CHAPTER− 1

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Our Country, Nepal is one of the least developed country of the world as well as landlocked . This country is surrounded by too big and rapidly developing countries. That is, it is surrounded three sides by India and one side by China. Because of the landlocked ness of the country, it has to depend with neighbour countries, mainly with India, which is directing her efforts in accelerating the pace of her economic development.

Nepal has an agro-based economy, where most of people are engaged with agriculture. The main reason for agro-based economy of Nepal is the geographical construction of the country. The other reason is due to its low literacy rate, which has restricted the people to primitive and traditional forms of occupation.

The source of finance is the most essential element for the establishment and operation of any profit and non-profit oriented institutions. Profit oriented institutions usually obtain these sources through ownership capital, public capital and financial institutions such as banks; in the form of credit and overdraft. Banking sector plays a vital role of the country’s economic development. Bank is a resource mobilizing institution, which accepts deposits from various sources and invests such accumulated resources in the field of agriculture, trade commerce, industry, tourism etc.

The banking sector is largely responsible for collecting household savings in terms of different types of deposits and regulating them into the society by lending them in different sectors of the economy. The banking sector has now reached to the most remote areas of the country and has experienced a good deal in the growth of the economy. By lending their resources in small scale industries under intensive banking program has enable the banks to share in the economic growth of the economy. (Shrestha; 1993: 32)

Banking institutions are inevitable for the resources mobilization and all the round development of the country. They have resources for economic development and they maintain economic confidence of various segments and extend credit to people. (Grywinshki; 1993: 87)

Bank refers to any firms that are basically concerned with the transaction of money however; today's banks are established for specific purposes. Different types of banks focus different types of services to their customers although the basic principle is same.

The history of the development of financial institutions in Nepal is not very long. The history of Nepalese banking begins from the establishment of the commercial bank; Nepal Bank Limited in 1994 B.S. for the first time to provide modern and organized banking services in Nepal. Up to 2012, only NBL provided services to the public as an organized bank. Later, Nepal Rastra Bank was established in 14th Baisakh 2013 B.S. as a central bank of Nepal under NRB Act 2012. Similarly, Rastriya Banijya Bank was established in 2021 B.S. the birth of this bank brought a new landmark in the history of banking facilities in Nepal. Thereafter banks were established gradually.

According to Commercial Bank Act 2031 B.S "A Commercial Bank is the one which exchanges money, deposits money, accepts deposits, grants loan and performs commercial banking functions and which is not a bank meant for co-operative agriculture, industries as for such specific purpose.(The Commercial Act, 2031 B.S)

Commercial banks are the central part of financial institutions and they are the most visible series of financial intermediaries. They hold the deposits of many persons, government, establishments and business units. They make funds available through their lending and investing activities to borrow business firms, industries, and individuals' etc. Bank is a resource for the economic development which maintains the self confidence of various segments of society and extends credit to people.

When the government adopted liberal and market oriented economic policy since mid 1980's, Nepal allowed foreign banks on joint venture basis to operate in the country after getting the approval from NRB. These foreign JVBs namely Nabil Bank Ltd., Nepal Indo-Suez Bank Ltd., Standard Chartered Nepal Bank Ltd., were established in 2041, 2042 and 2043 B.S. respectively. Now we have 25 commercial banks in Nepal, among of them two are under government control and other 23 are non govt. and joint ventures. Joint ventures banks gave a new horizon to the financial sectors of the country. They were expected to bring the foreign capital, technology experience, healthy competition, expertise and skills in Nepal.

HMG's liberate policy of allowing JVBs operation in Nepal is basically to encourage local traditionally run commercial banks to enhance their bankable capacity through competition, efficiency modernization mechanism via computerization and prompt customer's service. (Shrestha; 2047: 44)

1.2 COMMERCIAL BANKS AND ECONOMY

Commercial banks are those banks, which perform all kinds of banking functions as accepting deposits, advancing credits, credit creation, and agency functions etc. they provide short term credit, medium credits and long term credits to trade and industries. They also operate off-balance sheet functions such as issuing guarantee bonds, letter of credit, etc.

In every country outset of economic development is quite different but there is no debate about the significant role of banking sector for the economic development of the country, as they are considered as the main source of finance.

Without the development of sound commercial banking, underdeveloped countries cannot hope to join the ranks of advanced countries. If industrial development requires use of capital, use of capital equipment will not be possible without the existence of banks to provide the necessary capital. Besides, industrial development will be impossible without the existence of markets to depose of the goods produced. On the other hand the existence of the commercial banks will help to extend the market. The commercial banks play an important role to and for:

a. Help in Business Expansion
b. Encouragement of the Right type of Industries
c. Necessary for Trade and Industry
d. Transfer of Surplus Funds to Needy Regions
e. Promotion of Capital Formation

1.3 INFORMATION ABOUT BANKS UNDER STUDY

For this study mainly joint venture banks are chosen. In Nepal, we have six JVBs, which are Nabil Bank Ltd., Nepal Bangladesh Bank Ltd., Everest Bank Ltd., Himalayan Bank Ltd., Nepal SBI Bank Ltd. and Standard Chartered Bank Nepal Ltd.

Table 1.3

List of Licensed Joint Venture Banks of Nepal, Mid July, 2007

Joint Venture Banks	Operation Date (A.D)	Head Office	Telephone No.	Fax. No.
NABIL Bank Ltd.	16-07-1984	Kantipath, Ktm.	44295469	4429548
Standard Chartered Bank Nepal Ltd.	30-01-1987	New Baneshwar, Ktm.	4781469	4780762
Himalayan Bank Ltd.	18-01-1993	Thamel, Ktm.	4227749	4222800
Nepal Bangladesh Bank Ltd.	05-06-1993	Bijuli Bazar, Baneshwor, Ktm.	4783972/75	4780106
Nepal SBI Bank Ltd.	07-07-1993	Hattisar, Ktm.	4435516	4435612
Everest Bank Ltd.	18-10-1994	Lazimpat, Ktm.	4443377	4443160

Sources: www.nrb.org.np

– **Nabil Bank Ltd. (NABIL)** is the 1st JVB established in 16th of July 1984 A.D. under the company act Dubai Bank Ltd. The shares owned by DBL were transferred to Emirates Bank International Ltd., Dubai. Later on EBIL sold its entire holding to National Bank Ltd., Bangladesh. This bank was established with 50% of equity hold by DBL, 20% from financial institutions of Nepal and sharing 30% from public of Nepal. Currently, it has Rs 500 million authorized capital, Rs 492 million issued and Rs 689.20 million paid up capital. It has 27 branches all over the Nepal at the end of 2007.

─ **Nepal Bangladesh Bank Ltd. (NBBL)** was established in 5th June 1993 as a joint venture with IFIC(International Finance Investment and Commerce) Bank ltd. is one of the largest commercial bank of Bangladesh and also has a joint venture exchange company in Oman and a joint venture in Pakistan. Currently, it has Rs.1500 million authorized capital, Rs.1000 million issued and Rs.744.10 million paid up capital. It has 17 branches spread over all 5 development regions of the country at the end of 2007..

─ **Everest Bank Ltd. (EBL)** is a joint venture bank with Punjab National Bank of India was established in 18th Oct. 1994. This bank is established with 20% equity capital hold by Punjab National Bank and other 80% equity capital sharing by general public of Nepal. It has Rs.600 million authorized capital, Rs.466.8 million of issued capital and Rs. 831.40 million of paid up capital. It has 29 branches spread over the country at the end of 2007..

─ **Himalayan Bank Ltd. (HBL)** is a joint venture bank with Habib Bank Ltd. of Pakistan was established in 18th Jan. 1993 under the company act 1964. This is the first joint venture with the maximum share holding by Nepalese private sector. Its ownership is composed of financial institutions of Nepal by 66.29%, Habib Bank Ltd. of Pakistan by 20% and general public of Nepal by 13.58%. Currently bank has Rs.1000 million of authorized capital, Rs.650 million of issued and Rs. 1013.50 million of paid up capital. HBL has 19 branches spread over the country 1 including 1 Head Office at the end of 2007.

─ **Nepal SBI Bank Ltd. (NSBIBL)** is a joint venture bank with State Bank of India was established in 7th July 1993 as per Nepal Commercial Act 2031 B.S. It is the first joint venture in the financial sector sponsored by three institution promoters, namely State Bank of India, Karmachari Sanchaya Kosh and Agriculture Development Bank. State Bank of India, which is considered as one of the main commercial bank of India with large number of branches all over India is a major promoter of Nepal SBI Bank Ltd., which holds 50% of equity share capital, Karmachari Sanchaya Kosh holds its 15% equity, 5% equity capital hold by Agriculture Development Bank and rest 30% equity shares hold by general public. The bank's authorized capital is Rs.1000 million, Rs.500 million of issued and Rs. 874.50 million of paid up capital. It has 16 branches and 4 extension counters at the end of 2007.

– **Standard Chartered Bank Nepal Ltd. (SCBNL)** is one of the most recognize bank in Nepal established as a joint venture bank. Earlier, it was known as 'Nepal Grindlays Bank'. It was established as a joint venture bank between ANZ Grindlays (Australian and New Zealand Banking Group) and Nepal Bank Ltd. in 30th Jan. 1987. It has been financed by Standard Chartered Grindlays Bank sharing 50%, 33.34% is shared by Nepal Bank Ltd. and rest 16.66% by general public. The bank's authorized capital is Rs.1000 million, Rs.500 million of issued and Rs. 620.80 million of paid up capital. It has 11 branches including 1 Head Office and 16 ATM sites at the end of 2007.

1.4 FOCUS OF THE STUDY

Present situation of Nepalese market is not so good for any kind of business, banking business is totally on lending business, which is naturally a risky business, as per present situation banks are playing the vital role in the growth of the Nepalese economy. So what kinds of precautions is taken by bank for it survival is very serious matter.

As loan is the core area of commercial banking, it plays the significance impact on the commercial bank's liquidity and profitability. But the most worry factor in banking industry is the total management of loan. Due to the excessive amount of non-performing assets in commercial banks, there is the wide spread suspicion on the performance on the commercial banks.

So the main focus point of this study is as follows:

1. What types of risk are exists in the banking business?
2. What is the technique of credit risk management?
3. What is the framework of risk management?
4. What central bank plans to control the commercials banks?
5. What is the current condition of commercial banks regarding the credit risk position?

1.5 STATEMENT OF PROBLEM

Nepal is a small country with small market. Economic condition of the country is degrading due to conflict since 2052 B.S. Overall economic sectors either manufacturing or commercial have undergone heavy losses. However the financial institutions are increasing regularly. Liquidity is at maximum level with the financial institutions. Hence the banks and financial institutions are competing among themselves to advance credit to limited opportunity sectors. Due to unhealthy competition among the banks, the recovery of the banks credit is going negative trends. Non-performing credits of the banks are increasing year by year. To control such type of state, the regulatory body of the banks and financial institutions NRB has renewed its directives of the credits loss provision. Since the objective of the commercial banks is wealth maximization and achievement of organizational objectives contributes to the national economy and the success and failure of the commercial bank largely depends on the total credit risk management of the commercial banks. It is important to determine the factors affecting the default risk and its management. This study will try to find out how the joint venture banks of Nepal manage the ‘credit risk’. Specially the study is expected to answer the following research questions:-

- How the commercial banks are managing credit risk?
- What are the main causes of highly increasing credit risk in commercial banking sectors?
- Do the credit risk management is affected by the political, social and economic factors?
- Do credit risk increases in the lack of proper investment policies and practices?
- Is there any necessity to reform in regulations
- How to make optimal management of credit risk in commercial banks?

1.6 OBJECTIVES OF THE STUDY

The main objective of the study is to evaluate the credit risk management of commercial banks of Nepal. In order to achieve the basic objectives, the following other objectives are:

- To determine and analyze credit risk of joint venture banks in Nepal.
- To evaluate strength, weakness, opportunity and threats in the credit management of the commercial banks.
- To analyze the recovery status of the credit disbursed.
- To provide suggestions & recommendations about credit risk management.

1.7 SIGNIFICANCE OF THE STUDY

The business of banking is measuring, managing and accepting risk. We all know that default risk is a major risk factor facing by any banking industry. It is the uncertainty associate with the borrowers' loan payment, in general when borrowers' assets value exceed their indebtedness, they repay their loan and when borrower's assets values are less than borrower's loan value, they do not repay. Thus, it is imperative that lenders be able to value the borrowers' assets and to estimate a borrowers' probability of default. Lender should be very careful when they grants the loan, for that they need to take proper information about the borrower. Successful commercial lender needs good communication skill and clear vision to analysis borrower's planning and ability. In spite of being a very important topic of financial management, much research has not been done in this topic. At present the joint venture banks are gaining a wide popularity through their efficient management and professional services and playing a important role in the economy. This study no doubt will have importance to various groups like; shareholders, management bodies of the banks for the evaluation of the performance of their banks, outsiders (customers, financing agencies, stock exchange, depositors as well as credit takers, stockbrokers, etc).

1.8 LIMITATIONS OF THE STUDY

As the study is being carried out in a partial fulfillment of the requirements for the degree of 'Master in Business Studies', it possesses a number of limitations of its own kind. Some of the basic limitations of the study could be illustrated as follows:-

- Simple statistical techniques are followed by financial models have been used in the analysis.
- The study is based on data and information provided by the banks.
- Due to the small sample size, it may not fully represent Nepal as a whole.
- The study has been covered only recent five years from 2002/03 to 2006/07.
- The study largely depends on published documents such as balance sheet, profit & loss account statement etc.

1.9 ORGANIZATION OF THE STUDY

This study has been organized into the following chapters:

Chapter 1: Introduction:-

This chapter includes background of the study, introductions of commercial banking industry of Nepal, focus of study, statement of problem, objectives, significance and the limitations of the study.

Chapter 2: Review of Literature:-

This chapter deals with the review of available literature. It includes reviews of books, reports, journals etc.

Chapter 3: Research Methodology:-

This chapter explains the research methodology used in the study, which includes research design, source of data, population & sample, method of data analysis etc.

Chapter 4: Presentation and Analysis of Data:-

This chapter concerned with the data presentation and analysis of the study.

Chapter 5: Summary, Conclusions and Recommendations:-

This chapter is concerned with the major findings of the study, conclusion drawn from the findings and recommendation.

