7.44%) in 2007/08. The total core capital and risk based assets are in increasing trend over the study period. The ratio is above the standard set by NRB observed years. In the case of HBL, percentage of core capital ratio is increasing year by year during the study period, whereas maximum core capital adequacy is 9.64% in FY 2007/08 and minimum of 8.65% in FY 2005/06.

The core capital and total risk weighted assets also is in increasing trend. In the case of NABIL the core capital adequacy ratio is maximum of 10.78% in FY 2005/06 and minimum of 8.83% in FY 2009/10.

The ratio is in increasing trend. In the case of SCBNL, the core capital adequacy ratio is maximum of 14.70% in FY 2008/09 and minimum of 12.09% in FY 2010/11.. The total core capital is in increasing trend but risk weighted asset is in fluctuating trend, whereas ratio is also in fluctuating trend.

Among these sampled joint venture commercial banks the core capital ratio is maximum of 14.70% in FY 2008/09 (in SCBNL) and minimum of 7.31% (in EBL) in FY 2008/09. All banks have met capital adequacy ratio as directed by NRB. In general total core capital fund is in increasing trend and risk based core capital also in increasing trend except to the ratio of SCBNL.

4.1.1.3 Supplementary Capital (Tier 2) Adequacy Ratio

Supplementary capital is a broad array of secondary capital resource. It is collected using the hybrid capital instruments, which can absorb losses in the event of a winding-up and so provides a lesser degree of protection to depositors.

It includes loan loss provision, exchange equalization resources, assets revaluation reserve, hybrid capital instruments, unsecured sub-ordinate term debt, interest rate fluctuation fund and other free reserves. The Supplementary (Tier 2) Capital includes reserves which, though unpublished, have been passed through the profit and loss account and all other instruments eligible and acceptable for capital purposes.

Elements of the Tier 2 capital will be reckoned as capital funds up to a maximum of 100 percent of Tier 1 capital arrived at, after making adjustments referred to in 2.4. In case, where the Tier 1 capital of a bank is negative, the Tier 2 capital for regulatory purposes shall be considered as zero and hence the capital fund, in such cases, shall be equal to the core capital NRB has set a standard of supplementary capital not more than the core capital ratio of the bank.

Elements of Tier 2 Capital

a. Cumulative and/or redeemable preference shares with maturity of five years and above
b. Subordinated term debt fully paid up with a maturity of more than 5 years; unsecured and subordinated to the claim of other creditors, free of restrictive clauses and not redeemable before maturity. Since, subordinated term debt is not normally available to participate in the losses; the amount eligible for inclusion in the capital adequacy calculations is limited to 50% of core capital. Moreover, to reflect the diminishing

value of these instruments as a continuing source of strength, a cumulative discount (amortization) factor of 20% per annum shall be applied for capital adequacy computations, during the last 5 years.

Table 4.3 presents the supplementary adequacy ratio of sampled commercial banks over the study period.

Table 4.3

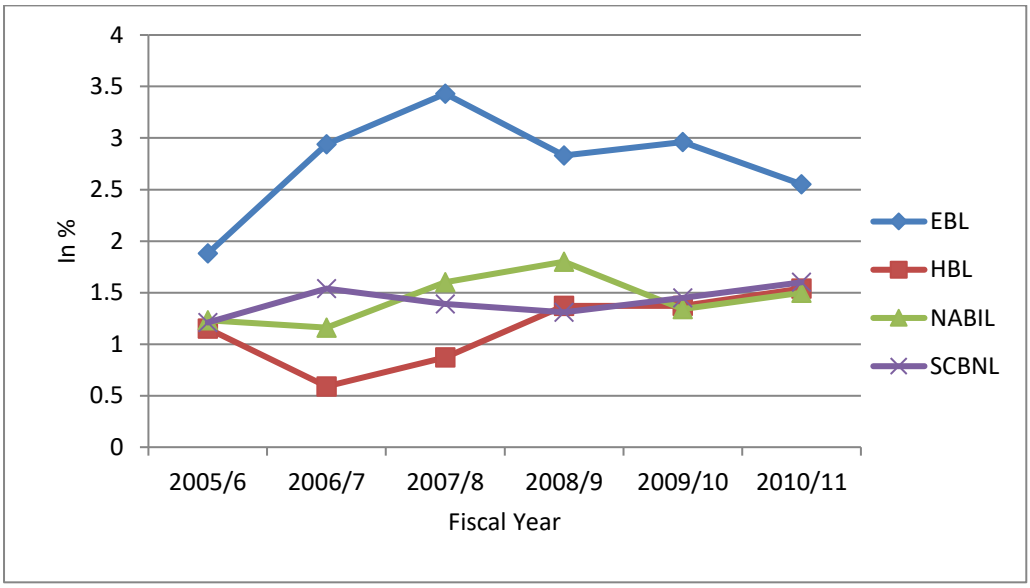
Supplementary Capital Adequacy Ratio

Fiscal Year	Bank	Total Supplementary Capital (million)	Total Risk Weighted	Supplementary Capital Ratio (%)	NRB Standard (%) not more than Core Capital Ratio)	Variance (%)
2005/06	EBL	493.79	11291.14	4.12	8.21	-4.09
	HBL	520.90	19918.33	2.62	8.65	-6.03
	NABIL	258.53	16976.37	1.52	10.78	-9.26
	SCBNL	237.34	12369.49	1.92	12.99	-11.07
2006/07	EBL	504.98	14976.74	3.37	10.40	-7.03
	HBL	546.77	21889.71	2.5	7.82	-5.32
	NABIL	314.78	19166.77	1.64	9.61	-7.97
	SCBNL	274.17	14168.42	1.97	13.77	-11.83
2007/08	EBL	787.53	20974.86	3.75	7.44	-3.69
	HBL	783.73	28152.90	2.78	8.77	-5.99
	NABIL	605.31	32329.94	1.87	7.31	-5.44
	SCBNL	350.52	18969.85	1.85	12.14	-10.29
2008/09	EBL	722.29	25619.75	2.81	7.75	-4.94
	HBL	770.77	34905.89	2.20	8.80	-6.6
	NABIL	682.74	34816.50	1.96	8.79	-6.83
	SCBNL	357.60	21703.16	1.66	14.70	-13.04
2009/10	EBL	720.04	30240.43	2.38	8.39	-6.01
	HBL	803.72	39357.06	2.04	8.68	-6.64
	NABIL	722.37	41822.66	1.72	8.77	-7.05
	SCBNL	479.78	24185.85	1.98	12.61	-10.63
2010/11	EBL	678.67	34583.55	1.96	8.46	-6.5
	HBL	794.27	44124.52	1.80	8.87	-7.07
	NABIL	947.60	55273.32	1.71	9.29	-7.58
	SCBNL	572.34	26974.34	2.12	12.09	-9.97

Source: *- Annual Reports of Sampled Joint Venture Banks: Appendix (I-IV)*

Figure4.3

Supplementary Capital Adequacy Ratio



As presented in Table & Figure 4.3, in the case of EBL, the supplementary capital and risk weighted assets are in increasing trend whereas maximum supplementary adequacy ratio is 10.40 % in F/Y 2006/07 and minimum is 7.44% in F/Y 2007/08.

The Supplementary capital ratio is not more than core capital ratio which is set by NRB standard, so that the ratio of EBL is within the boundary of NRB standard in over the study period. In the case of HBL, percentage of supplementary adequacy ratio is not consistent trend due to total supplementary capital is also in fluctuating trend. The maximum supplementary capital ratio is 2.78% in FY 2007/08 and minimum ratio of 2.04 % in FY 2009/10. The supplementary ratio is limit of NRB standard over the study period. In the case of NABIL the total supplementary capital is in consistent trend but risk weighted assets is in increasing trends where as maximum supplementary ratio as 1.96% in FY 2008/09 and minimum ratio is 1.10% in FY 2008/09. In the case of SCBNL, the total supplementary trend where as maximum supplementary adequacy ratio is 14.70% in FY 2008/09 and minimum of 12.09% in FY 2010/11.

Among these sample joint venture commercial banks, the supplementary adequacy ratio is maximum of 14.7% in FY 2007/08 (in EBL) minimum of 1.65%(in NABIL) in 2008/9. The supplementary capital ratio of all banks is within the limit of NRB standard throughout the study period.

4.1.2 Assets Quality

Assets quality ratio is one of the most critical factors to determine overall condition of any commercial banks. Primary factors that can be considered are the quality of loan portfolio, mix of risk assets and credit administration system.

Assets of the banks comprises of cash and bank balance, call money and short notice investment, loans and advances and fixed assets. However investments and loans and advances play a major role in determine the quality of assets. These ratios look at the amount of different types of assets and attempt to determine if there are too high or too low with regard to current operating levels. The prime reason behind meaning the assets quality is to ascertain the component of non-performing assets as a percentage of total assets/loan and ascertain the components of nonperforming assets as a percentage of total assets/loan and advances. In addition, we have analyzed the ratio of loan loss reserve ratio and nonperforming loan. It reflects the safety margin for the bank against NPL. These ratios used to evaluate managerial efficiency proper utilization of assets and it also measures the degree of effectiveness in use of resources of funds by commercial banks.

4.1.2.1 Ratio of Non-Performing Loan to Total Loan and Advance

Loan and advances are the most profitable of all the assets of a commercial bank. This is the primary source of income and the most profitable of all the assets of the bank. But bank need to be careful about the safety of such loan and advances because bank may be influences by bad debts. When the borrower fail to pay the interest or even principal within the timeframe the performing loan begins to start in nonperforming loan must classify into four-pass, sub-standard, doubtful and loss.

The ratio of non-performing loan total loan and advances measures the proportion of non-performing loan on the total volume of loans and advances. Lower ratio shows the better

performance of the bank in mobilization of loans and advance and vice versa. The ratio is less than 5% shows that the bank has strong level of non-performing loan to total loan. The ratio having 10% to 20% can be fair level of non-performing loan on total loan.