CHAPTER II

REVIEW OF LITERATURE

2.1 INTRODUCTION

The review of literature is a crucial aspect of planning of the study. The main purpose of literature review is to find out what works have been done in the area of the research problem under study and what has not been done in the field of the research study being undertaken. For the review study the researcher uses different books, reports, journals, and research studies published by various institutions, unpublished dissertations submitted by master level students have been reviewed.

This chapter presents the conceptual review of credit risk management including different types of risk that existing in banking business, credit risk management system and credit risk management framework and techniques. The central bank’s regulations regarding the risk management have been also discussed. This chapter deals with literatures relevant to this study. It is divided into following categories:

- Conceptual framework which consists concepts of banking, commercial banks, joint venture banks, concept of credit, techniques of credit risk management, etc.

- Review of books, journals an articles related to commercial banks and joint venture banks

- Review of previous thesis.

2.2 CONCEPT OF BANKING

Bank is a financial institution, which plays a significant role in the development of country. The history of banking transaction is as old as our civilization. People used to save and keep their old age. In ancient times gold smith used to keep people's valuable goods for the sake of security rather than earning interest. Mostly at that time goldsmiths performed this task, but now various type of banks have been acting in this field.

In England, gold smiths were the bankers in an ancient period. They used to lend money to the government and also at the time of emergency to keep deposits for purpose. People used to keep their ornaments with goldsmiths for safely. In ancient times, the function of foreign exchange also used to be done by goldsmiths, merchants and moneylenders. The terms 'bank ' was originated from the Italian word 'Banco' .A bank is a business organization that receives and holds deposits from others, lends loans or extends credit and transfers funds by written orders of depositors. (Encyclopedia; 1984, vol.3)

The business in banking is one of collecting funds from the community and extending credit (making loans) to people for useful purpose. Banks have played a pivotal role in moving money from lenders to borrowers. Banking is a profit seeking business not a community charity. As a profit seeker it is expected to pay dividends and otherwise add to the wealth of its shareholders. (Edimister; 1980, Ph.D report)

In the present Nepalese context, three types of banks have been separately performing their activities in different sectors, such as central bank, commercial banks and development banks. Three types of commercial banks have been operating in Nepal, in the public sector like Nepal bank limited, Rastriya Banijya Bank Ltd. etc. The joint venture with foreign banks like Himalayan Banks limited, Standard Chartered Bank Ltd. etc.

Nepal bank limited is the first bank of Nepal, which was established under Nepal bank limited act 1994. This is the first organized bank of Nepal. Under Ratra Bank Act 2013, Nepal Rastra Banks was established as the central bank of Nepal. After commercial bank act 2031 was enacted, other commercial banks, development banks were established.

The number of commercial bank branches operating in the country in mid-July 2007 totaled 552, including 45 commercial bank branches and 102 other non commercial bank branched of ADB/N. Of the total bank branches more than 46 percentage of bank branches are concentrated in the central region. By the end of mid-July 2007, 254 branches are being operated in this region. In the eastern, western, mid-western and far-western region 119, 114, 36 and 29 bank branches are in operation respectively. (NRB Banking & Financial Statistics Mid July 2007-vii)

2.3 CONCEPT OF COMMERCIAL BANKING

Commerce is the financial transactions related to selling and buying activities of goods and services. Therefore commercial banks are those banks, which work from commercial viewpoint. They perform all kinds of banking functions as accepting deposits, advancing credits, credit creations, and agency functions. The

Commercial banks are those financial institutions that deal in accepting deposits of persons and institutions and give loans against securities. They meet working capital needs of trade and industry and even of agricultural sectors. Moreover commercial banks provide technical and administrative assistance to industries, trades and business.

Commercial banks are the heart of the financial system. They hold the deposits of many persons, government establishment and business units. They make fund available through their lending and investing activities to borrowers, individuals, business firms and services, from the producers to customers and for the government too. These facts show that the commercial banking system of the nation is important to the functioning of the economy. (Reed/ Cotter/ Gill/ Smith; 1976)

The commercial bank has its own role and contribution in the economic development. It is a source for economic development; it maintains economic confidence to various segments and extends credit to people. (Grvwinshki; 1994: 87)

Commercial banks are organized as a joint stock company system, primarily for the purpose of earning profit, they can be either of the branch banking types as we in most of countries, with a large network branches like in Nepal or of the unit banking type, as we see in the United States where a bank operations are confined to a single office or to a few branches within a strictly limited area. (Shekher & Shekher;1999:4)

Nepal commercial bank act 2031 BS defines, “A commercial bank is one of which exchanges money, deposits money, accepts deposits, grants loans and performs commercial banking functions and which is not a bank meant for co-operations, agriculture, industries or for such specific purposes. (Nepal Commercial Bank Act, B.S 2031)

Commercial bank obtains deposits from customers under different accounts such as saving, fixed and current. Commercial banks also provide short-term drawing as necessary for trade and commerce e.g. hypothecation, against stock guarantee against any deviation in performing tasks, purchasing and selling of securities, discounting bills exchanging promissory notes, overdrafts facilities, treasury bill, foreign currencies, performing such tasks on the behalf of required as persons. Central bank’s main task is to monitor, direct and control the lending activities in the country. In Nepal, commercial banks perform their function under the rules and regulations of the Nepal Rasta Bank as the central bank of Nepal.

To sum up, a bank is defined as a financial institution, which performs widest range of economic and financial functions of any business firms in the economy. The commercial bank is that financial institution which collects scattered saving of the people and provides loans against proper securities for their productive purpose. Moreover they also provide technical help and suggestions, administrative suggestions, safekeeping of valuables, collection of bills cheques and overdraft facilities and provide modern banking facilities to industries and commerce.

2.4 CONCEPT OF JOINT VENTURE BANKING

A joint venture is joining forces between two or more enterprises for the purpose of carrying out specific operations like industrial or commercial investment, production or trade. When two commercial banks from different countries join hands to form independent enterprises it is said as joint venture commercial bank (JVB). The deliberate policy of allowing JVB in Nepal is basically to enhance local commercial banks performance via competition, efficiency, modernization, and computerization and prompt customer services, etc.

JVBs in Nepal are operated under the rules, regulations, supervision, control and directives of Nepal Rastra Bank, the central bank of Nepal. Major functions performed by these are the regular banking service of any commercial banks. Along with that it also brings foreign capital, skills, experience and latest technique and technology. It has also introduced the modern management for employee detainment and customer's satisfaction and latest technology like ATM; Tele banking, Credit/Debit cards etc. Due to international name attached to it, commercial banks might be able to raise resources internationally for viable projects due to their credibility. It is also seen that because of joint venture there has been a healthy and essential competitions among the contemporary banks.

Thus, conclusively, it can be said that JVB mobilizes the passive fund towards trade and commerce, provides economic assistant to enterprises, creates saving habits in general public, invests in priority sectors etc.

2.5 REVIEW OF JOURNALS RELATED TO JOINT VENTURE BANKS

When government decided to establish banks with joint ventures, two benefits were expected. First, that competition would force domestic banks. Nepal Bank Limited and Rastriya Banijya Bank have to improve their service and efficiency. Second, the introduction of new banking procedures, methods, and technology would occur. (Madlin C. and Snock H; Jan 31, 1998:4)

There has been substantial growth in the number of joint Venture Banks in Nepal since 1990s.The basic reason behind this is the government’s deliberate policy of allowing foreign joint venture banks to operate in Nepal. Government’s liberalization policy also encourages the traditionally run domestic commercial banks to enhance their efficiency and computerization and prompt customers services by setting them to the exposure of the joint venture banks. (Shrestha, M.K; 1990:16)

M.R. Sharma explains in his article, “ **Joint Venture Banks in Nepal Coexisting or crowding out”** (Sharma,M.R;1988:3.42) that it would be definitely unwishful for Nepal not to let JVBs to operate in the country and not to take advantage of additional means of resources mobilization as well as harbinger of new in banking. But it will certainly be unfortunate for the country to let the development of the JVBs at the cost of domestic banks .So far, one should admit frankly, no differential treatment has been made to the domestic and joint venture banks, at least from the latter's bargaining.

If the JVBS shows strength and briskness to come forward to share the trails and tribulation of this poor country, both types of bank will collapse and co-exist complementing each other, contributing to the nation's accelerated development. On the contrary if the joint venture bank use their strength against treading to the cumbersome path of development along with the domestic banks and government, they will eventually throw out the domestic banks from the more profitable and lucrative urban sectors unless reincarnated by the determination of the government

Mr. Sharma has made a comparative study of two different natures of banks, especially on-nature of transaction and expertise in banking network JVBs basically were orientated in urban areas whereas the local banks are set up and conducted their transactions both in urban and rural areas. Moreover a number of commercial banks are situated in rural rather than in urban areas.

Mr. Thapa, in his article **'Financial System of Nepal'** (Thapa,G.B;1994:29-30) has expressed his view that the commercial banks including foreign joint venture banks seen to be doing pretty well in mobilizing deposits. Likewise, loans and advances of these banks are also increasing but compared to the high credit needs particularly by the newly emerging industries, the banks still seem to lack adequate funds. The banks are increasing their lending to non-traditional along with traditional sectors.

He has also commenced that out of the commercial banks operating, Nepal Bank Limited and Rastriya Banijya Bank are operating with nominal profit, the later turning towards negatives from time to time. Because of non-recovery of accrued interest, the margin between interest income and interest expense is declining. They have heavy burden of personal and administrative overhead .On the other hand foreign joint venture banks are functioning in an extremely efficient way. They are making huge profit year after year. Because of their effective persuasion on loan, recovery, overdue, and defaulting loans have been limited resulting in high margins between interest income and interest expenses.

2.6 CONCEPTUAL REVIEW ON CREDIT RISK

Credit is the amount of money lent by the creditor to borrower either on the basis of security or without security. Credit and advances is an important item on the asset side of the balance sheet of a commercial bank.

Bank earns interest on credits and advances which is one of the major sources of income for banks. Bank prepares credit portfolio, otherwise it will not only add debts but also affect profitability adversely.(Varshney, N.P. and Swaroop;1994: 6)

Credit is financial assets resulting from the delivery of cash or other assets by a lender to a borrower in return for an obligation to repay on specified date on demand. Bank generally grants credit on four ways: (Chhabra, T.N. and Taneja; 1991: 4)

1. Overdraft
2. Cash Credit
3. Direct Credit
4. Discounting of Bills

For Bank's overall corporate strategy and strategic plan at least three critical components are needed, they are: (Joseph; 1998: 112)

a. Business plan
b. Framework for risk management
c. Strategies for corporate control

These are the basic components to provide a solid foundation for managing value and risk.

As with the traditional approach to strategic planning, it focuses in just on operating and competing in the financial services industry. The modern strategic approach also includes a framework for risk management and strategic for completing in the component fits for the modern idea of the basic business of banking as measuring, managing and accepting risk. The bank's objective is to manage value and risk by maximizing those items that create value and minimizing or eliminating those that destroy value.

As far as it is concerned to the commercial bank ,the main task of the commercial bank is to collect funds as deposit through several sources and lends them to different sectors like; manufacturing, transportation, trade, construction, communication and other public utilities, etc. Doing all these activities every bank has to face so many risks. There are several types of risk prevailed in the banking industry, but the major area of risk are widely recognized, i.e. Credit Risk, Market Risk, and Operating Risk, etc.

The Credit Risk is the potential financial loss resulting from the failure of customers to honor fully the terms of a loan or contract. On the other hand, the Market Risk includes balance sheet risk and trading risk such as potential risk to earning and capital resulting from changes in interest rate, liquidity conditions, impact of foreign exchange rate fluctuations etc. Meanwhile Operating Risk arises from the natural disasters, errors in processing and settlement of transactions safeguarding of assets, system failure, fraud and forgery. (Shrestha; 2000: 15)

2.6.1 Credit Risk Management

Credit risk is the risk of loss as a result of failure by a client or counterparty to meet its contractual obligations. It is an integral part of many of our business activities and is inherent in traditional banking products like loans, commitments to lend and contingent liabilities, such as letters of credit, trade products, derivative contracts such as forward, swaps, options, repurchase agreements (Repos and Reverse Repos) and securities borrowings and lending transactions.

Financial environment is dynamic. In this dynamic financial environment fluctuation in interest rates, exchange rates and commodity and real estate price are not something new. These fluctuations in economic and financial variables destabilize the corporate strategies and performance of bank. Thus it is necessary that bank has a framework of risk management.

Effective credit risk management allows a bank to reduce risk and potential non performing assets. Once bank understand their risks and their cost, they will be able to determine their most profitable business. Therefore the bank must have an explicit credit risk strategy by organizational changes, risk measurement techniques and fresh credit processes and systems.

While talking about the credit risk management, five C's of creditworthiness should be considered and they are:

1. Character

The good character and intention of the borrower is very important and thus should be seriously considered. Information about the character of the client can be gathered from his working place, reference, neighbours and other places he is associated with. This job is tedious but should be carried out for secure investment.

2. Capacity

It can be describe as a customer's ability to pay. It is measured by applicants' past performance records. For this on interview with applicant's customers/ suppliers will further clarify the situation. The gross income, expenses and net income of the borrower should be analyzed whether the borrower lives on salary/wages or any other forms of income source. Whether the borrower has some extra income source other than usual based which should be used to repay the scheduled installments should be considered.

3. Capital

Capital provides a caution to absorb operating and asset losses that might otherwise impair debt repayment. This, in fact, is the insurance against the loans granted to the borrowers.

4. Collateral

Sufficiency of collateral is necessary to ensure the recovery of loan. In case of default, by any cause, the collateral kept should have value enough to recover the loan granted and interest borne by it, it is recommended that only 50% of the value of collateral is granted as loan, but considering other factors like character of borrower and his credit worthiness, this percentage can be made flexible.

5. Conditions

Borrowers may be subject to unfavorable economic conditions beyond their control. Repayment depends not only upon character, capacity and collateral but those factors over which the borrower exercise little or on control. As for example: natural calamities or drastic economic crisis.