Table 4.4

Ratio of Non-Performing Loan to Total Loan

Fiscal Year	Bank	Total Non-Performing Loan (million)	Total Loan(million)	Ratio of Non-Performing to Total Loan (%)	IAR
2005/06	EBL	129.24	10136.25	1.27	13.16
	HBL	1040.76	15761.98	6.6	13.16
	Nabil	182.62	13278.78	1.38	13.16
	SCBNL	195.93	9206.28	2.13	13.16
2006/07	EBL	113.18	14082.69	0.80	10.56
	HBL	641.62	17793.72	3.61	10.56
	Nabil	178.29	15903.02	1.12	10.56
	SCBNL	197.10	10790.10	1.83	10.56
2007/08	EBL	127.31	18836.43	0.68	6.08
	HBL	475.80	20233.90	2.35	6.08
	Nabil	171.40	21769.80	0.79	6.08
	SCBNL	128.72	13964.40	0.92	6.08
2008/09	EBL	117.98	24469.55	0.48	3.53
	HBL	551.30	25519.52	2.16	3.53
	Nabil	220.72	27589.93	0.80	3.53
	SCBNL	91.04	13880.70	0.66	3.53
2009/10	EBL	111.87	28684.03	0.39	3.01
	HBL	890.01	30796.07	2.89	3.01
	Nabil	339.10	33910.10	1.00	3.01
	SCBNL	128.71	15507.11	0.83	3.01
2010/11	EBL	108.51	31534.70	0.34	3.20
	HBL	1391.74	32968.27	4.22	3.20
	Nabil	68.96	38905.49	0.18	3.20
	SCBNL	115.80	18662.48	0.62	3.20

Source: - *Annual Reports of Sampled Joint Venture Banks: Appendix (I-IV)*2.13.62

The Ratio of Non-Performing Loan to Total loan has been shown in the trend line as below:

Figure 4.4

Non-Performing Loan to Total Loan Ratio

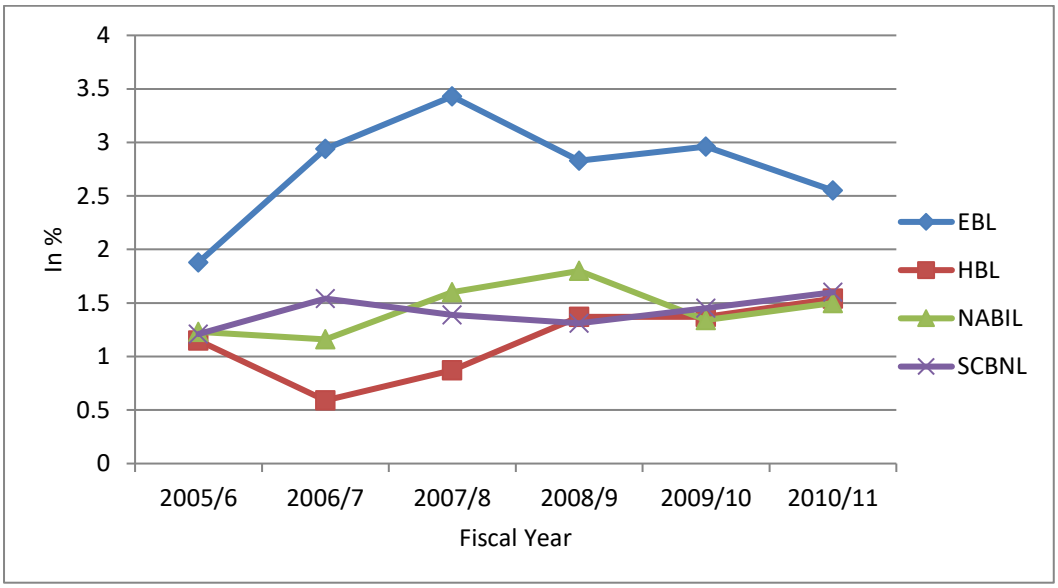


Table & Figure 4.4 presents the observed non-performing loan to total loan and comparison with industry average during the study period. In the case of EBL, the ratio of non-performing loan is in decreasing trend where as minimum ratio is of 0.39% in FY 2009/10 to maximum ratio is 1.27% in FY 2005/06. All ratio shows strong level of past due loan. In the case of HBL, the ratio of non-performing to total is in decreasing trend. The range of ratio is from 6.6 % in FY 2005/06 to 2.16% in FY 2008/09.The ratio of non-performing loan to total loan of NABIL is 1.38% in FY 2005/06, which is maximum and minimum is 0.18% in FY 2010/11. In the same way maximum non-performing ratio of SCBNL has 2.13% in FY 2005/06 and minimum ratio is 0.62% in FY 2010/11.

Generally, percent of non-performing loan on total loan of sampled joint venture banks is in decreasing trend over the study period. All the ratios are below the industry average. Despite the international benchmark appropriately justified due to high proportion of non-performing loan of two biggest government banks, the well non-performing loan is an international standard of below 5% in general. So that past due loan of joint venture banks on the average is at satisfactory level. Banking Industry is seriously affected by the

non-performing loan. If non-performing loan increasing, the overall banking business will be affected. So provision amount will increase and profit will decrease. Although all banks perform satisfactory level it is suggest that, to be sincere while granting loan and to do effective follow up for recovery of non-perform loan.

4.1.2.2 Loan Loss Reserve Ratio

The loan loss provision ratio shows how efficiently the company manages its loan and advances and makes effort for the loan recovery. Loan loss provisions an arrangement made in order to safe guard from bankruptcy if loan amount is not recovered or if the debtors default on repayment of loan.

But its positive impact is that strengthens the financial condition of banks by controlling the credit risks related to deposits. The low ratio indicates the good quality of assets in total volume of loan and advance. The higher ratio indicates the relatively more risky assets in the volume of loans and advances and indicates poor credit management. It is a reserve against a bank's total loans on the balance sheet, representing the amount thought to be adequate to cover estimated losses in the loan portfolio. When a loan is charged off, it is removed from the loan portfolio as an earning asset, and its book value is deducted from the when a loan is charged off, it is removed from the loan portfolio as an earning asset, and its book value is deducted from the reserve account for loan losses. Lenders also set aside reserves for a nonaccrual loan, in which interest and principal payments, are no longer being collected.

Table 4.5

Loan Loss Provision Ratio

FY	Banks	Loan Loss Provision	Total Loan (Mill)	Loan Loss Reserve Ratio %
2005/06	EB L	334.95	10136.25	3.30
	HBL	1119.42	15761.98	7.10
	Nabil	356.24	13278.78	2.68
	SCBNL	270.86	9206.28	2.94
2006/07	EB L	418.6	14082.69	2.97
	HBL	795.73	17793.72	4.47
	Nabil	357.25	15903.02	2.25
	SCBNL	287.51	10790.15	2.66
2007/08	EB L	993.40	18836.43	5.27
	HBL	584.31	20179.61	2.89
	Nabil	640.55	21759.46	2.94
	SCBNL	698.85	13960.40	5.00
2008/09	EB L	930.84	24469.55	3.80
	HBL	688.05	25519.52	2.70
	Nabil	457.22	27999.01	1.63
	SCBNL	566.65	13880.70	4.08
2009/10	EB L	770.10	28156.40	2.74
	HBL	692.64	25519.51	2.71
	Nabil	355.83	33030.97	1.08
	SCBNL	769.74	16176.59	4.76
2010/11	EB L	602.88	31534.70	1.91
	HBL	1401.29	32968.27	4.25
	Nabil	871.39	38905.49	2.24
	SCBNL	235.20	18662.48	1.26

Source: *- Annual Reports of Sampled Joint Venture Banks: Appendix. (I-IV)*

The Ratio of Loan Loss provision is shown in trend line as below:

Figure 4.5

Loan Loss Provision Ratio

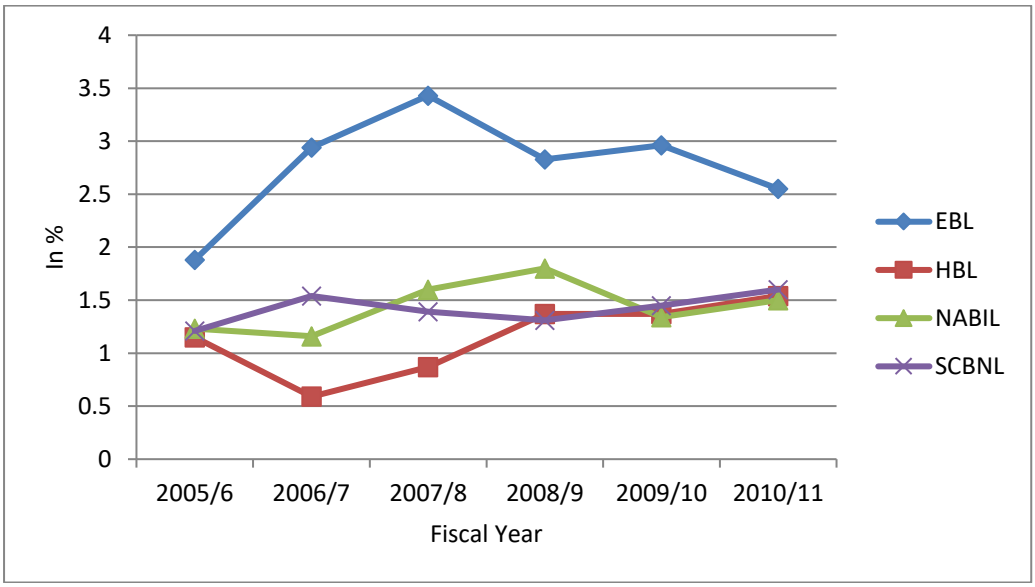


Table & Figure 4.5 shows the loan loss reserve ratio of sampled JVBs over the six years. The ratio of EBL is decreasing from the year of the study till 2006/07 then after it has increased in FY 2007/08 and again it decreased in the FY 2010/11. The ratio of HBL shows the consistent downward of the loan provision of the study period with maximum provision made in FY 2009/10 with 7.63%. In case of NABIL the loan loss provision is in decreasing trend with maximum provision made in FY 2004/5 with percentage of 3.29%. Finally, in SCBNL the ratio is in decreasing trend over FY 2006/7 but after it is in increasing trend from FY 2008/9 to final year with maximum provision made in FY 2008/9 with 4.79% provision.

Among, the sampled JVBs the NABIL and SCBNL have better performance than that of other two banks due to decrease in loan loss reserve ratio. Here HBL and EBL should follow up for recovery of loan.

4.1.3 Management Quality

Sound management is important key to bank performance. Every bank has to find out actual management performance which involves two analyses, which are subjective analysis and objective analysis.

Mainly subjective analysis for measuring the efficiency of the management, but it is difficult to measure. There is no particular facture can be used measure for assessing management quality.

Involvement of board of directors, success of top management, quality of manpower, customer relationship, management information system, internal control decision process, operating and lending decisions and technical factor etc. are qualitative aspects of assessment of management.

In measure the efficiency of the management in an objective way, we have used only two parameters: total operating revenue to total operating expenses and earning per employee of the bank are being used.

4.1.3.1 Earning per Employee

The earning per employee ratio measures the overall efficiency of the bank's staff. It is calculated dividing net profit after tax by number of employee. Higher the earning per employee reflects the higher the efficiency of the staff. Lower earning per employee reflects inefficiencies as a result of overstaffing which is directly effect on the profitability of the company. Tracking this Rupee figure historically and comparing it to peer- group companies will make this quantitative dollar amount more meaningful in an analytical sense.

Table 4.6

Earnings per Employee

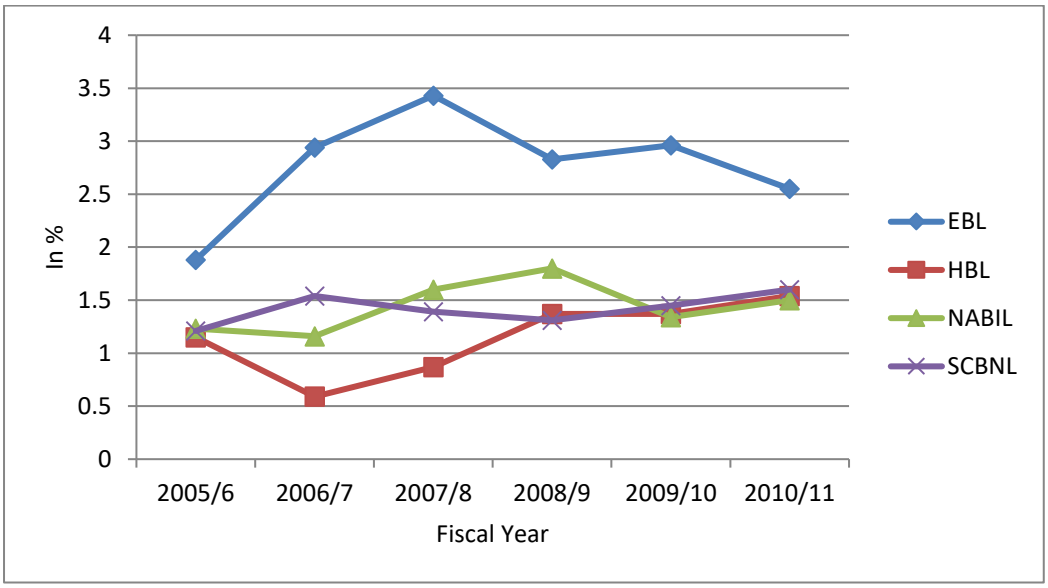
Fiscal Year	Bank	Net Profit (million)	Number of Employee	Earnings per Employee
2005/06	EBL	237.29	306	775460.58
	HBL	457.46	561	815432.62
	NABIL	635.26	441	1440504.19
	SCBNL	658.76	345	1906828.64
2006/07	EBL	296.41	393	754222.09
	HBL	491.82	584	842162.51
	NABIL	673.96	427	1578359.95
	SCBNL	691.67	351	1970564.29
2007/08	EBL	451.22	449	1004944.32
	HBL	635.87	591	1075922.17
	NABIL	746.49	416	1794447.11
	SCBNL	818.92	377	2172201.59
2008/09	EBL	638.73	534	1196123.6
	HBL	752.83	591	1273824.02
	NABIL	1031.05	505	2041683.17
	SCBNL	1025.11	392	2615076.53
2009/10	EBL	831.77	568	1464383.8
	HBL	508.79	577	881785.095
	NABIL	1138.57	557	2044111.31
	SCBNL	1085.87	429	2531165.50
2010/11	EBL	1119.60	586	1910580.20
	HBL	2546.00	647	3935085.00
	NABIL	1700.03	650	2615430.76
	SCBNL	1119.17	429	2608787.87

Source: - *Annual Reports of Sampled Joint Venture Banks: Appendix-(I-IV)*

The Ratio of Earning per Employee Ratio is shown as per the details from the table 4.6

Figur 4.6

Earning per Employee Ratio



Source: Table 4.6

Earnings per employee of sampled JVBs over the study Period has been presented in Table 4.6. In the case of EBL, EPE in Rupees is in increasing trend except in fiscal year (2008/09), and 2010/11, whereas EPE of HBL is in increasing trend only in the final year (2006/07) of the review period there decrease of the review period. As shown in Table EPE in case of NABIL the ratio of the increment is consistently increasing from FY 2005/06 To FY 2010/11. In the case of SCBNL there is consistent increase except in the FY 2005/06. On the whole, the maximum EPE was Rs 3935085 in (HBL) and minimum is Rs 1196123.6 on 2008/09 (in HBL).

Although, EPE is the least among other banks, its ratio is in increasing trend over the study period. It indicates symbol of good management. Overall EPE of JVBs is relatively at satisfactory level. But the best among the JVBs in terms of management is in NABIL with its consistence performance since last 5 years.

4.1.3.2 Total Operating Income (TOI) to Total Operating Expenses (TOE)

In this study, total operating expenses to total operating revenues ratio is used as a proxy of management quality. It indicates profitability of a company. It is determined by the gap of total operating revenue and total operating expenses which is direct control and monitoring of the management.

Table 4.7

Total Operating Expense to Total Operating Income

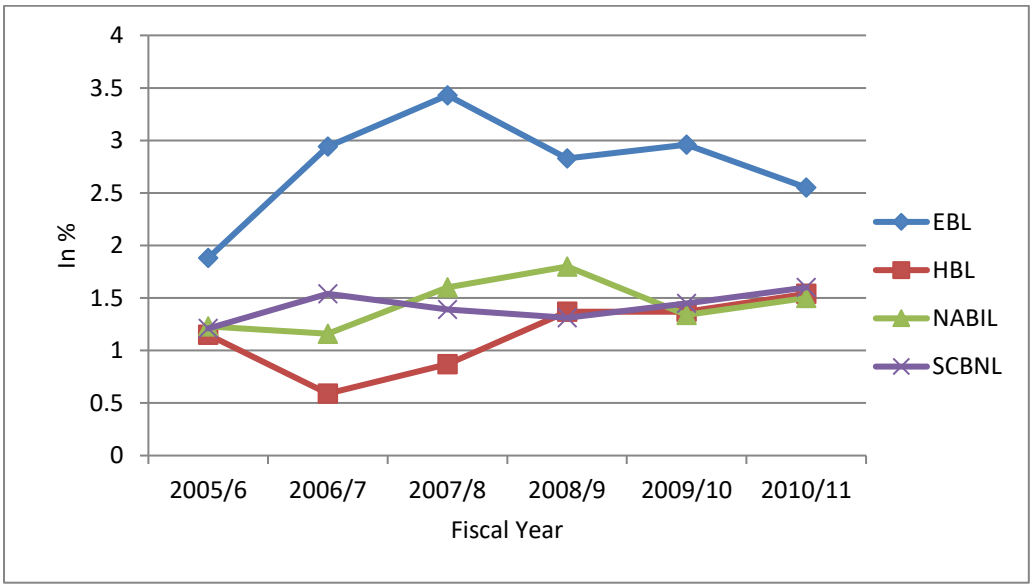
FY	Bank	TOE	TOI	TOE to TOI
2005/06	EBL	686.35	1063.55	64.53
	HBL	1358.28	2042.38	66.51
	NABIL	763.41	1716.67	44.47
	SCBNL	740.25	1721.45	43.00
2006/07	EBL	870.51	1358.5	64.08
	HBL	1471.89	2160.77	68.07
	NABIL	998.26	2035.87	49.03
	SCBNL	878.1	1971.06	44.55
2007/08	EBL	1123.67	1842.50	60.99
	HBL	1518.71	2421.24	62.72
	NABIL	1306.15	2428.87	53.78
	SCBNL	997.44	2245.87	44.41
2008/09	EBL	1584.89	2557.84	61.96
	HBL	1893.29	2922.83	64.78
	NABIL	1804.06	3374.26	53.47
	SCBNL	1129.80	2635.91	42.87
2009/10	EBL	2228.68	3457.67	64.12
	HBL	3132.26	3711.49	84.39
	NABIL	3017.77	4724.20	63.87
	SCBNL	1260.98	2873.45	43.88
2010/11	EBL	3113.82	4728.82	65.85
	HBL	3986.34	5001.55	79.70
	NABIL	3915.77	6008.67	65.17
	SCBNL	1757.04	3464.36	50.72

Source: *- Annual Reports of Sampled Joint Venture Banks. Appendix(I-IV)*

The Ratio Total Operating Expense to Total Operating Income is shown in the following figure as below:

Figure 4.7

Total Expense to Total Operating Income Ratio



A high or increasing ratio of expenses to total incomes indicates inefficient operation of the company which may negative affect productivity of the company. Commercial banks mainly earns income from interest on loans and advances, commissions, fees, and discounts, foreign exchange rate gains, and other miscellaneous income. And, the main components of expenses of commercial banks are interest on deposits, staff salary, provident fund write-off of bad debt loan and other operating expenses like rent, water supply and electricity, fuel expenses, audit fee expenses, management expenses, depreciation, miscellaneous expenses, direct related to the operating of company. Table & Fig 4.7 shows the total operating expenses to total revenue ratio of JVBs during the study period the last six fiscal years. In case of EBL the ratio is in inconsistent trend, which was maximum ratio 65.85% in FY 2010/11 and minimum is 60.99% in FY 2007/08. In case of HBL, ratio is also in fluctuating trend, minimum was 62.72% in FY 2007/08 to maximum 68.07% in FY 2006/07. Where as, the ratio of TOE to TOR of NABIL was maximum in FY 53.78% in FY 2006/7 and minimum in FY 2007/08 with

44.47%. In the same way, the ratio of TOE to TOR in SCBNL is minimum of 42.87% in FY 2008/09 to maximum was 44.55% in FY 2006/07.

Among these sampled joint venture banks the maximum ratio of TOE to TOR was 84.39% in FY 2008/09 (in EBL) and minimum is 42.87% in 2008/09 (in SCBNL). All ratios show the decreasing trend except EBL and HBL. The overall ratio implies that all JVBs in decreasing expenses with respect to income which is symbol of good management quality

4.1.4 Earnings

The main objective of bank is to earn profit by providing different types of banking services to its customer. A required level of profit is necessary for the firm's growth and survival in the competitive environment. The success of the bank heavily relies upon the efficiency of management to drive the bank to earn good profits.

Most of the commercial banks have been able to grow their net profits while some of the banks, resulting from high non–performing loan and operating inefficiencies are struggling with either very low net profit or negative profits. Analysis of the earnings helps the management, shareholders and depositors to know about the performance of the bank, sustainability of earnings and to forecast growth of the bank. The shareholders of the company may comprise common shareholders and preference shareholders. Therefore following ratios have been analyzed to test earning capacity of sampled JVBs.

4.1.4.1 Return on Equity (ROE)

ROE is the most vital tool to judge whether a bank has earned a satisfactory return to its equity shareholders or not. It is important measurement from the owner's point of view. It measures the return in the owner's fund. The ratio indicates how well the bank as used the resources of owners. This ratio measures the percentage of net profit to shareholders funds. Higher ratio of ROE ensures to owners that their investment is safe and they can get return regular. Generally, the ROE ratio should be 15% and higher as desired for banking industry.