Risk is dependent upon the quality found in each ‘c’ and the combination of these five Cs. Assuming the same conditions prevail, the following guideline is suggested:

Table 2.6.1

(Guidelines of Assessing Risk)

Applicant Characteristics	Credit Risk
Character + Capacity	Very Low
Character + Capacity without Capital	Low to Moderate
Character + Capacity but Insufficient Capital	Low to Moderate
Capacity + Capital but Impaired Character	Moderate
Capacity + Capital without Character	High
Character + Capital without Capacity	High
Character + No Capital + No Capacity	Very high
Capital + No Character + No Capacity	Very High
Capacity + No Character + No Capital	Fraudulent

2.6.2 Credit Risk Framework

Fluctuations in interest rate, exchange rates, and commodity and real estate prices are not something new. However, fluctuation in economic and financial variables destabilized the corporate strategies and performance of the banks and their client customers. Thus, it is crucial to those banks have a framework for risk management and for selling risk management services to clients. Risk management can be conducted on a bank's balance sheet through adjustments in portfolio composition, or off the balance sheet by using host of risk- management weapons derived from the technology of financial engineering, these off- balance sheet tools of risk management are known as derivatives contracts or activities or simply as 'derivatives'. (Joseph; 1998: 126)

The risk management framework rests on three pillars, (Froot; 1994:91-102) are summarized as follows:

Making good investment decisions creates corporate value

For tradition banks this means making good loans and investments and tradition banks, it means this plus making good investment decision regarding their non traditional activities e.g. investment banking, mutual funds, insurance derivatives.

Generating enough cash flow internally is the key to making good investments

Companies that don't generate cash flow internally tend to cut investment more substantially than their competitors do. Those banking, generating enough cash flow internally plays a critical role in maintaining a firm's capital adequacy. Adequate capital in turn is a prerequisite for expansion and making good investments. With respect to cost and control, banks with inadequate capital are subject to higher deposit insurance premiums greater regulatory scrutiny and possible takeover by outsiders.

<u>Proper and prudent look at major market indicators</u>

Bank should look properly at major market indicator because adverse movements in external factors such as interest rates, and commodity prices can disrupt cash flow, a company ability to invest be jeopardized.

2.6.3 Credit Risk Management Techniques

As the majority of bank's assets are in the form of loan, even the lending function is simple and creates the value of the bank; the main danger is the chance of the borrower not to pay the loan amount. So the proper and prudent management of the credit risk is very important.

Merton and Bodie has suggested three techniques for managing the credit risk in their article published in the Journal of Banking and Finance. (Miller, Merton; 1995: 483-489)

<u>Risk based pricing</u>

It has been established that risk based pricing requires lenders to change the rate that compensates for the risk ness of the loan. The pricing procedure needs to be straightforward and not based solely on historical loan loss experience. In practice, loan pricing tends to follow the prime rate plus basis. Because the prime rate is not the lowest rate a bank charges, the credit worthiest customers can negotiate from the prime rate. The discount prime rate is what banks use to attempt to complete with open market instruments such as commercial paper and corporate bonds.

<u>Assets Restriction</u>

Bank lenders and other creditors have a claim on the borrower's assets. As long as the market value of assets exceeds the value of liabilities, creditors are protected because proceeds from sale of assets cover the entire claim alternatively, as long as positive net worth exists, business firms are not going to turn over to creditor's assets that exceed the value of claim against them. Thus one ways for lenders to protect themselves is to try to ensure that the value of assets always exceed than value of claims. Restriction amount of debt a borrower takes on and restricting the variability of the value of assets are the basic ways of meeting this objectives. Restricting covenants in loan agreement and the strength of bank customer relationships are practical ways that lenders impose asset restrictions or establish borrower's incentives for compliance.

Monitoring

If lenders have a contractual right to monitor assets value continuously and to seize assets, then loan losses can be minimized either by auditing asset values and seizing assets before shortfalls exist or by requiring the posted value of collateral assets to equal or exceed the promised payments. For private loans, for which banks have considerable expertise in organization, monitoring with continuous surveillance is costly.

Before providing credit to the customer, bank makes analysis of project from various aspects and angles. It will help the bank to see whether project is really suitable to invest or not. For that, bank needed to do a project appraisal. The purpose of project appraisal is to achieve the guarantee of reasonable return from the project. Project appraisal answers the following questions:

- ✓ Is the project technically sound;
- ✓ Will the project provide a reasonable return;
- ✓ Is the project in line with the overall economic objectives of the country?

Generally, the project appraisal involves the investigation from the following aspects. (Gautam; 2004:258)

- Financial aspect
- Economic aspect
- Management/ Organizational aspect
- Legal aspect

2.6.4 Directives Issued by NRB for the Commercial Bank: (related to credit aspect only)

Commercial banks are heavily regulated than its non-bank competitors in the financial service industry. They are subject to follow the updated regulations issued by the regulation authority. Nepal Rastra Bank has the regulating authority for Nepal. As per directives issued by NRB, loans and advances shall be classified into the following four categories:

Pass Credit

Pass loan and advance whose principle amounts are not past due and past due for a period up to 3 months shall be included in this category. Those are classified and defined as performing loans.

Sub Standard Credit

All loans and advances that are past due for a period of 3 to 6 month shall be included in this category. Those are classified as non-performing loans.

Doubtful Credit

All loans and advances, which are past due for period of 6 month to 1 year shall be included in this category. Those loans are classified as non-performing loans.

Loss

All loans and advances which are past due for a period of more than 1 year as well as advance which have at least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery in future shall be included in this category. These loans and advances are also classified as non-performing loans.

The credit loss provision for performing credit is termed as general credit loss provision whereas the credit loss provision for non-performing credit is termed as specific credit loss provision. Auditor has to correctly rate the credit and ensure that accurate credit loss provision has been made. The auditor should examine whether the bank has obtained complete documentation so that banks interest is secured. In addition audit is made to inspect compliance of terms and conditions laid down. Credit audit is required to check whether credit given is within authority, drawing power etc. credit audit helps the bank to know the quality of its credit, its weaknesses and the strengths. This in turn, helps the bank to adopt corrective measures where weaknesses have been pointed out and to focus further on strengths.

On the basis of outstanding loans and advances classification and provisioning for credit as per directives shall be provided as follows:

Table 2.6.4

Classification of Loan and Loss Provision

Classification of loan	**Loss Provision**
Pass	1%
Substandard	25%
Doubtful	50%
Loss	100%

Source: NRB Directives

2.7 REVIEW OF THE EARLIER STUDIES

Various studies have been conducted on the credit management and other related subjects of different institutions and banks. Reviews of some of the thesis works are presented below:

2.7.1 Study of Mr. Pawan Regmi

Mr. Pawan Regmi has submitted a thesis named “Credit Management of Commercial Banks with Reference to Nepal Bangladesh Bank and Bank of Kathmandu” on December 2004 (T.U.)
In his thesis, he stated liquidity matters, unfair competition between banks and service institutions, lack of enough profitable investment sectors, poor credit recovery process and lengthy and ineffective legal process in the recovery of credit as a statement of research problem.

Mr. Regmi has concluded in his thesis that, both of the banks (NB Bank and BOK) have sufficient liquidity. It shows that banks have not got investment sectors to utilized their liquid money; both of the bank have provided modern facilities to its customers and have used modern technology; non-performing credits are increasing, it concludes that credit is not satisfactory; because of increasing in non-performing credit bank should increase its provision for credit loss; lack ness in efficiency in the management of credit resulting the process of recover in slow motion; due to increase in the non-performing credit, banks' profit is decreasing year by year.

In his thesis he recommended some suggestions which are as follows:

- Cash and bank balance of both banks are high. Unused cash and bank balance do not provide return to the bank, therefore some percentage of cash and bank balance should be invest somewhere in profitable sectors.

- Non-performing assets of both banks are high. It doesn't provide return to banks therefore bank should increase its effort to recover its credit on time.

- Weighted average capital funds of both banks are lesser than the required as per directives issued by the NRB. Therefore he suggested to increase the amount of the capital fund for overcome out from panelize by NRB.

- Few customers are unsatisfied with the service charges and interest of credit; therefore he suggested that banks should decrease service charges and interest charges.

2.7.2 Study of Mr. Ganesh Bahadur Chand

Mr. Ganesh Bahadur Chand has submitted his thesis on "Credit Disbursement and Repayment of Agriculture Development Bank Nepal" on 1988 to T.U.

In his thesis, he stated problem of balance development; slowly ness in credit collection hinder the flow of capital required to develop the economic growth as a statement of research problem.

And the main objectives of his study were: to analyze the repayment situation, finding out the rate of growth of investment and to explain the possible causes of none and delayed repayment.

Mr. Chand has found some finding and recommendation which are as follows:

- There is systematic relationship between credit disbursement and repayment.

- Repayment situation is satisfactory on production inputs and agro-based industry, warehouse and marketing percentage of repayment to due to the farm mechanization and irrigation and tea horticulture and livestock, poultry and fisheries is much less satisfactory.
- ADB should have to play a significant role in such direction as to fulfill the credit demands of the rural areas. For effective credit recovery from the borrower or clients' credit should be channeled through the borrower groups.

2.7.3 Study of Mr. Kimananda Aryal

Mr. Kimananda Aryal has submitted a thesis named "An Evaluation of Credit Investment and Recovery of Financial Public Enterprise in Nepal" a case study of ADB/N.

In his thesis, he stated high interest rate of non-institutional sources; people are unable to pay their credit at fixed time. These institutions compel them to transfer their property to the moneylender resulting himself or herself as a landless person as a research statement of problem. ADB/N is one of the major financial institutions supporting for the people for the different purpose like agro, industries, tea, coffee, livestock farming etc. ADB/N provides the credit for individual and co-operative sector to all region of the country. Credit outstanding amount is increasing day by day but the collection amount is not good. However ADB/N has increased its effort to collect its credit. It is said that people who really need to do receive sufficient amount of credit from ADB/N, So, Mr. Aryal chose this bank to analyze the credit disbursement and recovery pattern of ADB/N.

From his research, he made some major findings which are shown below:

- Actual credit disbursement, collection and outstanding are increasing in decreasing rate.
- Yearly increase in credit disbursement is higher than that of collection
- Positive relation between credit disbursement and collection is 0.996.
- Targeted credit collection and disbursement fixed by planning and project department is not significantly different than the actual.
- Most of the customers are unaware of the policy of the bank.

Mr. Aryal has concluded in his thesis that, the borrower should be informed about the credit, its use and its payment procedures and schedule.

- Greater attention should be given to increase the credit collection and to collect old outstanding amount of credit and renewal of it.
- To accelerate the collection, credit should be followed continuously in a regular interval of time.
- The behavior of the personal should be strictly supervised in granting credit in proper investment proposal because of most the bad credit disbursement is due to weak decision of the personal.

2.8 RESEARCH GAP

Research gap is the difference between previous work done and the present work.. Earlier works conducted by the previous researchers are very useful and appreciated by personnel in various related field. The suggestions and recommendations given by the previous researchers help to improve and increase the necessary data for the related topic. Although, there is a long gap between previous studies and this study, the gap between earlier studies and this study is that, this study analyses the credit risk management system of commercial banks i.e Joint Venture Commercial Banks, in this study requirement of Loan Loss provisions are studied and its effect on activity and profitability of those JVBs, which are very crucial for the going concern strategy of those banks. For the analysis purpose this study mostly used **“Risk Index and Probability of Book Value Insolvency”** as suggested by Joseph F. Sinkey, Jr., in his book “**Commercial Bank Financial Management**”.

CHAPTER III

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research is a common parlance refers to a search for knowledge. The Webster International Dictionary gives a very inclusive definition of research as “a careful critical inquiry or examination in seeking facts and principles; diligent investigation in order to as certain something”. (Saravanavel; 1990:1)

A systematic methodology is required to pick an actual result of any study. Research Methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objectives in views. “Research Methodology is a way to systematically solve the research problem”. (Kothari; 1990:10) It may be understood as a science of studying how research is done scientifically.

This chapter deals with the methodology adopted in analysis of the data for the study. The population and sample, source and data collection technique, data analysis tools, the hypothesis to be tested and various limitations which are associated with the study have been discuss in this chapter. It helps us to find out accuracy, validity and suitability. The justification on the present study cannot be obtained without help of proper research methodology. The research methodology used in present study is briefly mentioned below.

3.2 RESEARCH DESIGN

A research design is the arrangement of condition for collection and analyze of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is an overall operational pattern of framework of the project that stipulates what information is to be collected from which source and by what procedures.

As the study focuses to evaluate credit risk management of the banks, the research design of the study is primarily related to the credit risk management of Nepalese joint venture banks. For the research work, the analytical and descriptive research designs are applied.

3.3 POPULATION AND SAMPLE

During the past decade, central bank has licensed more than a dozen of commercial banks to get established. So, all the commercial banks operating in Nepal are considered as the population. It is not possible to study all the data related with commercial banks because of the limited time period. Thus, here only six joint venture banks are taken out as a sample of all commercial banks.

Population:

Table 3.3.1

-All the Commercial Banks including Joint Venture Banks are Population.

S.N	Commercial Bank	Operation Date (A.D.)	Head Office	Paid Up Capital (Rs. in Million)
1	Nepal Bank Ltd.	1937/11/15	Kathmandu	380.40
2	Rastriya Banijya Bank	1966/01/23	Kathmandu	1172.30
3	**NABIL Bank Ltd.**	1984/07/16	Kathmandu	689.20
4	Nepal Investment Bank Ltd.	1986/02/27	Kathmandu	1203.00
5	**Standard chartered Bank Nepal Ltd.**	1987/01/30	Kathmandu	620.80
6	**Himalayan Bank Ltd.**	1993/01/18	Kathmandu	1013.50
7	**Nepal SBI Bank Ltd.**	1993/07/07	Kathmandu	874.50
8	**Nepal Bangladesh Bank Ltd.**	1993/06/05	Kathmandu	744.10
9	**Everest Bank Ltd.**	1994/10/18	Kathmandu	831.40
10	Bank of Kathmandu Ltd.	1995/03/12	Kathmandu	603.10
11	Nepal Credit & Commercial Bank Ltd.	1996/10/14	Siddhartha Nagar	1275.80
12	Lumbini Bank Ltd.	1980/07/17	Narangarh	750.00
13	Nepal Industrial & Commercial Bank Ltd.	1998/07/21	Biratnagar	792.00
14	Machhapuchhre Bank Ltd.	2000/10/03	Pokhara	821.70
15	Kumari Bank Ltd.	2001/04/03	Kathmandu	900.00
16	Laxmi Bank Ltd.	2002/04/03	Birgunj	732.00
17	Siddhartha Bank Ltd.	2002/12/24	Kathmandu	790.00
18	Agriculture Development Bank Ltd.	1968/01/02	Kathmandu	9278.00
19	Global Bank Ltd.	2007/01/02	Birgunj	700.00
20	Citizens Bank International Ltd.	2007/06/21	Kathmandu	560.00
21	Prime Commercial Bank Ltd.	2007/09/24	Kathmandu	700.00
22	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu	700.00
23	Sunrise Bank Ltd.	2007/10/12	Kathmandu	700.00
24	Development Credit Bank Ltd.	2001/01/23	Kathmandu	301.00
25	NMB Bank Ltd.	1996/11/26	Kathmandu	1000.00
Total Population : 25				

SOURCE : www.nrb.org.np

Sample:

-Among them Joint Venture Banks are taken as Sample.