Analysis of the earnings helps the management, shareholders and depositors to know about the performance of the bank, sustainability of earnings and to forecast growth of the bank. The shareholders of the company may comprise common shareholders and preference shareholders

Table 4.8

Return on Equity (ROE)

FY	Bank	Net profit After Tax	Shareholder's Equity	ROE
2005/06	EBL	237.29	962.81	24.65
	HBL	457.46	1766.18	25.90
	NABIL	635.26	1874.99	33.88
	SCBNL	658.76	1754.14	37.55
2006/07	EBL	296.41	1201.52	24.67
	HBL	491.82	2146.5	22.91
	NABIL	673.96	2057.05	32.76
	SCBNL	691.67	2116.35	32.68
2007/08	EBL	451.22	1921.24	23.49
	HBL	635.87	2513.00	3.46
	NABIL	746.49	2437.20	30.63
	SCBNL	818.92	2492.55	32.85
2008/09	EBL	638.73	2203.63	28.99
	HBL	752.83	3119.88	24.13
	NABIL	1031.05	3130.24	32.94
	SCBNL	1025.11	3052.47	33.58
2009/10	EBL	831.77	2759.14	30.15
	HBL	508.79	3439.20	14.79
	NABIL	1138.57	3834.23	29.69
	SCBNL	1085.87	3369.71	32.22
2010/11	EBL	931.30	3113.54	29.91
	HBL	893.11	3995.48	22.35
	NABIL	1700.38	5460.52	31.14
	SCBNL	1119.17	3677.77	30.43

Source: - *Annual Reports of Sampled Joint Venture Banks: Appendix(I-IV)*

The Ratio of Return on Equity is shown in the following figure as below:

Figure4.8

Return on Equity

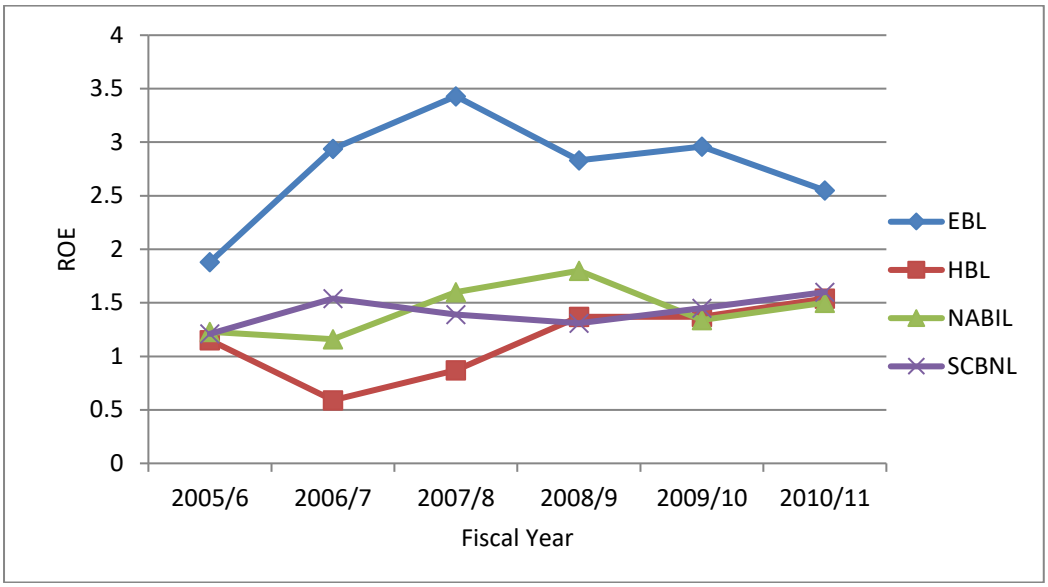


Table & Figure 4.8 presents the ROE of sampled JVBs for the period between FY 2005/06 to FY 2010/11. The maximum ratio of ROE of EBL is 30.15% in FY 2009/10 and minimum of 23.19% in FY 2008/09. The ratio is in increasing trend. The ratio of HBL is in decreasing up to FY 2006/07 and thereafter it is in increasing trend of up to FY 2010/11. The ratio ranges from a minimum of24.46% in FY 2008/09 to maximum of 24.13% in FY 2008/09. Whereas the ratio of NABIL is quite consistent with the increment from FY 2005/06 of study period. The ROE of 33.88% is the maximum in FY 2005/06 and minimum of 29.69% in FY 2009/10. Finally, the ROE of SCBNL has continually increasing over the study period with the maximum 37.55% of in FY 2005/6 and minimum of 32.22% in FY 2009/10.

The observed value of ROE ratio is above the 15% benchmark except HBL in FY 2007/08 of all selected JVBs. Hence the EBL, NABIL and SCBNL of ROE ratio is sound then HBL.

4.1.4.2 Return on Assets (ROA)

ROA measures the bank's ability to earn rate of return on the total assets invested. It is most important measurement of bank, which is measure the effectiveness of the banks in generating profits through the usage of available resources i.e. total assets. The higher the ratio of ROE indicates the higher efficiency in utilizing bank resources and generating profit. The ROA ratio should be 1.5% or more shows the bank has strong earning capacity.

Table 4.9 exhibits the ROA ratio of JVBs during the study period. The return on assets is a useful measure of the profitability of all financial resources invested in the firm's assets. It evaluates the use of total funds without any regard to the sources of funds.This ratio is particularly useful to evaluate the performance of divisions in a multi-divisional firm.

Generally, these divisions have the responsibility of using and controlling assets without any responsibility towards the raising and utilizing funds.

Table 4.9
Return on Assets (ROA)

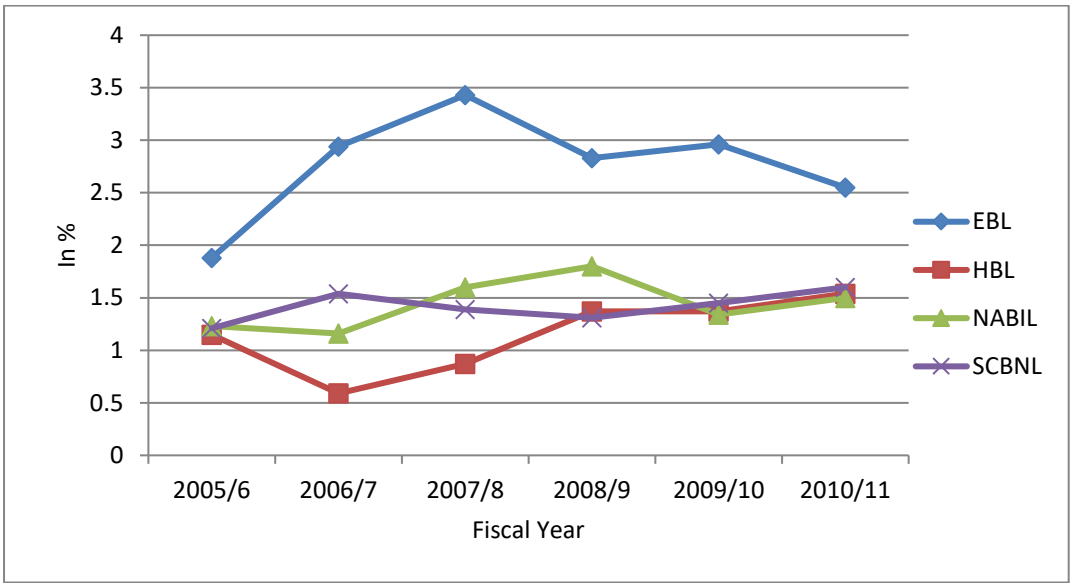
FY	Bank	Net Profit After Tax	TA	ROA
2005/06	EBL	237.29	15959.28	1.5
	HBL	457.46	29460.39	1.55
	Nabil	635.26	22329.97	2.84
	SCBNL	658.76	25776.33	2.56
2006/07	EBL	296.41	21432.57	1.38
	HBL	491.82	33519.14	1.47
	Nabil	673.96	27253.39	2.47
	SCBNL	691.67	28596.69	2.42
2007/08	EBL	451.22	21749.34	2.07
	HBL	635.87	36175.53	1.76
	Nabil	746.49	37132.76	2.01
	SCBNL	818.92	33335.79	2.46
2008/09	EBL	638.73	36916.85	1.73
	HBL	752.83	39320.32	1.91
	Nabil	1031.05	43867.40	2.35
	SCBNL	1025.11	40066.57	2.56
2009/10	EBL	831.77	41382.76	2.00
	HBL	508.79	42717.12	1.19
	Nabil	1138.57	52079.73	2.83
	SCBNL	1085.87	40213.32	2.70
2010/11	EBL	931.30	46840.36	1.99
	HBL	893.11	48137.50	1.86
	Nabil	1700.38	63257.37	2.69
	SCBNL	1119.17	43810.52	2.55

Source: *- Annual Reports of Sampled Joint Venture Banks: Appendix(I-IV)*

The Ratio of Return on Assets is shown in the following figure as below:

Figure4.9

Return on Assets Ratio



As exhibited in Table & Figure 4.9 ROA ratio of EBL is being up and down review the study period. It ranges from a minimum of 1.38% in the FY 2006/7 to maximum of 2.07% in the FY 2007/8 of study. So on, the ratio of HBL is continuously increasing from FY 2005/06 and again decrease in FY 2009/10.

The maximum ratio is 1.91% FY 2008/09 and minimum of 1.11% in FY 2004/5. Likewise the ROA of NABIL has been in increasing trend. The ratio of ROA varies from the minimum of 2.01% in FY 2007/08 to maximum of 3.05% in FY 2008/09. At the end, the ROA ratio of SCBNL is in consistent with the highest ratio 2.70% in final year and the lowest 2.42% in FY 2006/7 year review the study period.

NABIL bank and SCBNL have maintained strong position regarding the ROE. But EBL and HBL have less than 1.5% FY 2008/09 to FY 2005/06 except in the final three years of study period. In general most of the banks are in increasing trend of ROA, which shows the banks are utilizing assets to generating profit.

4.1.4.3 Earning Per Share (EPS)

EPS measures the profit available to the equity shareholders as per share i.e. the amount they get from every share. It does not reflect how much is paid as dividend and how much is retained in the business. The profitability of the common shareholders investment can be measure in many other ways. One such measure is to calculate the earnings per share. The earning per share is calculated by dividing the net profit after taxes less preference dividend by the total number of common share outstanding. The earnings per share calculations made over years indicate whether or not the firm's earning power on per-share basis has changed over that period. The earnings per share should be should be compared with the industrial average and the earning per share of other firms. The earning per share shows the profitability of the firm on a per-share basis; it does not reflect how much is paid as dividend and how much is retained in the business. A bank can decide whether to increase or reduce of shares on issue. This decision will automatically affect the earning per share. It reflects the earning power of the bank. Higher EPS ratio shows the sound profitability position of the bank and vice versa. Primary earnings per share is the earning per share for the number of ordinary share outstanding in the beginning of the report period. On the contrary, diluted earnings per share are calculated after taking into account the convertibles preference share, debentures, bonds etc. which have been converted into ordinary shares during the year.

Table & Figure 4.10 exhibits the EPS of sampled JVBs during the study period. As exhibited in Table EPS of EBL is maximum of 100.21% in the final year and minimum of 54.22% in the FY 2004/5 of study. It is in increasing trend in the. Whereas, the EPS of HBL has continuously increased from the initial FY 2008/09 to FY 2009/10 and slightly increase in last final two years. The EPS ranges from a minimum of 31.8% in FY 2009/10 to maximum of 66.66% in FY 2006/07.

Likewise, the EPS of NABIL is continually increasing during the study period with the maximum of 137.08% in FY 2006/7 and minimum of 78.58% in 2009/10. EPS ratios of sampled JVBs show all banks able to maximize the shareholders wealth.