Table 3.3.2

S.N	Commercial Bank	Joint Venture With
1	**NABIL Bank Ltd.**	National Bank Ltd. Bangladesh
2	**Standard chartered Bank Nepal Ltd.**	ANZ Grindlays Bank
3	**Himalayan Bank Ltd.**	Habib Bank Ltd. of Pakistan
4	**Nepal SBI Bank Ltd.**	State Bank of India
5	**Nepal Bangladesh Bank Ltd.**	IFIC Bank Ltd. of Bangladesh
6	**Everest Bank Ltd.**	Punjab National Bank of India
Total Sample : 6		

Therefore,

$$\textbf{Sample Percentage} = \frac{\textbf{Total No. of Sample}}{\textbf{Total No. of Population}} * 100\ \%$$

$$= 6 / 25 * 100$$

$$= 24\ \%$$

Similarly, financial statements of these six JVBs for 5 years from 2002/2003 to 2006/2007 have been taken as a sample for the same purpose.

3.4 TYPE AND SOURCES OF DATA

There are two kinds of data; primary data and secondary data. The primary data are those which are collected a fresh and the first time, and thus happen to be original in character. Secondary data, on the other hand are those, which have already been collected by some one else and already been passes through the statistical process.

To achieve the objectives of the study, both secondary as well as primary data has been used. Discussions and interview with existing credit takers, staff members of the related banks have been conducted to collect the primary data. In this regard questionnaire has been used as a primary data.

The secondary data has been collected through various published and unpublished documents of the concerned authorities. The sources of secondary data are as follows:

- Journals, newspaper and magazines.
- Government material related to this research.
- Unpublished master degree thesis related to this research.
- Books related to financial management.
- Websites

3.5 DATA COLLECTION TECHNIQUES

In order to collect the data, annual report published by banks and NRB economic report and other published statistical data are used, and to obtain the additional information, informal talk is made with bank personals. Similarly information is collected from bulletin, booklets and journals published from relevant banks and other sources also have been used. For collecting primary data and information, the schedules of questionnaire has been developed and provided to the related parties. For collecting data, questionnaire schedule was distributed to 68 parties and 60 replies have been received for this research purpose. 45 replies were received from individual credit customers and 15 from institutional customers. Their opinion have been taken and used as vital information for this research.

3.6 DATA ANALYSIS TOOLS

To achieve the objective of the study, various financial and statistical tools have been employed. The analysis of data has been done according to pattern of available data. The descriptions of financial tools as well as statistical tools are described below:

3.6.1 Financial Tools

Analysis of financial statements helps to take managerial and financial decisions. In present research, various financial tools have been employed for the sake of analysis. The basics tool used for analysis is ratio analysis. Beside it risk index technique also has been used.

Ratio analysis has been accepted as the most dominant financial tool to analyze and interpret the financial statements. The relationship between two figures expressed mathematically is known as financial ratio. It is the systematic use of ratio to interpret the financial statement so that the strength and weakness of the firms as well as its historical performance and current financial conditions can be determine. Thus ratio is defined as “the indicated quotient of two mathematically expressions, and the relationship between two or more things”. (Webster’s New Collegiate Dictionary; 1975: 985)

Alexander Wall has considered as the pioneer of ratio analysis. He presented after serious thinking, a detailed system of ratio analysis in 1909. He explained that the work of interpretation can be made easier by establishing quantitative relationship between the facts given in the financial statement.

Ratio analysis has various uses such as it is useful in financial position which helps the banks and other financial institutions in lending and making investment decisions; for forecasting purpose and making plans; for locating weak spot in business and also in comparison of performance with the contemporary firm or department. In spite of uses, there are some limitations, which restrict its uses. If data are incorrect, it present false result; there is no common standard of comparison. But despite that its significance is much accepted in analyzing the financial performance of any firm.

A large number of ratios can be generated from the components of profit and loss account, and balance sheet. For this study, ratios are categorized into the following major headings:

A. Activity Ratio

Activity ratio or utilization ratio is employed to measure the efficiency of the bank manages and utilize its resources. Hence, these ratios are also called efficiency ratio, assets utilization management ratio or turnover ratio.

This ratio indicates the efficiency, speed and rapidly with which assets have been used or converted into sales. The greater the ratio is the more efficient the utilization of resources. Various ratios are examined under this ratio. Some of them which are useful for this study shown below:

Credit and Advances to Total Deposits Ratio:

Commercial banks utilize the outsider's fund for profit generation purpose. Credit and advances to deposit ratio shows whether the banks are successful to utilize the outsider's funds for profit generation on the credit and advances or not. Generally, a high ratio reflects higher efficiency in utilization of outsiders fund and vice-versa. The ratio can be calculated by using the following formula:

$$\textbf{Credit and Advances to Total Deposits} = \frac{\textbf{Credit and Advances}}{\textbf{Total Deposits}}$$

Credit and Advances to Total Assets Ratio:

It measures the ability in mobilizing total assets into credits and advances for generating income. A higher ratio is considered as and adequate symbol for effective utilization of total assets of banks to credit and advances of which creates opportunity to earn more and more. This ratio can be calculated as follows:

$$\textbf{Credit and Advances to Total Assets Ratio} = \frac{\textbf{Credit and Advances}}{\textbf{Total Assets}}$$

Performing Assets to Total Assets Ratio:

It tells the percent of performing assets on total assets. It is useful to know the fact that whether the good credit is increasing or not. We can generate more earning by increasing good credit and can be reducing bad and inferior credit. It teaches us to invest sources of final only on good credit. This ratio can be calculated by using following formula:

$$\textbf{Performing Assets to Total Assets Ratio} = \frac{\textbf{Performing Assets}}{\textbf{Total Assets}}$$

B. Profitability Ratio

Profitability ratio indicated the degree of success in achieving desired profit. Profit is the difference between revenue and expenses over a certain period of time. Profit is ultimate output of company and its existence is not justified if it fails to make sufficient profit. So, profits are essential for every firm to survive and to grow over a long period of time.

Profitability ratios are the indicators of degree of managerial success in achieving firm’s overall goals. (Pradhan; 1996, p.41), it shows the overall efficiency of the business concern. The following ratios are calculated under the profitability ratio:

Return on Total Assets Ratio:

Return on total assets explains the contribution of assets to generating net profit. This ratio indicates efficiency towards of assets mobilization. In other word, ROA is an overall profitability rate, which measures earning power and overall operation efficiency of a firm. This ratio can be calculated by using following formula:

$$\textbf{Return on Total Assets} = \frac{\textbf{Net Profit after Tax}}{\textbf{Total Assets}}$$

Return on Equity:

The equity capital of any bank is its owned capital. The prime objective of any bank is wealth maximization i.e. to earn high profit, there by maximizing return on its equity capital. This ratio shows how efficiently bank has utilized shareholders' fund to raise the profit. The higher ratio represents the higher efficiency of the bank in utilizing long term funds of shareholders. It can be calculated as follows:

$$\textbf{Return on Equity} = \frac{\textbf{Net Profit after Tax}}{\textbf{Shareholders' Equity}}$$

3.6.2 Statistical Tool

For supporting the study, statistical tools such as risk index, probability of book value insolvency, co-efficient of correlation, probable error, regression analysis and hypothesis techniques have been used under this study.

Risk Index :

Basically credit risk management is reviewed by two approaches; first approach is micro approach. This approach is generally out by bank employee, internal auditors who can collect all and every related information to credit management. Another approach is macro approach; this is faster but less accurate way of estimating risk and loss exposure of bank according to Joseph F. Sinkey, in his book Commercial bank Financial Management.

Risk index is based on macro approach to review and appraise the credit management process. It measure the bank risk exposure related to credit based on the financial information. This index, which widely used and practiced in the bank for review and appraisal, was first developed and used by Hannen and Hanweck(1988). It has been applied by Liang and Savage (1990), Sinkey and Nash (1993). Risk index can be computed by using following formula:

Risk Index = [E (ROA) + CAP]/ S.D ROA

Where,

E (ROA) = Expected return of assets

CAP = the inverse of equity multiplier

S.D ROA = Standard deviation of ROA

Lower the RI impels riskier bank where as higher RI impels safer bank. The resultant figure as per group average, or above or below the average shows the strengths and weakness of the bank's credit and administrative policy and practices.

Probability of Book Value Insolvency:

This figure is calculated by using the value of RI, probability of book value insolvency can be expressed as $½(RI)^2$. The resultant figure shows the thickness of the book value cushion a bank has available to absorb accounting losses.

In both cases, risk index and probability of book value insolvency, a bank with a high expected ROA, a strong capital position and stable earnings, has a relatively high of RI and a small chance of exhausting its book value insolvency.

Coefficient of correlation:

Correlation may be defined as a degree of linear relationship existing between two or more variables. Correlation is of three types. They are simple, partial and multiple correlations. Correlation may be positive, negative and zero too. Correlation can be classified as linear and non-linear.

Coefficient of correlation is an important measure to describe how one variable explains another. It is the simplest method of ascertaining the correlation between two variables. It is not influenced by the size of the extreme items. Karl Pearson's coefficient of correlation between variable X and Y is usually denoted by 'r' and is defined by

$$\mathbf{r = \frac{n\sum XY-(\sum X)(\sum Y)}{\sqrt{\{n\sum X^2-(\sum X)^2\}\{n\sum Y^2-(\sum Y)^2\}}}}$$

Where,

N = No. of observation of X and Y

$\sum X$ = Sum of the observations in series X

$\sum Y$ = Sum of the observations in series Y

$\sum X^2$ = Sum of square of the observations in series X

$\sum Y^2$ = Sum of square of the observations in series Y

$\sum XY$ = Sum of the product of the observations in series X and Y

Interpretation of Correlation Co-efficient:-

(i) It lies always between +1 and -1.

(ii) When r = +1 ; there is perfect positive (+ve) Correlation.

(iii) When r = -1 ; there is perfect negative (-ve) Correlation.

(iv) When r = 0 ; there is no Correlation.

(v) When r lies between 0.7 to 0.999 or -0.7 to -0.999 ; there is a high degree of +ve Correlation (or high degree of –ve Correlation).

(vi) When r lies between 0.5 to 0.699 ; there is a moderate degree of Correlation.

(vii) When r is less than 0.5 ; there is a low degree of Correlation.

<u>Probable Error:</u>

Probable error of the correlation coefficient denoted by P>E is the measure of testing the reliability of the calculated value of correlation coefficient(r). P.E is defined by:

$$\mathbf{P.E = \frac{0.6745(1- r^2)}{\sqrt{n}}}$$

With the help of P.E, it is possible to determine the reliability of the value of the co-efficient. Decision rule for significances test are;

If r<P.E, it is insignificant. So, perhaps there is no evidence of correlation.

If r>P.E, it is significant.

If r doesn't satisfy either of the above two conditions then the relation is inconclusive.

Regression Analysis :

Regression analysis is used as a tool of determining the strength of relationship between two variables. Thus, it is a statistical device, with the help of which we can predict the value of one variable when the value of other variable is known. The unknown variable, which we have to predict, is called dependent variable and the variable which value is known is called independent variable. (Shrestha & Silwal; 2057: 249-250).

The general form of simple regression line is

$$Y = a + bX$$

Where,

Y = Dependent variable

X = Independent variable

a = Intercept of Y on X

b = Slope of the regression line of the coefficient of independent variable

In this study, simple regression analysis has been used to study the influence of PLL to ROA as well as ROE. Therefore PLL is the dependent variable while ROA and ROE are concerned as independent variables.

Test of Hypothesis

The test of hypothesis is a process of testing of significance regarding the parameter of the population on the basis of the sample drawn from the population. The computed value of the statistics may differ from the hypothetical value of the parameter due to sampling fluctuation. If the differences are small, we consider that has arisen due to sampling fluctuation. Hence the difference is considered to be insignificant and the hypothesis is accepted. If the difference is large we consider that it has not arisen due to sampling fluctuation but it is due to some other reasons. Hence the difference is considered to be significant and the hypothesis is rejected.
(Shrestha and Manandhar; Valley Publishers, p. 6-1)

Another type to measure the statistical analysis is significance of the slope of the line has been calculated, for this purpose, null hypothesis has been formulated, as the slope of the line is zero. This can be formulated as follows:

$$\mathbf{Sy} = \sqrt{\frac{\sum(Y^2)-a\sum(Y)-b\sum(XY)}{N-2}}$$

Where,

Sy indicate the standard error of the y value

The Sy value results are again put in calculating the standard error of estimate of the slope of the line. That is;

$$Sb = \frac{Sr}{\sqrt{\sum(X-\sum X/n)^2}}$$

The resultant figure is put it down in the following formula and compares it with the tabulated value of determines statistically significant of the slope of the line. That is;

$$Tb = \frac{b-0}{Sb}$$

Where, Tb indicates the calculated t-value

CHAPTER − IV

PRESENTATION AND ANALYSIS OF DATA

This chapter deals with the presentation and analysis of relevant data of the JVBs of Nepal in order to fulfilled the objectives of the study. To obtain best result, the data have been analyzed according to the research methodology as mentioned in third chapter.