Table 4.10

Earning Per Share (EPS)

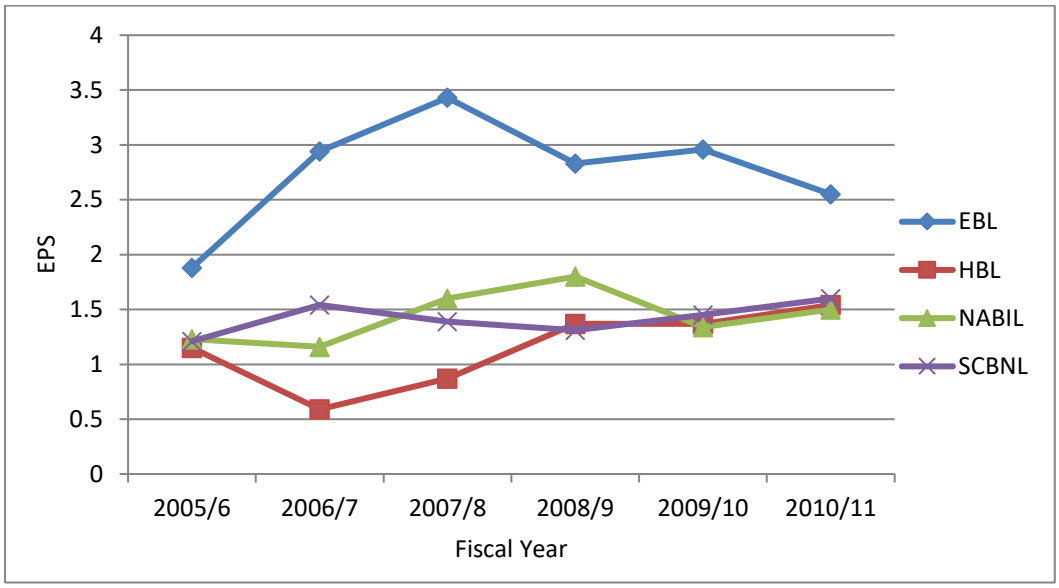
FY	Bank	Net Profit (million)	No of Share (million)	EPS(Rs)
2005/06	EBL	237.29	3.78	62.78
	HBL	457.46	7.72	59.24
	Nabil	635.26	4.92	129.21
	SCBNL	658.76	3.75	175.84
2006/07	EBL	296.41	3.78	78.42
	HBL	491.82	8.11	66.66
	Nabil	673.96	4.92	137.08
	SCBNL	691.67	4.13	167.37
2007/08	EBL	451.22	4.91	91.90
	HBL	635.87	10.13	62.77
	Nabil	746.49	6.89	108.34
	SCBNL	818.92	6.20	132.08
2008/09	EBL	638.73	6.38	100.11
	HBL	752.83	12.16	61.91
	Nabil	1031.05	9.66	106.73
	SCBNL	1025.11	9.31	110.11
2009/10	EBL	831.77	8.30	100.21
	HBL	508.79	16.00	31.80
	Nabil	1138.57	14.49	78.58
	SCBNL	1085.87	13.98	77.67
2010/11	EBL	931.30	11.19	83.23
	HBL	893.11	20.00	44.66
	Nabil	1700.38	20.29	83.80
	SCBNL	1119.17	16.10	69.51

Source: - *Annual Reports of Sampled Joint Venture Banks: Appendix(I-IV)*

The Earnings per share is shown as per the above table.

Figure4.10

Earning per Share



So on, the EPS of SCBNL increased in FY 2005/06 then FY 2008/09 and it is decreased in the FY 2006/07 again slightly increased in two years maximum of 175.84% and minimum of 77.67% in FY 2009/10. In final year ratio of EPS is decrease in study period. The EPS calculated in the Table shows the minimum ratio of 31.8% in initial year FY 2004/5 of EBL and maximum of 175.84% in FY 2009/10 of SCBNL. EPS of most of the sampled banks is in increasing trend, which shows that the profitability position of these banks is improving.

4.1.4.4 Net Interest Margin

The net interest margin measures the bank's ability in mobilizing lower cost funds and investing them at reasonably higher interest by borrowing short and lending long. Net interest income is different between interest income and interest expenses. Earning assets includes investment, loan and advances and bills purchased and money at call and short notice. The net interest margin means net interest income as percentage of net earning assets. The positive or increasing ratio indicates better efficiency of interest generating by utilizing the earning assets and vice versa. The net interest margin ratio between 3 to 4 percent and higher is better in banking industry.

Table 4.11

Net Interest Margin

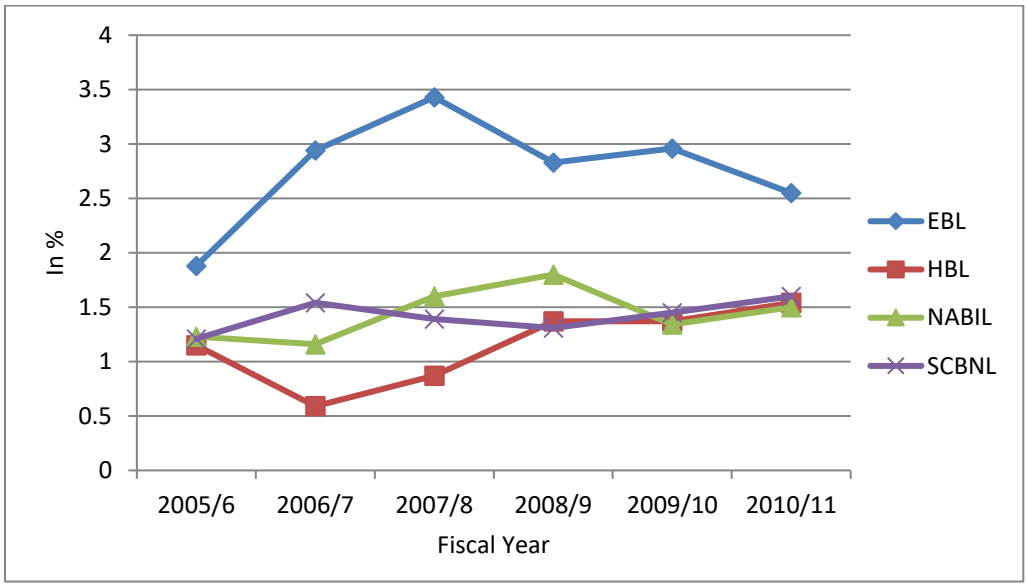
Fiscal Years	Banks	Net Interest Income Net Interest Margin	Earning Assets	Net Interest Margin
2005/06	EBL	502.01	13802.44	3.63
	HBL	977.63	26490.85	3.69
	NABIL	952.84	19347.40	4.92
	SCBNL	886.40	23061.03	3.84
2006/07	EBL	627.24	18186.25	3.45
	HBL	1000.81	30048.42	3.33
	NABIL	1032.04	23342.29	4.42
	SCBNL	998.93	24647.02	4.05
2007/08	EBL	916.05	23976.30	3.82
	HBL	1139.90	31842.79	3.60
	NABIL	1220.26	31915.05	3.82
	SCBNL	1119.46	29744.00	3.76
2008/09	EBL	1175.94	33322.95	3.53
	HBL	1407.42	34681.35	4.06
	NABIL	1645.21	37348.26	4.40
	SCBNL	1313.43	35350.82	3.72
2009/10	EBL	1927.98	36932.31	5.22
	HBL	1595.07	37611.20	4.24
	NABIL	2089.61	47340.70	4.41
	SCBNL	1466.37	35182.72	4.16
2010/11	EBL	2192.94	38880.16	5.64
	HBL	1911.33	41070.92	4.65
	NABIL	2311.58	53489.81	4.32
	SCBNL	1715.60	39966.84	4.29

Source: *- Annual Reports of Sampled Joint Venture Banks, Appendix (I-IV)*

The Ratio of Net Interest Margin is shown in the following figure as below:

Figure 4.11

Net Interest Margin



The data presented in Table & Figure 4.11 exhibits the NIM of EBL is in fluctuating trend where as maximum ratio was 5.64% in the final year of study and minimum of 3.45% in the FY 2006/07 of study. In case of HBL the net interest margin ratio is in continually increasing trend study period, whereas the NIM ratio of NABIL is also in increasing trend with maximum in FY 2005/06 of 4.92 and minimum of 3.82 in FY 2007/8. At end the NIM ratio of SCBNL varies from the maximum of 4.29 of FY 2010/11 to minimum of 3.73% in FY 2008/09, where as NIM is in continually increasing trend in last three years and slightly increased in FY 2008/09, again decrease in FY 2005/06. The net interest margin ratio between 3 to 4 percent and higher is better in banking industry. The observed ratio of net interest margin in sampled banks is above the benchmark 3 to 4% of all study period. So in comparison, the Net Interest Margin of EBL and HBL is not better than NABIL and SCBNL.

4.1.5 Liquidity

The main objective behind this parameter is to assess the ability of a bank to meet the demand from the deposit holders in a particular time. Liquidity risk arises when liquidity

deficit and much more liquidity surplus which indicates the problem in the financial health of a commercial bank. Day to day withdraws by liability holders are generally predictable but large FIs can borrow additional funds or demand large amount then usual that makes sudden shortfalls of cash in bank.

So every commercial bank should manage the liquidity risk using various methods. Liquidity has been compared based on the following parameters.

4.1.5.1 Total Loan to Total Deposit Ratio (LDR)

The LDR reveals the efficiency with which the commercial banks and collects so many from the available sources and channeling these to a various productive activities in the economy. Commercial banks collect deposits from the individual and institutional deposits in from of different accounts offered.

These funds are further extended in the form of loan and advances to different borrowers consider various aspects like risk analysis, diversification bank's policy, NRB rules and regulations, customer behavior etc.