The purpose of this chapter is to introduce to the mechanics of data analysis and interpretation. Data analysis is the relationships or differences supporting or conflicting with original or new hypothesis should be subjected to statistical test of significance to determine with what validity data can be served to indicate any conclusion. This chapter divides into two parts; analysis within primary data and analysis within secondary data of joint venture banks and its findings have been discussed in this chapter.

4.1 PRESENTATION AND ANALYSIS OF PRIMARY DATA

For collecting primary data and information, the schedules of questionnaire has been developed and provided to the related parties. For collecting data, questionnaire schedule was distributed to 68 parties and 60 replies have been received under research time period. 45 replies were received from individual credit customers and 15 from institutional customers. Their opinion have been taken and used as vital information for this research.

4.1 PRESENTATION AND ANALYSIS OF PRIMARY DATA

i. Frequencies of responses of credit customers of the JVBs of Nepal for the question of **"Do you know all information about bank rules, regulations and policies?"**

Source: Questionnaire No.1 (Annex-I) Table 4.1.1

Table no.4.1.1 shows that 6 out of 10 credit customers of the SCBNL said they were up to date with the banking policies and remaining said "No". 6 out of 10 customers were well known about the banking policies of the NABIL and remaining were little unknown about that. 70%

sample of the credit customers of EBL said they have the all necessary information about the bank's policies and remaining said 'no'. 50% of the sample of the customers of NSBIBL said they were up to date with the banking policies and 50% of the credit customers were little unknown about the policies. 6 out of 10 customers of the HBL said they were up to date with the banking policies. 5 out of 10 customers of the NBBL were well known about the banking policies and remaining were little unknown.

ii. Frequencies responses of credit customers of the JVBs of Nepal for the question of "**Are you satisfied with the interest rate coated by bank?"**

Source: Questionnaire No. 2 (Annex-I) Table 4.1.2

Table no. 4.1.2 shows that 6 out of 10 customers of the SCBNL were satisfied with the bank interest rate and remaining were little unsatisfied 3 customer were unsatisfied and 1 customer did not give clear response. 6 out of customers of the NABIL were satisfied with the bank's interest rate and remaining customers were not satisfied. Only 60% of the samples of the customers of EBL were satisfied with the interest rate and remaining 40% sample were actually unsatisfied. 50% of the sample of NSBIBL said they were satisfied with the bank's interest rate 40% were unsatisfied and 1 customer did not give clear response. Only 3 out of 10 customers of the HBL were satisfied with the bank's interest rate and 70% customers were little unsatisfied with the interest rate. For the NBBL, only 40% of the customers were satisfied with the bank's interest policies 40% were unsatisfied and 2 was in confusion stage.

iii. Frequencies of Responses of Credit Customers of the JVBs of Nepal for the question of **"Does any Bank officer visit your project site and study at the time of granting loan?"**

Source: Questionnaire No.3 (Annex-I) Table 4.1.3

Table no. 4.1.3 shows that 80% sample of SCBNL told that bank officer visited their project site at the time of granting loan & remaining customers haven't gave the proper response about the bank officer visit. 90% sample of the NABIL accepted the visit of the officer at the time of loan granting, 1 customer was unknown about the visit of officer. 90% of the sample of the EBL said the bank officer visited their project site at the time of loan granting, 1 customer haven't gave the clear response. 60% of the sample of the NSBIBL said "Yes" 20% said "No" and 20% did not give clear response. 70% of the sample of the HBL said that the bank officer visited their project site at the time of granting loan and 10% customers said there isn't any visit of bank officer at the time of loan granting and remaining 20% did not give clear response. 60% of NBBL accepted the visit of officer at the time of loan granting, 30% customers said 'No' and 1 customer was unknown about the visit of the bank officer.

iv. Frequencies responses of credit customers of the JVBs of Nepal for the question of **"Is the service charge taken by the bank satisfactory?"**

Source: Questionnaire No. 4 (Annex-I) Table 4.1.4

Table no. 4.1.4 shows that services charge taken at the time of issuing credit is high from the view point of customers of each bank. 60% customers of SCBNL are satisfied with the charges. 40% customers were unsatisfied. 60% customers of NABIL were satisfied with the service charge taken by bank at the time of issuing loan. 30% were unsatisfied and 10% were did not give clear response. 30% customers of EBL thought that charge taken by bank at the time of issuing loan is satisfactory 50% were unsatisfied and rest 20% in confusion. 60% customers of NSBIBL and HBL are quite satisfied with the bank. 40% customers of NSBIBL and HBL were unsatisfied, 40% customers of NBBL are satisfied with these charges taken by the bank and 50% were unsatisfied while 10% did not give clear vision about this matter. Based on above calculation, we can say that, large amount of customers are not satisfied with these charges taken by the banks when they grant the loan. So, all the banks have to think that matter seriously.

v. Frequencies responses of credit customers of the JVBs of Nepal for the Question of **"Do you feel that you have got full cooperation and necessary informational support from the bank officers?"**

Source: Questionnaire No. 5 (Annex-I) Table 4.1.5

Table no. 4.1.5 shows that 7 out of 10 customers of the SCBNL were satisfied with the bank officers' cooperation, 1 was unsatisfied and left 2 did not gave the clear response. 9 out of 10 customers of NABIL were satisfied with the cooperation given by the bank officers' of NABIL and 1 customer did not responded clearly. 70% sample of customers of EBL were satisfied with the bank officers' cooperation and 30% customers from the sample were unsatisfied the bank officers' behavior. 6 out of 10 customers of NSBIBL were satisfied with the bank officers' cooperation, 2 of them were unsatisfied and rest 2 did not responded clearly. 6 out of 10 customers of HBL were satisfied with the cooperation of the bank officers,1 customer was unsatisfied and 3 of them did not responded clearly. 60% samples of the customers of NBBL were satisfied with the cooperation of the bank officers and 40% customers were unsatisfied.

vi. Frequencies responses of credit customers of the JVBs of Nepal for the question of **“Have you received any notice before credit expiration date or maturity?”**

Source: Questionnaire No. 6 (Annex-I) Table 4.1.6

Table no 4.1.6 shows that almost 90% of the sample of SCBNL said they received notice of repaying credit from the bank and 1 customer did not responded clearly, he said that it was his first time credit taken from the bank. 8 out of 10 customers from the NABIL accepted that they received information of repaying credit from the bank and 1 customer said “No” and the rest 1 customer did not clearly response on this matter. 80% of the sample of the customers of EBL received notice of repaying credit from the bank, 10% said ‘No’ and 10% did not responded clearly. 70% of the sample of the customers of NSBIBL received notice of repaying credit from the bank, 10% said ‘No’ and 20% did not responded clearly. 8 out of 10 customers of the HBL received information of repaying credit from the bank and rest 2 were did not responded clearly. 70% of the customers of the NBBL received notice of repaying credit from the bank, 20% customers did not responded clearly and 1 customer clearly said ‘No’.

vii. Frequencies responses of credit customers of the JVBs of Nepal for the question of **“Have you utilized the entire credit to the prescribed sector as specified at the time of taking loan?”**

Source: Questionnaire No. 7 (Annex-I) Table 4.1.7

Table no. 4.1.7 shows that 100% sample of the credit customers of SCBNL utilized the credit amount for the same sector as specified at the time of taking loan. Same thing happened with the NABIL. 80% customers of EBL utilized the credit amount for the same sector as specified at the time of taking loan and 20% customers did not response clearly. 90% sampled customers of the NSBIBL were said that they utilize the credit amount for the same sector as specified at the time of taking loan and 1 customer said he had not utilized all the credit amount for the same purpose. 80% customers of HBL utilized the credit amount for the same sector as specified at the time of taking loan and rest 20% did not gave the clear response. 80% sampled credit customers of NBBL said that they utilized the credit amount as specified at the time of credit taking 10% said “No” and rest 1 did not clearly respond.

viii. Frequencies responses of credit customers of the JVBs of Nepal for the question of **“Are you satisfied with the bank and its policy?”**

Source: Questionnaire No.8 (Annex-I) Table 4.1.8

Table no. 4.1.8 shows that 8 out of 10 sampled customers of SCBNL said that they were satisfied with the bank and 2 customer did not responded clearly. 100% sampled customers of NABIL were satisfied with the bank. 80% customers of EBL were satisfied with the bank and 10% were not satisfied whereas 10% sampled customers did not gave the clear response. 90% customers of NSBIBL were satisfied with the bank whereas 10% sampled customers did not gave the clear response. 8 out of 10 sampled customers of the HBL were satisfied with the bank, 1 was unsatisfied and 1 sampled customer did not responded clearly. 5 out of 10 sampled customers of NBBL were satisfied with the bank remaining customers were unsatisfied with the bank.

ix. Frequencies responses of credit customers of the JVBs of Nepal for the question of **“DO you want to take further credit from the bank?”**

Source: Questionnaire No.9 (Annex-I) Table 4.1.9

Table no. 4.1.9 shows that 9 of 10 sampled customers of the SCBNL responded that they would like to take credit from the same bank in future and 1 customer did not respond clearly. 8 out of

10 sampled customers of the NABIL said that they would like to take credit from the bank again and 2 customers did not responded clearly. 80% sampled customers of the EBL responded that they would like to take credit from the same bank in the near future and 10% customers did not responded clearly whereas 10% customers clearly said that they were not going to make any relation with the bank in future. 8 out of 10 sampled customers of NSBIBL were interested to take further credit from the same bank and 2 of them were not interested. 80% sampled

customers HBL responded that they would like to take credit from the same bank in the near future, 1 said ‘No’ and remaining 1 customer did not responded clearly. 70% sampled customers of NBBL responded that they would like to take credit from the same bank in future, 10% customers said ‘No’ and remaining 20% customers did not responded clearly.

x. Frequencies responses of credit customers of the JVBs of Nepal for the question of **“Are you thinking as a satisfied customer of the bank or want to switch off the bank in the future?”**

Source: Questionnaire No. 10 (Annex- I) Table 4.1.10

Table no. 4.1.10 shows that 1 from the sampled customers of SCBNL would change the bank in near future and rest would like to continue their credit term with the bank, 100% sampled customers said they would like to attach with the bank NABIL. There was not found any customer from the sample who wants to switch off the bank. Only 1 customer from the sample of EBL responded clearly that he would change the bank next time and remaining customers would like to attach with the bank. 1 out of 10 sampled customers from the NSBIBL responded clearly that they would like to change the bank next time and remaining customers would like to attach with bank in near future too. Only 1 customer from the sample of HBL responded clearly that he would change the bank next time and remaining sampled customers would like to attach with the bank.10% sampled customers of the NBBL would like to switch off the bank in near future and 70% sampled customers said that they would attach with the bank in near future too whereas 20% sampled customers did not responded clearly for this question.

4.2 PRESENTATION AND ANALYSIS OF SECONDARY DATA

- The secondary data are those which are collected through various published and unpublished documents of the concerned authorities. The sources of secondary data are as follows:
  - Journals, newspaper and magazines.
  - Government material related to this research.
  - Unpublished master degree thesis related to this research.
  - Books related to financial management.
  - NRB Directives.

- BASEL -II
- Websites.

4.2.1 Company wise Analysis:

As per directives loan and advances should be categorizes into performing loan and non performing loan. In non-performing loan also it must be categorizes into substandard, doubtful and loss. For these loans provision should be maintained which must be 25, 50, and 100% respectively.

A. Standard Charter Bank

Table 4.2.1(A_1)

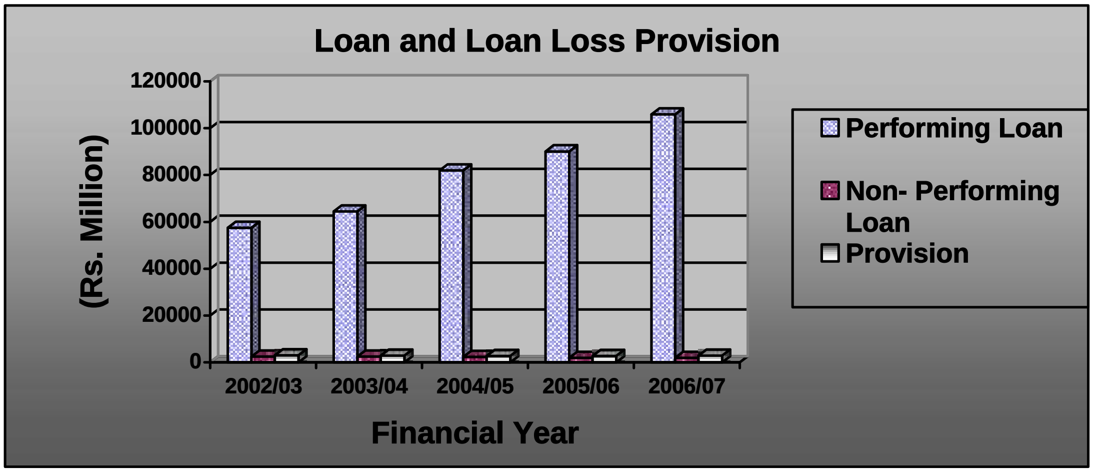
Loan and Loan Loss Provision of SCBL

(Rs in Million)

Year	Performing Loan	Non-performing Loan	Provision
2002/2003	57522.14	2479.49	3043
2003/2004	64416.64	2521.98	2836
2004/2005	81945.60	2263.10	2777
2005/2006	90103.48	1959.32	2709
2006/2007	105931.31	1970.17	2875

Source: Annual Report of SCBNL

Figure 4.2.1(A_1)
Loan and Loan Loss Provision of SCBL



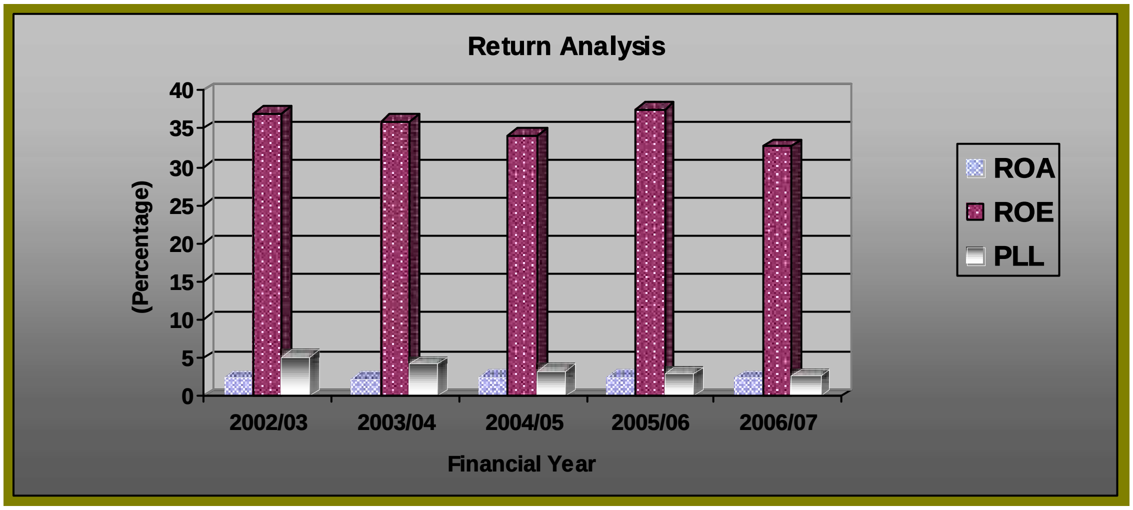
As per above figure of loan and loan loss provision of Standard Chartered Bank Nepal Ltd, its performing loan is in increasing trend and non-performing loan is in decreasing. Difference between performing and non-performing loan is very high, which shows that bank is maintaining good loan position and its credit risk position is also maintained.