Table 4.12
Total Loan to Total Deposit Ratio

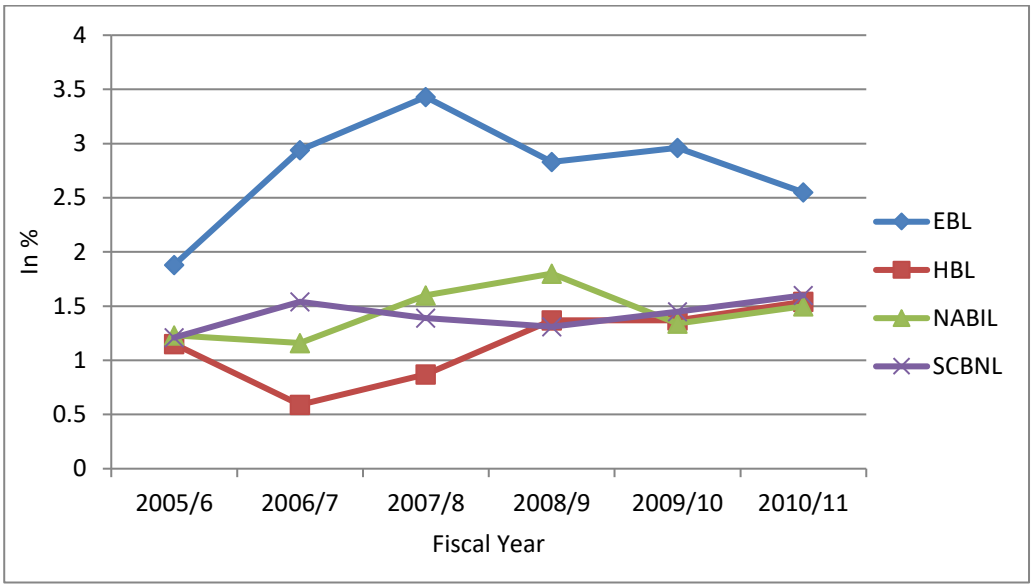
Fiscal Years	Banks	Total Loan and Advance	Total Deposit	Loan Deposit Ratio	Industry Average
2005/06	EBL	10136.25	13802.44	73.44	60.7
	HBL	15761.98	26490.85	59.50	60.7
	NABIL	13278.78	19347.40	68.63	60.7
	SCBNL	9206.28	23061.03	39.92	60.7
2006/07	EBL	14082.69	18186.25	77.44	68.7
	HBL	17793.72	30048.42	59.22	68.7
	NABIL	15903.02	23342.29	68.13	68.7
	SCBNL	10790.19	24647.02	43.78	68.7
2007/08	EBL	18836.43	23976.30	78.56	71.1
	HBL	20179.61	31842.79	63.37	71.1
	NABIL	21759.46	31915.05	68.18	71.1
	SCBNL	13960.40	29744.00	46.94	71.1
2008/09	EBL	24469.55	33322.95	73.43	70.64
	HBL	25519.52	34681.35	73.43	70.64
	NABIL	27999.01	37348.26	74.97	70.64
	SCBNL	13880.70	35350.82	39.27	70.64
2009/10	EBL	28156.40	36932.31	76.24	79.57
	HBL	25519.51	37611.20	67.85	79.57
	NABIL	33030.97	47340.70	69.77	79.57
	SCBNL	16176.59	35182.72	45.98	79.57
2010/11	EBL	31661.84	41127.91	76.98	82.00
	HBL	32968.27	40920.63	80.57	82.00
	NABIL	38905.48	46410.70	83.82	82.00
	SCBNL	18662.48	37999.24	49.11	82.00

Source: *- Annual Reports of Sampled Joint Venture Banks: Appendix(I-IV)*

The ratio of Total Loan to Total Deposit Ratio is shown in the following figure:

Figure 4.12

Total Loan to Total Deposit Ratio



Ratio of EBL ranges highest of 78.56% in FY 2007/08 and lowest 73.43% in FY 2008/09 shows fluctuating trend in the review period likewise the ratio of HBL ranges highest of 73.43% in FY 2008/09 and lowest of 68.13% in FY 2006/07. The ratio shows in increasing trend all the study period. So on the ratio of NABIL bank has increased for all the study period. The highest ratio is 75.05% in FY 2008/09 and the lowest ratio of 50.31% in FY 2006/07. SCBNL has in fluctuating trend ratio, the highest ratio 46.94% in FY 2007/08 and lowest ratio was 39.27% in FY 2008/09. The ratio tries to find out which banks is successful to utilize the depositor's funds to earn profit by computed by dividing the total amount of loans and advances by total deposit. Higher ratio indicates proper utilization of funds that the bank has more funds than it needs for investment. Among sampled JVBs that shows highest ratio total loan and advance to total deposit was 78.56% in FY 2007/08 (in EBL) and lowest ratio 39.27% in FY 2008/09 (in SCBNL). In conclusion the ratios are in increasing trend except SCBNL.

It reveals that they will not face the liquidity problems in future. In SCBNL liquidity is slightly up and down but in the 2006/07, it has maintained higher liquidity than in fiscal year 2008/09.

4.1.5.2 NRB Balance to Total Deposit Ratio

This ratio measures the proportion of NRB balance in total deposits. It shows whether the commercial bank is holding the balance as required by NRB or not. According to NRB directives, every commercial bank should maintain certain percent of total deposit in NRB, to ensure adequate liquidity in the commercial banks, to meet the depositor's demand for cash at any time, to inject the confidence in depositors regarding the safety of their deposited funds. The bank should strictly comply with the directives. Total deposit means current saving and fixed deposit an account as well as call account deposit and certificates of deposits.

The reserve requirement (or cash reserve ratio) is a central bank regulation that sets the minimum reserve each commercial must hold (rather than lend out) of customer deposits and notes. It is normally in the form of cash stored physically in a bank vault (vault cash) or deposits made with a central bank.

The reserve ratio is sometimes used as a tool in the monetary policy, influencing the country's borrowing and interest rates by changing the amount of loans available. Western central banks rarely alter the reserve requirements because it would cause immediate liquidity problems for banks with low excess reserve they generally prefer to use open market operations.

The reserve requirement can affect monetary policy, because the higher the reserve requirement is set, the less money banks will have to loan out, leading to lower money creation, and maintaining the purchasing power of the currency previously in use. The effect is exponential, because money that is loaned out can be re-deposited; a portion of that money may again be re-loaned and so on. The CRR is applicable to all scheduled banks including the scheduled co-operative banks and the Regional Rural Banks.

Table 4.13

NRB Balance to Total Deposit Ratio

FY	Banks	NRB Balance	Total Deposit	NRB DR	Industry Averag
2005/06	EBL	1139.51	13802.44	8.26	7.2
	HBL	1096.25	26490.85	4.14	7.2
	NABIL	318.36	19347.40	1.65	7.2
	SCBNL	749.74	23061.03	3.25	7.2
2006/07	EBL	1178.2	18186.25	6.48	6.9
	HBL	1272.54	30048.42	4.23	6.9
	NABIL	1113.42	23342.29	4.77	6.9
	SCBNL	1613.76	24647.02	6.55	6.9
2007/08	EBL	1080.31	23976.30	4.51	7.2
	HBL	935.84	31842.79	2.94	7.2
	NABIL	1833.76	31915.05	5.75	7.2
	SCBNL	1266.27	29744.00	4.26	7.2
2008/09	EBL	4787.16	33322.95	14.37	9.6
	HBL	2328.40	34681.35	6.71	9.6
	NABIL	2655.88	37348.26	7.11	9.6
	SCBNL	1851.13	35350.82	5.24	9.6
2009/10	EBL	5625.11	36932.31	15.23	6.5
	HBL	2604.79	37611.20	7.05	6.5
	NABIL	549.45	47340.70	1.16	6.5
	SCBNL	819.50	35182.72	2.33	6.5
2010/11	EBL	4706.32	41127.91	11.44	7.09
	HBL	1390.63	40920.63	3.39	7.09
	NABIL	1473.39	46410.70	3.17	7.09
	SCBNL	1638.27	37999.24	4.31	7.09

Source: - *Annual Reports of Sampled Joint Venture Banks: Appendix(I-IV)*

The ratio of NRB balance to Total Deposit Ratio is shown in the following figure:

Figure 4.13

NRB Balance Total Deposit Ratio

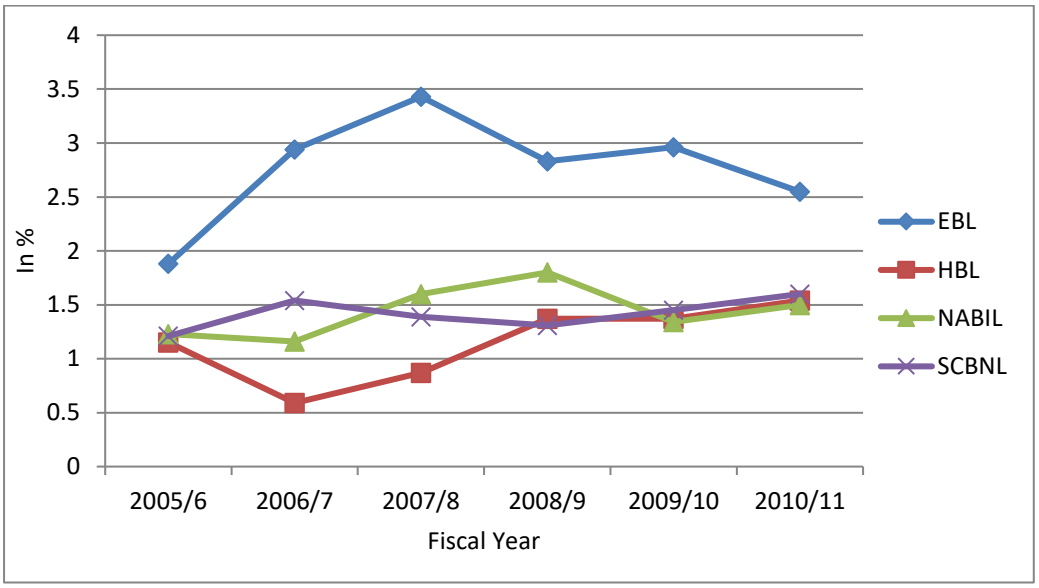


Table shows the ratio of NRB balance to total deposit ratio of last six fiscal years as exhibits in Table & Figure 4.13. The ratio of EBL is in fluctuating Trend during the study period and it is distributed from minimum of 4.51% in FY 2007/08 to maximum of 15.23% in FY 2009/10, whereas ratio of HBL is in increasing trend during the first three years and rapidly decreasing in last three years. The ratios were less than industry average ratio in all observed years with maximum of 7.05% in 2009/10 and minimum of 2.94% in 2007/08.

So on the ratio of NABIL bank is being up and down over the period of the study period except FY 2008/09. It ranges from a minimum of 1.16% in FY 2009/10 to maximum of 7.11% in FY 2008/09. At the end, the ratio of SCBNL is in fluctuating trend. It has minimum of 2.33% in the fiscal year 2009/10 to maximum of 6.55% in the FY 2006/7.

The ratio of NRB balance to total deposit ratio of all sampled JVBs was less than industry average. It shows that the balance with NRB is less than that of average which indicates that they are less experience towards balance with NRB.

4.1.5.3 Cash in Vault to Total Deposits Ratio

This ratio shows the percentage of total deposit maintained in vault. The term cash in vault represent the ratio measures the percentage of most liquid fund with the bank to make immediate payment or the depositors. Cash in hand and foreign currencies in hand are included as cash in vault. So, sufficient and appropriate cash reserve in the vault should be maintained.

Cash in Vault to total deposit ratio of sampled JVBs compared with industrial average shows below the industry average throughout the study period. It is concluded that banks have inadequate cash in vault as liquidity over the study period. Cash in vault to total Deposit Ratio shows the adequate capacity requirement with the banks in the case of requirement. This will help to payment of cash to the required customers in the needful period.

Table 4.14

Cash in Vault to Total Deposits Ratio

Fiscal Years	Banks	Cash in Vault	Total Deposit	CDR	Industry Average
2005/06	EBL	259.35	13802.44	1.88	2.2
	HBL	305.43	26490.85	1.15	2.2
	NABIL	237.82	19347.40	1.23	2.2
	SCBNL	279.51	23061.03	1.21	2.2
2006/07	EBL	534.1	18186.25	2.94	2.3
	HBL	177.24	30048.42	0.59	2.3
	NABIL	270.41	23342.29	1.16	2.3
	SCBNL	378.42	24647.02	1.54	2.3
2007/08	EBL	822.99	23976.30	3.43	3.0
	HBL	278.18	31842.79	0.87	3.0
	NABIL	511.43	31915.05	1.60	3.0
	SCBNL	414.88	29744.00	1.39	3.0
2008/09	EBL	944.70	33322.95	2.83	2.8
	HBL	473.76	34681.35	1.37	2.8
	NABIL	674.40	37348.26	1.80	2.8
	SCBNL	463.35	35350.82	1.31	2.8
2009/10	EBL	1091.50	36932.31	2.96	2.9
	HBL	514.22	37611.20	1.37	2.9
	NABIL	635.99	47340.70	1.34	2.9
	SCBNL	509.031	35182.72	1.45	2.9
2010/11	EBL	1048.99	41127.91	2.55	2.95
	HBL	632.046	40920.63	1.54	2.95
	NABIL	744.59	49696.11	1.50	2.95
	SCBNL	610.690	37999.24	1.60	2.95

Source: *- Annual Reports of Sampled Joint Venture Banks: Appendix (I-IV)*

The ratio of cash vault to Total Deposit Ratio is shown in the following figure

Figure 4.14

Cash Vault to Total Deposit Ratio

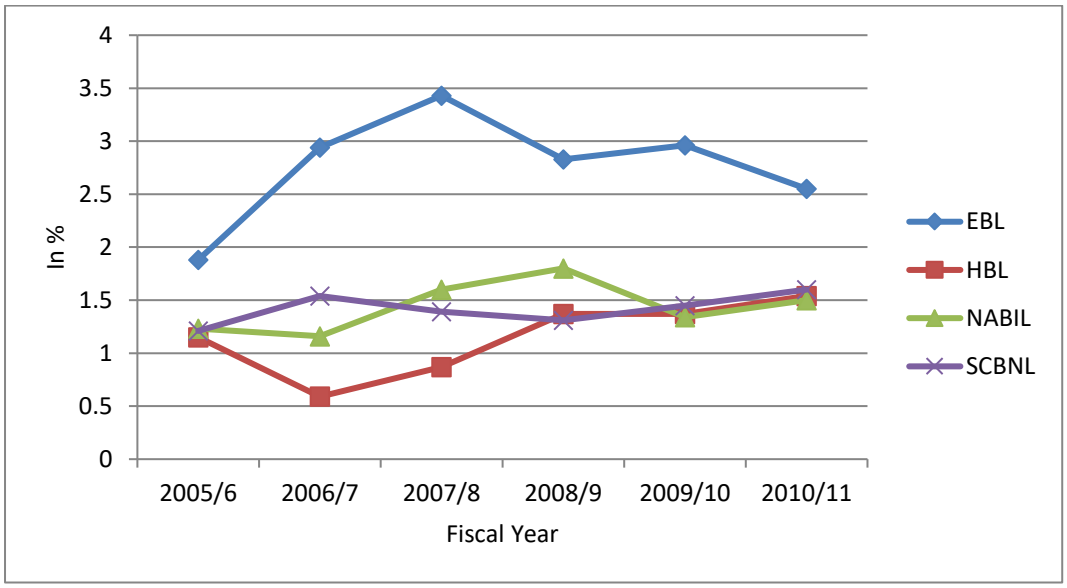


Table & Figure 4.14 presents the observed cash in vault to total deposit ratio comparison with industry average of sampled JVBs during the study period.

Cash in vault to total deposit ratio of EBL is being up and down over the study period. It ranges found minimum of 1.88% in FY 2005/06 and maximum of 3.43% in FY 2007/08 of study period. So on, the ratio of HBL has maximum of 1.37% in fiscal year 2009/10 and minimum of 0.59% in fiscal year 2006/07. It is increasing year by year from the beginning fiscal year to at the end of fiscal year of study. Like ratio of NABIL bank is also being up and down over the study period. It ranges from a minimum of 1% in FY 2008/09 and maximum of 1.8% in FY 2008/09. At the end ratio of SCBNL is in fluctuating trend whereas maximum of 1.54% in FY 2006/07 and minimum of 1.01% in FY 2008/09.

4.1.6 Sensitivity to Market Risks

These parameters refers to the risk conditions in the market such as exchange risk, interest rate risk etc. which could adversely affect earnings/or capital of the bank. Banking business is open to risks from movements in competitors prices, competitors cost of fund, foreign exchange rates and interest rates all of which need to be managed. Although Nepalese banking sector is exposed to interest rate risk and the exchange rate risk, interest rate is the focus of this study. It is the primary risk in most of the commercial banks in Nepal.

This study is worked with duration gap model, which are simple method than dollar gap and simulation analysis. Duration gap model simply measures the net quality of assets or liabilities re-pricing within a given period to estimate the likely impact changes in interest rates that will have in earnings. Gap analysis is a technique of asset-liability management that can be used to assess interest rate risk or liquidity risk. Implementations for those two applications differ in minor ways so people distinguish between interest rate gaps and liquidity gaps. This article discusses both. Gap analysis was widely adopted by financial institutions during the 1980s. When used to manage interest rate risk, it was used in tandem with duration analysis. Both techniques have their own strengths and weaknesses.

Duration is appealing because it summarizes, with a single number, exposure to parallel shifts in the term structure of interest rates. It does not address exposure to other term structure movements, such as tilts or bends. Gap analysis is more cumbersome and less widely applicable, but it assesses exposure to a greater variety of term structure movements.

Sensitivity Analysis: (1% Change in Interest rate will have the given % change in the Net-interest Income NII):

According to NRB, duration gap analysis model adapted for minimization of liquidity risks shall also be adapted in respect of minimization of IRR. Banks shall classify the time interval of the assets and liabilities on the basis of maturity period of 0-90 days, 91-180 days, 181-270 days, 271-365 days, &over the 365 days. For changing probability of estimate interest rate is normally one percent.

The effect on the percent change in NII is calculated by multiplying the change in interest rate Ri in the it maturity bucket annualized with cumulative Gap.

If the interest rate rises on RSAs and RSAs, the positive CGAP (RSA>RSL) would project increase in the expected annual NII. However if interest rate fall when CGAP is positive, NII will fall. In General, when the CGAP or the GAP ratio is positive (RSA>RSL), the change in NII is positively related to the change in interest rates. Thus banks would want to keep CGAP positive when interest rates expected to rise. Conversely, when CGAP is negative the change in NII is negatively related to the change in interest rates. Thus banks are expected to keep CGAP negative when interest rates are expected to fall.

4.2 Major Finding

The major findings of the study of financial performance analysis of sampled joint venture banks in the framework of CAMELS are as follows.

- Among the sampled Joint ventures banks, the capital adequacy ratio is maximum of 19.13% (in SCBNL of FY 2009/10) and minimum of 10.22% (in HBL of FY 2009/10). Throughout the study period all banks met the capital adequacy ratio as directed by NRB. EBL & HBL has not shown good performance to Nabil and SCBNL.
- The core capital adequacy ratio of sampled joint venture banks is maximum of 14.70% (in SCBNL of FY 2009/10) and minimum of 7.31% (in HBL of FY 2008/09). In all the six years of the review period, the core capital adequacy ratio is above the NRB standard. Thus it is found that the core capital adequacy of joint venture banks is adequacy and sufficient. It shows the protection and security to

creditors and depositors and depositors and financial soundness of the joint venture banks.

- Over the six studies year period, EBL, HBL, NABIL and SCBNL have with the boundary of NRB standard (not more than core capital of banks). Among the sampled joint venture banks the supplementary adequacy ratio is maximum of 4.7% in FY 2007/08(in EBL) and minimum of 1.65% (in NABIL). It shows that joint venture banks were running with adequate capital.
- The past due loan to total loan of sampled joint venture banks shows decreasing trend over the study period. All the ratios are below the industry average. Industrial benchmark is not appropriate justifiable due to high proportion of NPL of two biggest highest government banks. It is found that the past due loan to total loan ratio of the joint venture banks have below 5% except HBL and NABIL But they have decreasing ratio of past due loan to total loan every year. It shows the improvement of the nonperforming loan ratio year by year. It shows the non performing assets of joint venture banks on the average is at satisfactory level, but they are far below the aggregate percentage of nonperforming assets of commercial banks
- The ratio loan loss reserve ratio of NABIL and SCBNL shows decreasing trend over the study period. The maximum ratio of 7.10% in HBL (in FY 2005/06) and minimum of 1.08% if Nabil (FY 2009/10). Throughout the study period the ratio of EBL and Nabil is at fluctuating trend.
- The earning per employee ratio of joint venture banks have maximum ratio of EPE as Rs. 2615076.53 in (SCBNL) and minimum as Rs. 615319.70 (in HBL) in FY 2008/09 and FY 2008/09 respectively. EPE ratio is in increasing trend over the study period except SCBNL where there was slight decrement in FY 2009/10. Although EBL has EPE ratio least among others banks, its ratio is increasing trend over the study period. That indicates symbol of good Management. Overall EPE ratio of JVBs shows relatively at satisfactory level.
- The total operating expenses to total operating revenues of sampled joint venture banks with the maximum ratio of 84.93% in FY 2008/09(in EBL) and minimum was 42.87% in 2008/09 (in SCBNL). SCBNL and NABIL banks have TOE to

TOR ratio were in decreasing trend except final year but EBL and HBL have in fluctuating trend. The overall ratio implies that all JVBs in decreasing expenses with respect to income with symbol of good management quality.

- The ratio is in increasing trend. The ratio of HBL is in decreasing up to FY 2003/04 and thereafter it is in increasing trend of up to FY 2005/06 and again decreases in final year. The ratio ranges from a minimum of 3.46% in FY 2007/08 to maximum of 24.13% in FY 2008/09. Whereas the ratio of NABIL is quite consistent with the increment from FY 2005/06 of study period. The ROE of 33.88% is the maximum in FY 2005/06 and minimum of 29.69% in FY 2009/10. Finally, the ROE of SCBNL has continually increased over the study period with the maximum 37.55% .So overall they indicate the earning return satisfactory for its equity shareholders.
- The ROA ratio of Nabil and SCBNL are in increasing trend during the study period. Likewise the ratio of HBL is in fluctuating trend. Where as it is in consistent in the case of EBL. The maximum ratio is 3.05% in FY 2006/07 (in NABIL) and minimum of 1.4% in FY 2008/09(in EBL). NABIL bank and SCBNL have maintained strong position regarding the ROE. But EBL and HBL have less than 1.5% FY 2005/06 to FY 2008/09 except final three years of study period. In general most of the banks are in increasing trend of ROA, which shows that the banks are utilizing assets to generating profit.
- The EPS ratio of NABIL and HBL bank is in continuously fluctuating trend and EBL has also in increasing trend except second year of over the study period. Whereas the EPS of HBL is in continuously increasing trend from the initial FY 2008/09 to FY 2007/08 and slightly increase in last final two years. Likewise SCBNL has decrement in EPS during the study period. Among the JVBs the maximum ratio of EPS is 175.84% in FY 2007/08 (in SCBNL) and minimum ratio is 54.22% in FY 2008/09 (in EBL) in over the study period.
- The EPS ratio of HBL and NABIL and EBL is in increasing trend which shows the profitability position of these banks but SCBNL and Nabil has declined in last 3 years.
- The Net Interest Margin rate of sampled JVBs have maximum was 5.19% in FY 2006/07 (in NABIL) and minimum of 3.04% in FY 2009/10 (in EBL). SCBNL and

EBL have fluctuating trend of NII during the study period but in case of HBL and NABIL movement is increasing trend except final year and final two years respectively. The observed ratio of NIM in sampled JVBs is above the benchmark. So it can be concluded that the banks have good management with regard to asset. In aggregate the NIM ratio is better.