Table 4.2.1(A_2)
Return Analysis of SCBNL

Year	ROA	ROE	PLL
2002/2003	2.42	37.03	5.07
2003/2004	2.27	35.96	4.24
2004/2005	2.46	34.07	3.3
2005/2006	2.56	37.55	2.94
2006/2007	2.42	32.68	2.69

Source: Annual Report of SCBNL

Figure 4.2.1(A_2)
Return Analysis of SCBNL



As per above figure of return analysis, it shows that there is no negative effect of loan loss provision on ROA and ROE. Trend of return on equity and return on assets is stable. ROE is slightly fluctuated than ROA but it is not decreased as bank has to maintain the loan loss provision.

B. <u>Himalayan Bank Ltd.</u>

Table 4.2.1(B_1)
Loan and Loan Loss Provision of HBL

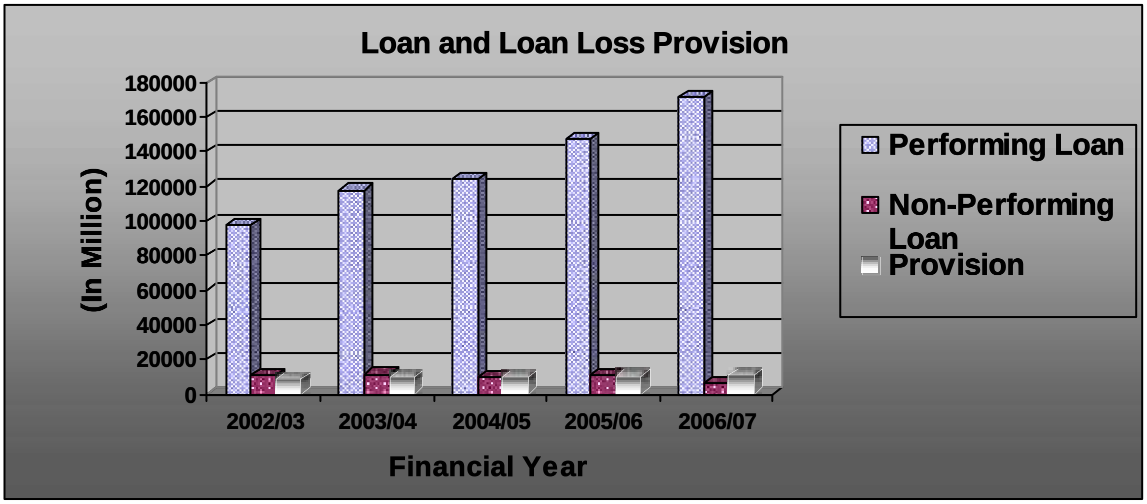
(Rs in million)

Year	Performing Loan	Non-performing Loan	Provision
2002/2003	97517.60	10928.40	8427
2003/2004	117721.70	11474.60	9677
2004/2005	124498.20	10013.50	9371
2005/2006	147212.18	10407.57	10266
2006/2007	171521.08	6416.15	11194

Source: Annual report of HBL

Figure 4.2.1(B_1)

Loan and Loan Loss Provision of HBL



As per above figure on loan loss provision of HBL, its performing loan is in increasing trend and difference between the performing loan and non performing loan is very high which shows that the bank is able to maintain the good ratio of performing loan and the percentage of loan loss provision is also as per NRB rules, and its credit risk position is also maintained.

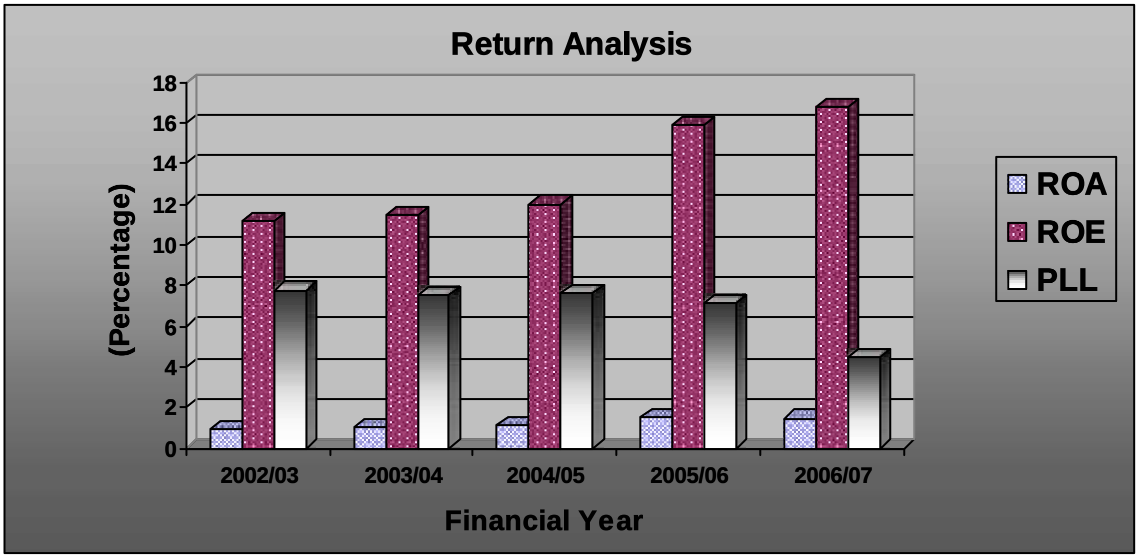
Table 4.2.1(B_2)

Return Analysis of HBL

Year	**ROA**	**ROE**	**PLL**
2002/2003	0.91	11.13	7.77
2003/2004	1.06	11.48	7.49
2004/2005	1.11	12.00	7.63
2005/2006	1.55	15.85	7.1
2006/2007	1.47	16.76	4.47

Source: Annual report of HBL

Figure 4.2.1(B_2)
Return Analysis of HBL



The above figure of HBL shows that the trend of return on assets and equity both are in increasing trend. There is no negative effect of loan loss provision on ROA and ROE, which proved that there is no negative impact of PLL on ROA and ROE.

C. <u>Nepal SBI Bank Ltd.</u>

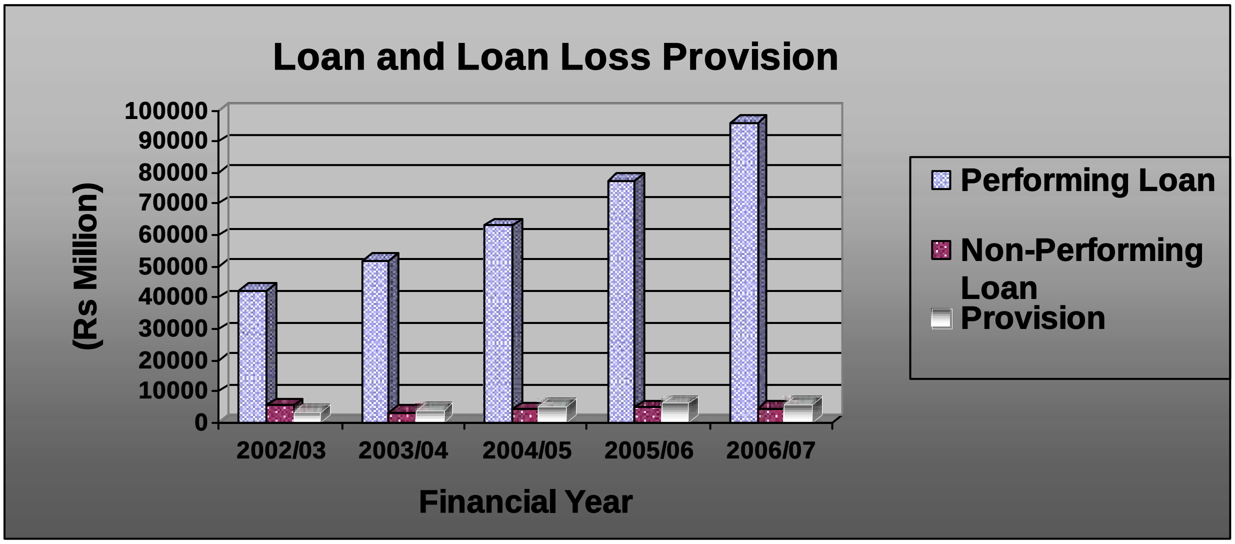
Table 4.2.1(C_1)
Loan and Loan Loss Provision of NSBIBL

(Rs in million)

Year	Performing Loan	Non-performing Loan	Provision
2002/2003	42341.70	5616.70	3271
2003/2004	51860.12	3458.21	3882
2004/2005	62983.30	4410.17	5255
2005/2006	77361.20	5053.37	6147
2006/2007	96062.96	4587.56	6046

Source: Annual report NSBI Bank Ltd.

Table 4.2.1(C_1)
Loan and Loan Loss Provision of NSBIBL



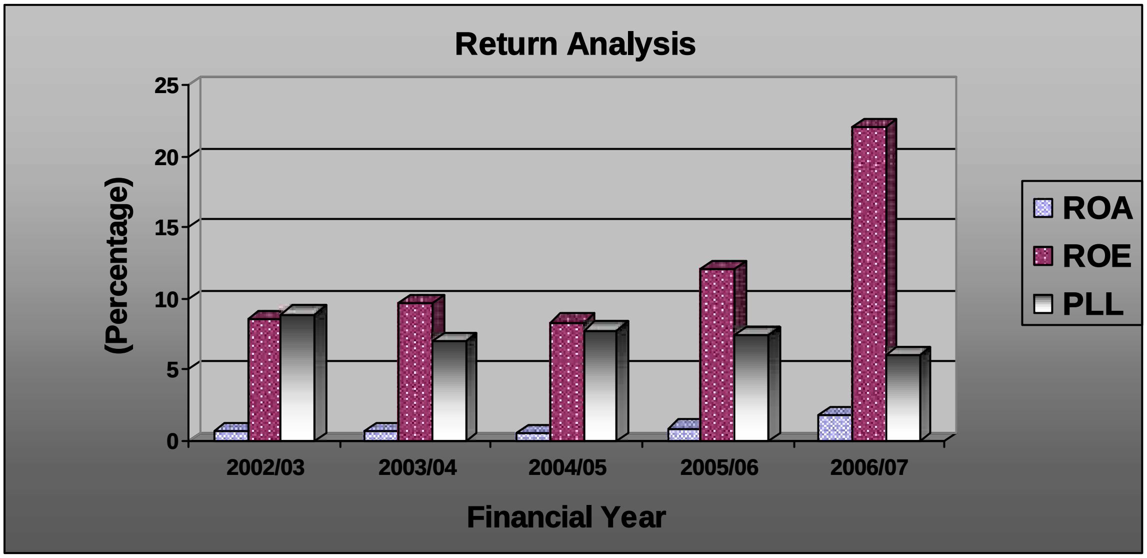
As per above figure of loan loss provision of Nepal SBI Bank Ltd., its performing loan is in increasing trend and difference between the performing loan and non performing loan is very high which show that the bank is maintaining good loan position and its credit risk position is also maintained.

Table 4.2.1(C_2)
Return Analysis of NSBIBL

Year	ROA	ROE	PLL
2002/2003	0.64	8.55	8.9
2003/2004	0.72	9.71	7.02
2004/2005	0.55	8.33	7.8
2005/2006	0.90	12.04	7.46
2006/2007	1.83	22.10	6.01

Source: Annual report of NSBIBL

Figure 4.2.1(C_2)
Return Analysis of NSBIBL



Above analysis of return shows that there is no negative effect of loan loss provision on return on assets and return on equity. Trend of return on equity is fluctuated and return on assets is stable excluding of financial year 2006/07. ROE is very high in year 2006/07.Sufficient Provision is also maintained by the bank . NSBIBL's net profit for 2004/05 is very low which effects bank's ROA and ROE

D. Nabil Bank Ltd.

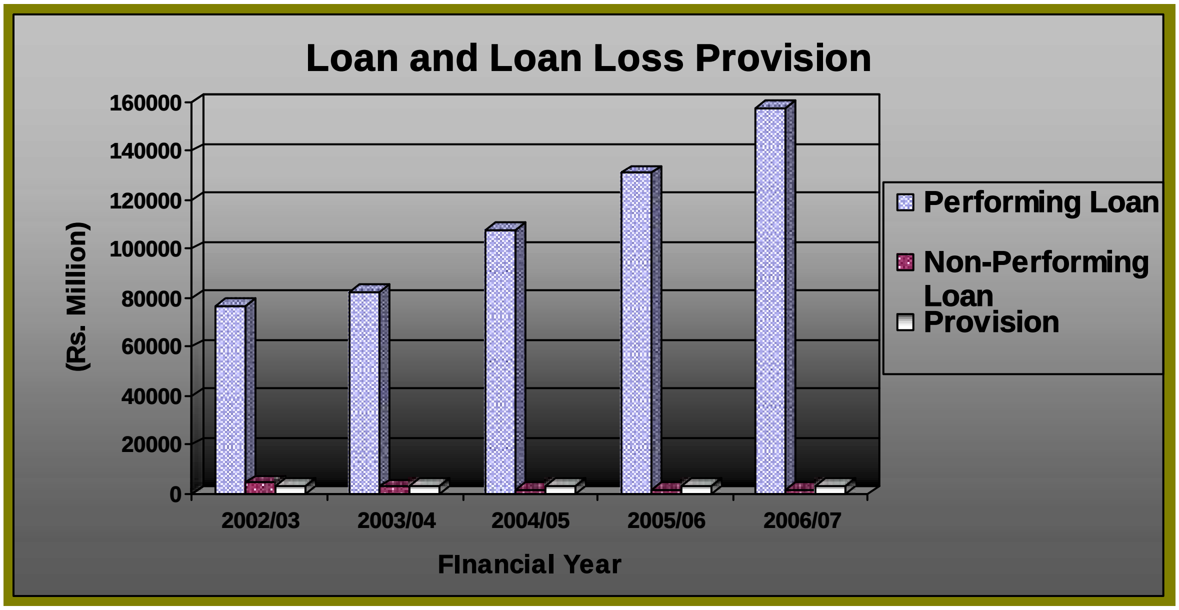
Table 4.2.1(D_1)
Loan and Loan Loss Provision of NABIL

(Rs in million)

Year	Performing Loan	Non-performing Loan	Provision
2002/2003	76640.50	4496.30	3577
2003/2004	82619.78	2866.80	3586
2004/2005	108022.30	1445.07	3606
2005/2006	130961.58	1826.24	3562
2006/2007	157247.30	1782.94	3572

Source: Annual Report of NABIL

Figure 4.2.1(D_1)
Loan and Loan Loss Provision of NABIL



As per above table of loan and loan loss provision NABIL Bank, its performing loan is in increasing trend and difference between the performing and non-performing loan is very high which indicates that bank is maintaining good loan position and its credit position is also maintained.

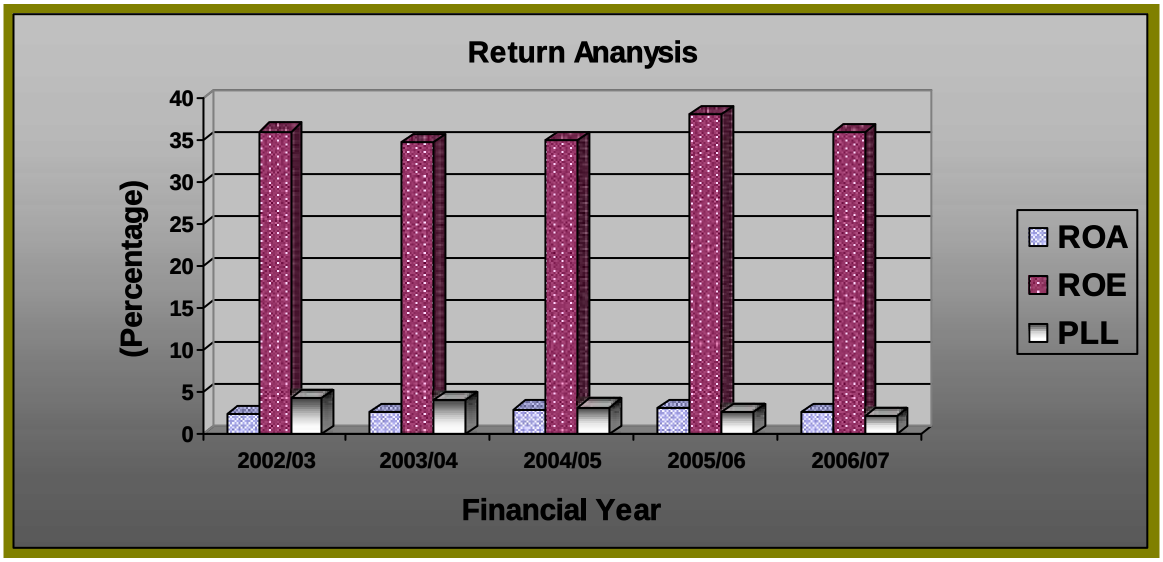
Table 4.2.1(D_2)
Return Analysis of NABIL

Year	ROA	ROE	PLL
2002/2003	2.43	36	4.41
2003/2004	2.76	34.7	4.2
2004/2005	3.06	35	3.29
2005/2006	3.23	38	2.68
2006/2007	2.72	35.9	2.25

Source: Annual report of NABIL

Table 4.2.1(D_2)

Return Analysis of NABIL



Above analysis of return shows that there is no negative effect of loan loss provision on return on assets and return on equity. Trend of return on equity and assets is stable. ROE in financial year 2005/06 is slightly high which is good sign for that year of the bank .Provision is in accordance to NRB circular.

E. <u>Everest Bank Ltd.</u>

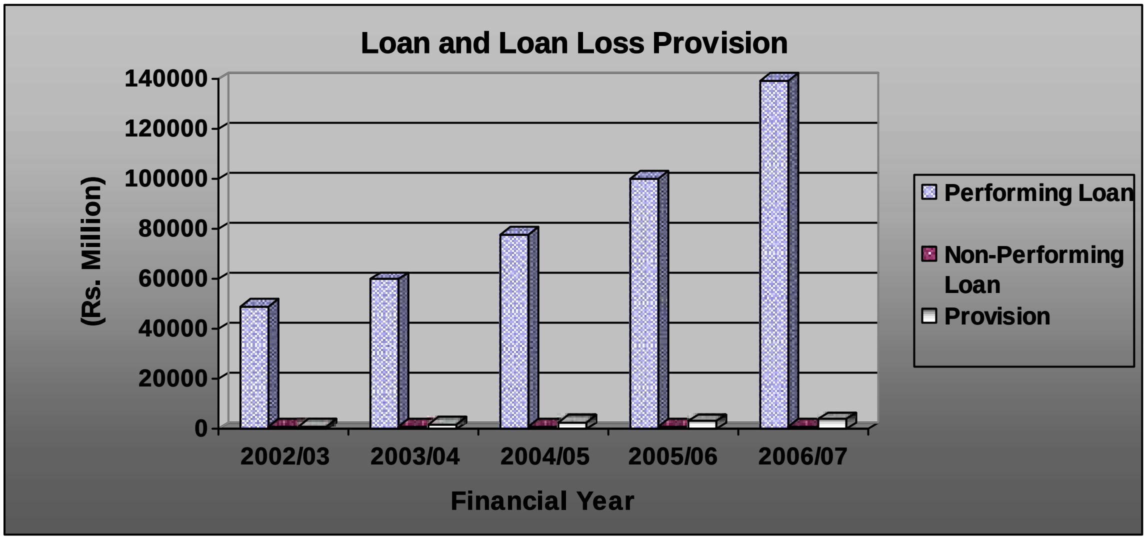
Table 4.2.1(E_1)
Loan and Loan Loss Provision of EBL

(Rs in million)

Year	**Performing Loan**	**Non-performing Loan**	**Provision**
2002/2003	49383.90	1111.90	1411
2003/2004	59910.80	1047.60	2117
2004/2005	77712.80	1288.10	2814
2005/2006	100078.18	1292.36	3349
2006/2007	139695.07	1131.78	4186

Source: Annual report of EBL

Figure 4.2.1(E_1)
Loan and Loan Loss Provision of EBL



As per above figure on loan loss provision of Everest Bank Limited, its performing loan is in increasing trend and non-performing loan is in decreasing trend which is bright situation for the survival of the bank. Bank's loan position shows that it is able to manage the credit risk position and bank also following the NRB regulations, which is shown by the amount of loan loss provision.

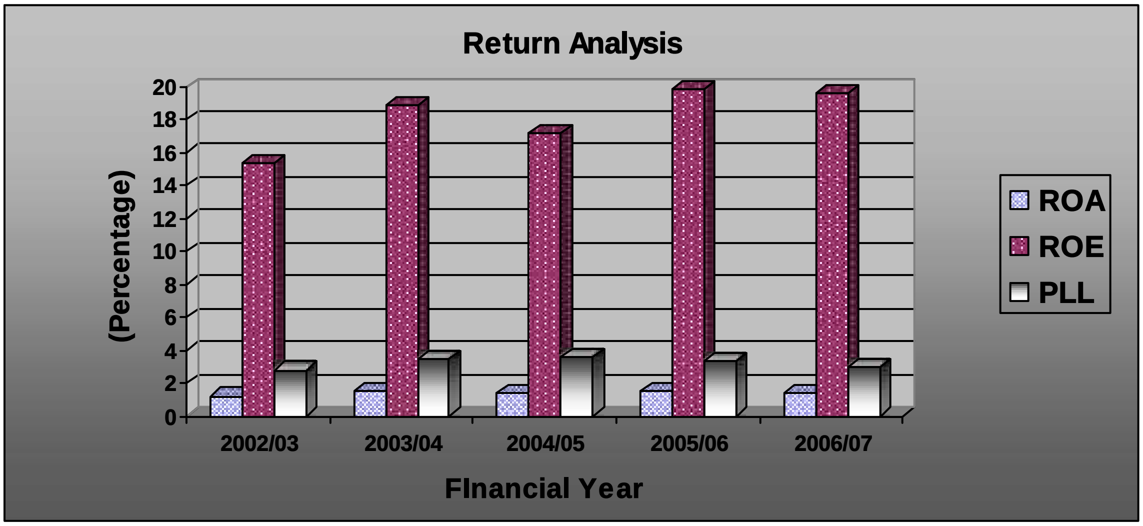
Table 4.2.1(E_2)
Return Analysis of EBL

Year	ROA	ROE	PLL
2002/2003	1.20	15.34	2.79
2003/2004	1.50	18.84	3.47
2004/2005	1.40	17.11	3.56
2005/2006	1.50	19.82	3.3
2006/2007	1.40	19.57	2.97

Source: Annual report of EBL

Table 4.2.1(E_2)

Return Analysis of EBL



The above figure of Everest Bank Limited shows that the trend of the returned on assets and returned on equity is increasing trend but ROE in year 2004/05 and 2006/07 are in decreasing trend. But there is no negative effect of loan loss provision on return on equity and return on assets, which proved that there is no negative impact of PLL and ROA and ROE.

F. Nepal Bangladesh Bank Ltd.

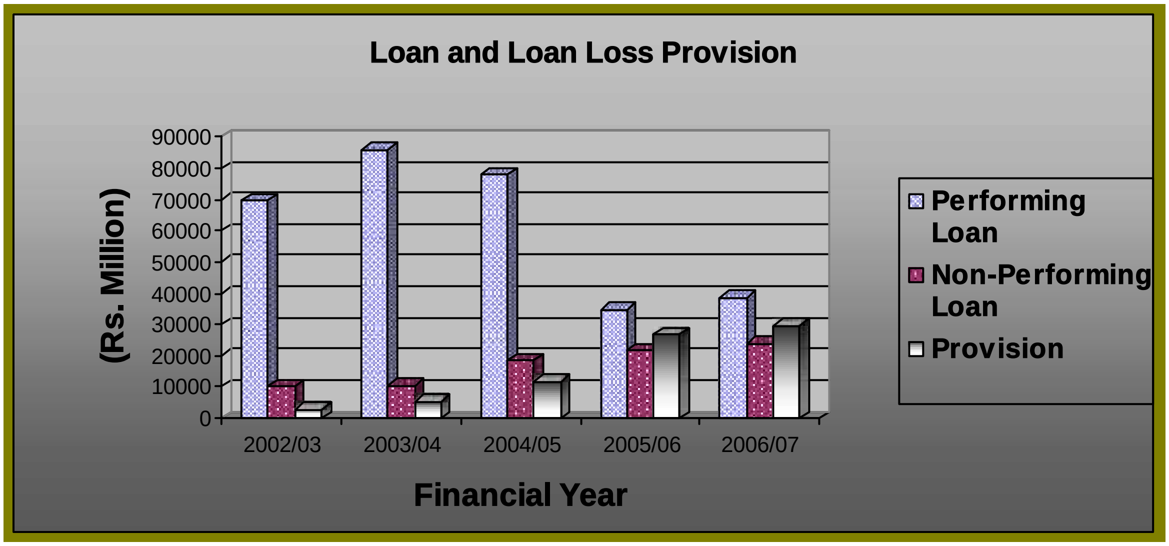
Table 4.2.1(F_1)
Loan and Loan Loss Provision of NBBL

(Rs in million)

Year	Performing Loan	Non-performing Loan	Provision
2002/2003	69482.30	10132.80	2638
2003/2004	86025.20	10421.80	5236
2004/2005	77969.70	18329.40	11845
2005/2006	34809.00	21587.88	26785
2006/2007	38677.00	23986.53	29760

Source: Annual report of NBBL

Figure 4.2.1(F_1)
Loan and Loan Loss Provision of NBBL



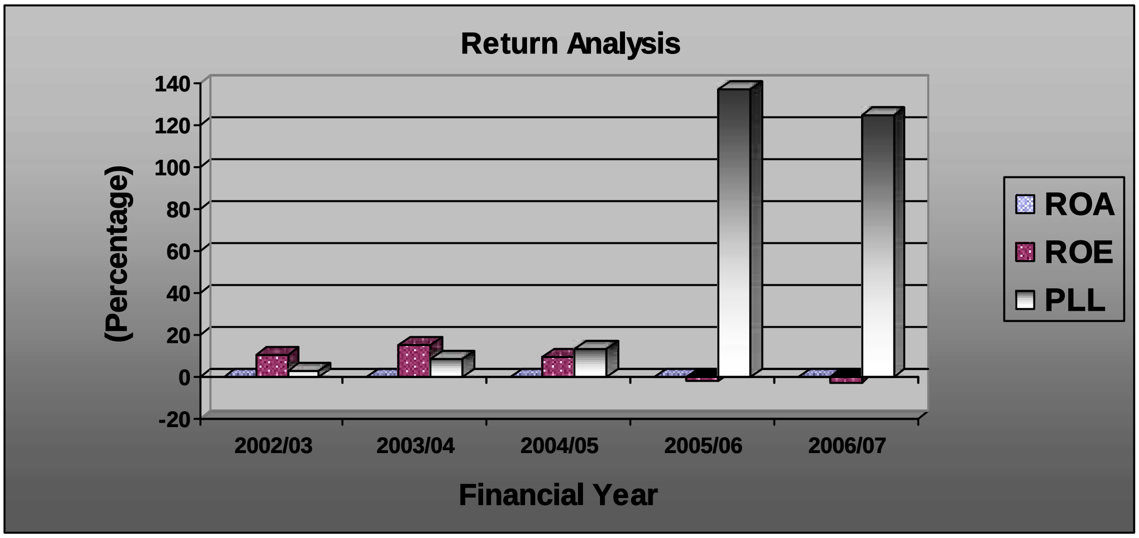
As per above figure of loan and loan loss provision of NBBL, its performing loan is in increasing trend upto year 2003/04, little decrease in year 2004/05 and then more decrease in year 2005/06 where as it is little increasing in year 2006/07 in comparison to year 2005/06 . ROE is in increasing trend in the sample period. The difference between performing and non-performing loan is very high upto year 2004/05 which indicates that bank is maintaining good loan position. In the year 2005/06 and 2006/07 non performing loan is in increasing and performing loan is not as much increasing as in previous years in comparison to non performing loan hence provision is maintained high.