- The total loan to deposit ratio of the EBL and SCBNL is in fluctuating trend but other banks HBL, NABIL are in increasing trend in the review period. From the analysis of data, the loan to deposit of EBL is above the industry average and NABIL bank is also above the industry average except first two years and final year. Others two banks have below the industry average. It implies that NABIL and SCBNL have proper utilization of fund in comparison to the rest of two. In conclusion the sampled banks have properly maintained the liquidity during the study period.
- NRB balance to total deposit ratio of JVBs are in fluctuating trend over the study period. The maximum ratio of NRB balance to total deposit ratio was 15.23% in FY 2009/10 (in EBL) and minimum of 1.16% in FY2009/10 (in NABIL). Thus it is found from the analysis of data that the NRB balance to total deposit ratio of sampled JVBs are less than industry average except EBL in FY 2008/09, FY 2009/10. This implies that EBL has strictly followed the NRB directives in respect to balance that must held in with NRB than other banks.
- Cash in vault to total deposit ratio of EBL and HBL was inconsistent over the study period, where as SCBNL and NABIL were able to maintain cash in vault consistently. It indicates that bank is running with the inadequate liquidity to meet its short term obligation. Despite these fluctuation Banks maintained only the adequate level of cash in vault to minimize the risk.
- Among the sampled JVBs the CGAP ratio or the interest rate or the interest rate sensitivity ratio to the total earning assets in short horizon was highest with 69.07% in FY 2008/09 and lowest with 45.79% in FY 2005/06 of SCBNL. In NABIL bank CGAP ratio in short term horizon was decreasing trend except 2005/06. In case o EBL, the ratio in short term horizon was in decreasing trend except FY 2007/08. HBL is also in increasing trend except FY 2005/06 and FY 2008/09 respectively. In

short term horizon, the CGAP trend of NABIL and SCBNL was in decreasing trend except FY 2009/010 and FY 2002/03 respectively. In EBL had also in decreasing trend except FY 2007/08. Among the sampled JVBs, the CGAP trend in the short run is in decreasing trend. Hence it can be concluded the bank less asset sensitive in future. Since the CGAP trend in long term horizon is zero in case of SCBNL and NABIL bank also zero concluding 4 years.

CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This Chapter is divided into three sections-Summary, Conclusions and Recommendations. The first section summarizes the whole study, the second draws the conclusion and the last one forwards the recommendations.

5.1 Summary

For the Objective of the study is to analyze the financial performance of joint venture banks in Nepal in CAMELS framework. This study covered six years data following a descriptive and analytical research design. EBL, HBL, NABIL and SCBL were sampled as a study unit with using convenience sampling method. This study is based on the secondary data. Annual report and financial statements of the respective banks are major sources of data of study. CAMELS are a common technique of evaluating the financial performance of commercial banks. In this technique consists of six factors-Capitals Adequacy, Assets Quality, Management Quality, Earning Quality, Liquidity Position, and Sensitivity to market risk. These six individual factors are typically evaluated on a ration scale. The CAMELS rating ranges from 1 to 5, lower rating representing a better and well managed firm. It was originally used by the Federal Reserve Bank, the Federal Deposit Insurance Corporation (FDIC) and the comptroller of the Currency (OCC) and other financial agencies to provide a convenient summary of bank condition at the time of an exam. In Nepalese context, supervision department of NRB is using CAMELS rating to find out financial health of commercial banks.

The specific objectives of the study were to analyze the capital adequacy, non-performing assets, loan loss reserve ratio, and management quality, earning quality, liquidity position and sensitivity to market risk of sampled JVBs during six years period form FY 2008/09 to FY 2009/10. Various theories relating to the performance evaluation of commercial banks were reviewed in order to build up the conceptual foundation and reach to the clear destination of research. During the research the areas that formed part of the research

review were, historical development of banking industry in Nepal, Concept of commercial banks, function of commercial banks, supervisory and monitoring system of the NRB methods of Banking supervision, financial performance analysis framework, components of CAMELS, with NRB directives according to bank and financial institution Act 2063, New Basel Capital Accord. Besides these review of journals, articles and review of dissertations were carried out under research review. In analysis the ratio is comparison with NRB standard, industrial average.

The capital adequacy ratio of all sampled JVBs were generally above the NRB standard during the study period .which shows the banks were running with adequacy capital. The core capital adequacy ratio above the NRB standard of JVBs indicates the protection and security of stakeholders and financial soundness of the banks. Whereas supplementary capital adequacy ratio was as per NRB standard in all the study period which leads to conclude that the sampled JVBs were running with adequate capital. The non-performing to total loan ratios are below the industry average and international standard of 5%, which shows strong position of asset quality. The management quality ratio: the earning per employee was fluctuating trend. Although EBL has EPE ratio is the least among other banks, its ratio is increasing trend over the study period. It indicates good management. Overall EPE ratio of JVBs shows relatively satisfactory level. Whereas the total operating expenses to total operating revenue of JVBs ratios were decreasing expenses with respect to income which indicate good symbol of good management quality. The earning ratios like ROE, ROA and EPS show the profitability of JVBs and they are not so weak during the study period. Profitability of NABL, SCBL is above the industry average but the EBL and HBL have below the industry average. In general EPS ratio is in increasing trend. The NIM ratio was above the bench mark except EBL. It indicates that banks manager done a good job of assets and liabilities except EBL. The liquidity position of SCBL and HBL is better than other two banks. The LDR position of JVBs shows that they have stored high level of liquidity. Their high liquidity is affecting financial health adversely by deteriorating their profitability. Thus, with a view point of liquidity problems the health of JVB is looked like a little bit unhealthy. JVBs were low sensitive to interest

rate in long horizon but high sensitive to interest rate in short term horizon due to CGAP ratio to earning assets is high.

5.2 Conclusions

Based on the findings following conclusions have been drawn:

The total capital adequacy ratio of JVBs have maintained NRB standard over the study period only HBL has not maintained the ratio in FY 2003/04. It can be concluded that the capital fund of joint ventures banks are sound and sufficient to meet the banking operation as per NRB Standard except HBL. This shows that HBL do not strictly follow the NRB standard in that year.

Core capital adequacy ratio of joint venture banks were above the NRB standards in the review period. It reveals that the joint ventures hanks have adequate amount of internal sources or core capital in the past six years and they are strictly followed by NRB standard. In this point of view the banks is financially sound and strong.

Supplementary capital ratio of joint venture banks were with in the boundary of NRB standard over the study period. Which supports to draw the conclusion of the supplementary capital of the JVBs were running with adequate capital and have strictly followed the NRB directives. In the point of view of JVBs were sounds in Nepal.

The non-performing loan to total loan of JVBs is below the industry average. The non-performing loan ratio was decreasing over the study period. Industrial bench mark is not appropriate of NPL of two biggest government banks. The ratio of non-perfuming loan to total loan of JVBs has below 5% except HBL and NABIL. But they are improving the recovers the international standard i.e. 5% final years. It can be concluded that non performing loan ratio of JVBs on the average is at satisfactory level but they are far below the aggregate percentage of non performing assets of commercial banks. The loan loss reserve ratio of SCBL and NABIL has decreasing trend where as other two banks ratio have fluctuating trend.

Among the JVBs EPE ratio the maximum in SCBL and minimum of EBL. The EPE ratio is fluctuating trend except EBL. Although EBL has EPS ratio is least among other banks, its ratio is increasing trend over study period. That indicates symbol of good management. Overall ratio of JVBs shows relatively satisfactory level.

The decreasing trend of total operating expenses to total operating revenue ratio shows that the bank operate efficiency. In any case, the decreasing trend will positively affect the profitability in future.

The decrease trend of ROE shows that the return per unit of equity invested by the shareholders is in decreasing year by year. Among the sampled JVBs have ROE ratio is satisfactory level.

The increasing trend of ROA ratio concludes that the quality of assets and their efficiency to generate return is increasing. In general, ratio of ROA is in increasing all over the study. This shows that the ability of the management to utilize banks assets to generate profits is in increasing.

The increasing trend of EPS indicates that the returns flowing to the banks owner in increasing. It means the market value of the share is in increasing.

The increasing trend of Net interest margin shows that the banks have raised funds with liabilities that have low interest costs and acquired assets with high interest income. It can be concluded that the bank manager has done a good job of assets and liabilities management during the study period.

The loan to total deposit ratio were below the industry average except EBL and NABIL. It can be concluded that NABIL and EBL have proper utilization of fund. Whereas other two banks have more fund it needs to investment. They will not face the liquidity problem in future.

The NRB balance to total deposit ratio is below the industry average except EBL in FY 2006/07, FY 2008/9 . It can be concluded that HBL, NABIL and SCBL have not maintained sufficient amount of balance much held in NRB except EBL.

Cash in vault to total deposit ratio was fluctuating trend and below the industry average ratio. This indicates that the banks were running with the inadequate liquidity to meet its short term obligation. Higher the cash in vault will be in risk so sample JVBs maintain adequate level of cash in vault to minimize the risk.

Among the sampled JVBs the CGAP trend in the short run in decreasing trend. The banks in later years were keeping the mismatch (RSA-RSL) lower in the short run. This would make the banks were less sensitive in future. Since the CGAP trend in long term horizon is zero all banks. Hence it can be concluded the banks were low sensitive to interest rate in the long horizon but highly sensitive to interest rate in short term horizon due to CGAP ratio to earning assets is high.

5.3 Recommendations

Based on the conclusion drawn earlier, the following recommendations have been forwarded to improve the financial performance of JVBs in Nepal.

- The total capital adequacy ratio of JVBs has sufficient as per the NRB Standard except HBL. It has not met the minimum capital requirement as directed by NRB in the FY 2006/07. So the recommendation is provided to strictly follow the NRB directives.
- The non-performing loan to total loan of JVBs is in decreasing trend over the study period it signals good improving the quality of assets years by years. Although JVBs perform satisfactory level. It suggests that to be sincere while disburse loan and to do effective follow up for recovery of non-performing loan. But the ratio is far below the industry average in all the over the study period. It suggest that banks are recommended to maintain the below international standards. The loan loss reserve ratio of the EBL and HBL need to maintain lower the proportion of loan loss provision.

- Total operating expenses to total operating revenues ratio of JVBs have decreasing trend but EBL and HBL has in fluctuating trend during the study period. So it is recommended to those banks try to reduce the operating expenses.
- The earning ratios of the JVBs like Return on Assets, Earning per Share, Net Interest margin are increasing trend but Return on Equity is in fluctuates trend. During the study period the earning quality ratio of JVBs is not so weak. Thus it is recommended that it need to maintain this level. Every bank maintains their

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