Table 4.2.1(F_2)
Return Analysis of NBBL

Year	ROA	ROE	PLL
2002/2003	0.60	10.57	3.08
2003/2004	0.59	15.56	9.20
2004/2005	0.62	9.41	13.55
2005/2006	0.04	-1.85	136.48
2006/2007	0.05	-2.05	124.07

Source: Annual report of NBBL Bank

Figure 4.2.1(F_2)
Return Analysis of NBBL



Above analysis of return shows that the trend of return on assets and return on equity of Nepal Bangladesh Bank limited is decreasing, which is not good sign for any bank. In financial year 2003/04, both return on assets and return on equity are high. But in financial year 2006/07, both ROA and ROE of the bank is decreased as the lowest for the study time period. ROE in negative trend is very much unfavourable indicator for the bank but NBBL is maintaining PLL in accordance to NRB directives.

4.2.2. Financial Statement Analysis

The concept of financial statement analysis has been already discussed in previous chapter. Here we study and analyze the data by using financial tools:

Table 4.2.2(A)

Analysis of Credit and Advances to Total Deposit Ratio

Year	SCBNL	NABIL	EBL	NSBIBL	HBL	NBBL
2002/03	31.99	60.34	75.42	73.05	51.53	80.51
2003/04	31.63	60.55	75.59	76.85	58.70	80.44
2004/05	43.49	75.05	78.24	77.87	52.21	72.07
2005/06	39.92	68.63	73.44	74.91	59.50	63.05
2006/07	43.78	68.13	77.44	87.94	59.22	51.59
Total	**190.81**	**332.7**	**380.13**	**390.62**	**281.16**	**347.66**
Avg.(Ttl/5)	38.16	66.54	76.03	78.12	56.23	69.53
S.D (?)	5.36	5.54	1.68	5.18	3.58	11.04
C.V(SD/AVG*100)	14.05	8.33	2.21	6.63	6.37	15.88

Source: Annex-II

From the above table, the average ratio of credit and advances to total deposits of SCBNL is 38.16%. The fluctuation in the ratio is not too high. The lowest ratio 31.63% is in financial year 2003/04 and the highest ratio 43.78 is in 2006/07. Standard deviation and coefficient of variation of SCBNL for 5 years are 5.36 and 14.05% respectively which is high. It means that, the consistency of the bank is almost 86% .

The average ratio of NABIL is 66.54%. There is the medium level of fluctuation in bank's credit and advances and the deposits. Under the study period, the lowest ratio 60.34% is in financial year 2002/03 and the highest ratio 75.05 is in financial year 2004/05. Standard deviation and coefficient of variation of NABIL are 5.54 and 8.33% respectively, which is not too high. The consistency of the bank is around 92%.

The average ratio of EBL is 76.03%. Fluctuation in the ratio is low. The lowest ratio 73.44% is in financial year 2005/06 and the highest ratio 78.24 % is in 2004/05. Standard deviation and coefficient of variation of EBL are 1.68 and 2.21% respectively, which is good. The consistency of the bank is around 98%.

The average ratio of credit and advances to total deposits of NSBIBL is 78.12%. Fluctuation in the ratio is not high. The lowest ratio 73.05% is in financial year 2002/03 and the highest ratio is 87.94% is in 2006/07. Standard deviation and coefficient of variation of the ratios are 5.18 and 6.63% respectively. It concluded that, the consistency of the bank is around 93% which is on so-so position.

The average ratio of HBL is 56.23%. The fluctuation of the ratio is not too high. Under the study period, the lowest ratio 51.53% is in financial year 2002/03 and the highest in 2005/06 i.e. 59.50%. Standard deviation and coefficient of variation of the ratios are 3.58 and 6.37% respectively. It means that the consistency of the bank is almost 94% which is on so-so position.

The average ratio of NBBL is 69.53%. The ratio is continuously falling down under the study period. Under the study period, the lowest ratio 51.59% is in financial year 2006/07 and the highest in 2002/03 i.e. 80.51%. Standard deviation and coefficient of variation of the ratios are 11.04 and 15.88% respectively. It means that the consistency of the bank is almost 84% which is a bad indicator for the bank.

Conclusion :

Total deposits are the main source of bank to provide credit advances. Large percentage almost 64% of total deposits goes as credit and advances to customers. Therefore it is seemed, banks are heavily depended on credit and advances to make profit from their investment. Above table shows that as the deposit increases, the credit and advances also increases and vice versa. Therefore it indicates that there is strong relationship between total deposit and total credit and advances.

Combined S.D (2.86%) and C.V (4.46%) are at satisfactory level. The combined consistency level is around 95.54% which shows that in combined stage the utilization of bank’s deposit as credit and advances is at satisfactory level but try to increase consistency level .

Table 4.2.2(B)

Analysis of Credit and Advances to Total Assets Ratio

Year	SCBNL	NABIL	EBL	NSBIBL	HBL	NBBL
2002/03	28.57	50.91	62.71	59.59	46.58	65.68
2003/04	28.31	50.05	63.44	65.54	52.18	64.5
2004/05	38.66	63.69	67.34	65.14	49.06	56.24
2005/06	35.72	59.47	63.51	63.22	53.5	44.16
2006/07	37.73	58.35	65.71	72.41	53.09	56.09
Total	**168.99**	**282.47**	**322.71**	**325.9**	**254.41**	**286.67**
Avg.(Ttl/5)	33.80	56.49	64.54	65.18	50.88	57.33
S.D (?)	4.48	5.23	1.72	4.18	2.65	7.71
C.V(SD/AVG*100)	13.25	9.26	2.66	6.41	5.21	13.45

Source: Annex- II

From the above table, we can conclude that the SCBNL has generally steady trends under the study period. Only in financial year of 2004/05 it has little higher ratio i.e. 38.66%. The lowest ratio as credit and advances to total assets of the bank is 28.31% on 2003/04. The average ratio is 33.80%. It's S.D. and C.V are 4.48 and 13.25 respectively. It shows that the bank has utilizing the minimum capacity of total assets in the form of credit and advances. Fluctuating in the ratio is minimum, which is supported by standard deviation i.e. 4.48% only.

Credit and advances to total assets ratio of NABIL is in mixed trend. The ratio is highest in year 2004/05 i.e.63.69%. and the lowest in 2003/04 (50.05%). The average ratio as credit and advances to total assets of the bank is 56.49% and standard deviation is 5.23% and the coefficient of variation is 9.26%. It means that the bank has the capability to utilize its assets to gain income. Consistency in utilization of assets in the form of credit and advances is satisfactory.

EBL has mixed trend of its utilization of its assets through credit and advances. The highest ratio is in financial year 2004/05 (67.34%) and the lowest is in 2002/03 (62.27%). The average ratio under the study period is 64.54 %. It shows that bank has capability to utilize its assets to gain income. Bank's S.D and C.V as the credit and advances to total assets ratio are 1.72 and 2.66% respectively. It shows that the consistency in the utilization of assets on the form of credit and advances is good .

NSBIBL has mixed trend of the ratio under the study period. The highest ratio is 72.41% in financial year 2006/07 and the lowest is 59.59% in 2002/03, but the fluctuation rate is minimum. The average ratio is 65.18%, which indicates that the bank has the capability to utilizing its total assets in the form of credit and advances. Bank's S.D and C.V are 4.18 and 6.41% respectively. It's consistency level shows that the bank uses its assets at satisfactory level.

HBL has the steady trends of ratio within the study period. The highest ratio is 53.09% (2006/07) and the lowest is 46.58 (2002/03). The average ratio is 50.88%. It shows that the bank has utilized its total assets properly in the form of credit and advances. Banks S.D and C.V are 2.65 and 5.21% respectively. It indicates that the consistency in the utilization of assets in the form of credit by HBL is satisfactory.

It is clear from the above table that NBBL has generally mixed trends under the study period. The highest ratio is 65.68% (2002/03) and the lowest ratio is 44.16% (2005/06). The average ratio is 57.33%. it shows that the bank utilized its total assets as credit and advances is little high, which can be make little difficulty for the bank. Fluctuating in the ratio is medium and S.D & C.V of the ratio are 7.71 and 13.45% respectively. It indicates that the consistency in the utilization of assets in the form of credit by NBBL is not satisfactory.

Conclusion:

The combined average ratio of the JVBs is 54.71%. Standard deviation and coefficient of variation are 1.19 and 3.49% respectively. It shows that in average, the joint venture bank utilize their total assets in the form of loan and advances is around 54.71%. Combined S.D and C.V are at satisfactory. The combined consistency level is around 96.51% which shows that all the bank should try to increase consistency level for more better performance. It will be the good investment for bank if there is not any default situation emerge.

Table 4.2.2(C)

Analysis of performing assets to Total Assets Ratio

Year	SCBNL	NABIL	EBL	NSBIBL	HBL	NBBL
2002/03	27.39	48.09	61.33	52.92	41.89	53.74
2003/04	27.25	49.34	62.35	61.44	47.54	54.12
2004/05	37.62	62.85	66.24	60.88	45.41	50.17
2005/06	34.96	58.65	62.70	59.35	49.97	24.89
2006/07	37.04	57.70	65.18	69.10	51.17	38.64
Total	**164.26**	**276.63**	**317.8**	**303.69**	**235.98**	**221.56**
Avg.(Ttl/5)	32.85	55.33	63.56	60.74	47.20	44.31
S.D (?)	4.64	5.68	1.84	5.17	3.32	11.21
C.V(SD/AVG*100)	14.12	10.27	2.89	8.51	7.03	25.30

Source: Annex-II

Average of Performing assets to total assets ratio of SCBNL is 32.85%. It shows that the performance asset of the SCBL is in not so satisfactory. The highest ratio is 37.62% in year 2004/05 and the lowest ratio is27.25% in year 2002/03. S.D and C.V. are 4.64% and 14.12% respectively which shows that banks consistency level is not so good i.e.85.88% which indicates its total assets is not utilized in the form of performing assets as it is to be.

Nabil Bank's performing assets ratio is in mixed trend. The average ratio for NABIL is 55.33%. The highest ratio is 62.85% in year 2004/05 and the lowest ratio is 48.09% in year 2002/03. S.D and C.V. are 5.68% and 10.27% respectively which shows that banks consistency level is also not so good i.e.89.73% which indicates its total assets is not utilized as performing assets. The bank should try to utilize its total assets to performing assets to the maximam level.

EBL's performing assets ratio is also in mixed trend. The average ratio for EBL is 63.56%. The highest ratio is 66.24% in year 2004/05 and the lowest ratio is 61.33% in year 2002/03. S.D and C.V. are 1.84% and 2.89% respectively which shows that banks consistency level is good i.e.97.11% which indicates its total assets is utilized as performing assets in good ratio.

NSBIBL's performing assets ratio is also in mixed trend. The average ratio for NSBIBL is 60.74%. The highest ratio is 69.10% in year 2006/07 and the lowest ratio is 52.92% in year 2002/03. S.D and C.V. are 5.17% and 8.51% respectively which shows that banks consistency level is not good i.e.91.49% which indicates that its total assets utilization as performing assets does not meet satisfactory level.

HBL's performing assets ratio is also in mixed trend. The average ratio for HBL is 47.20%. The highest ratio is 51.17% in year 2006/07 and the lowest ratio is 41.89% in year 2002/03. S.D and C.V. are 3.32% and 7.03% respectively which shows that banks consistency level is not good i.e.92.97% which indicates that its total assets utilization as performing assets does not meet satisfactory level.

NBBL's performing assets ratio is in volatile. The average ratio for NBBL is 44.31% means non-performing assets is almost 55.69% which indicates unfavourable condition for the bank. The highest ratio is 54.12% in year 2003/04 and the lowest ratio is 24.89% in year 2005/06. S.D and C.V. are 11.21% and 25.30% respectively which shows that banks consistency level is in a bad condition i.e.74.7% which indicates that its total assets utilization as performing assets is very bad. It is important that Bank should focus and try to maintained good level of consistency level in this case.

Conclusion:

The combined average ratio of the JVBs is 50.66%. Standard deviation and coefficient of variation are 2.93 and 5.78% respectively. It shows that in average, the joint venture bank utilize their total assets in the form of loan and advances is around 50.66%. Combined S.D and C.V are at satisfactory level. The combined consistency level is around 94.22% which shows the level of utilization of performing assets to total assets is satisfactory level and little effort may contribute more efficient utilization of assets and finally it impacts on the prosperity of the JVBs.

Table 4.2.2(D)

Trend Analysis of Combined Ratios

Particular	2002/03	2003/04	2004/05	2005/06	2006/07
Trend values of combined credit and advances to total deposits ratio (%)	0.633	0.637	0.641	0.645	0.649
Trend values of combined credit and advances to total assets ratio (%)	0.529	0.538	0.547	0.556	0.565
Trend value of combined performing assets to total assets ratio (%)	0.488	0.498	0.507	0.516	0.525

Source: Annex- III

The trend value of the combined credit and advances to total deposit are increasing every year. Table no. 4.2.2(D) shows that the trend value is 0.633 in the year 2002/03 and 0.637, 0.641, 0.645, 0.649 times in the respective following years of the research period.

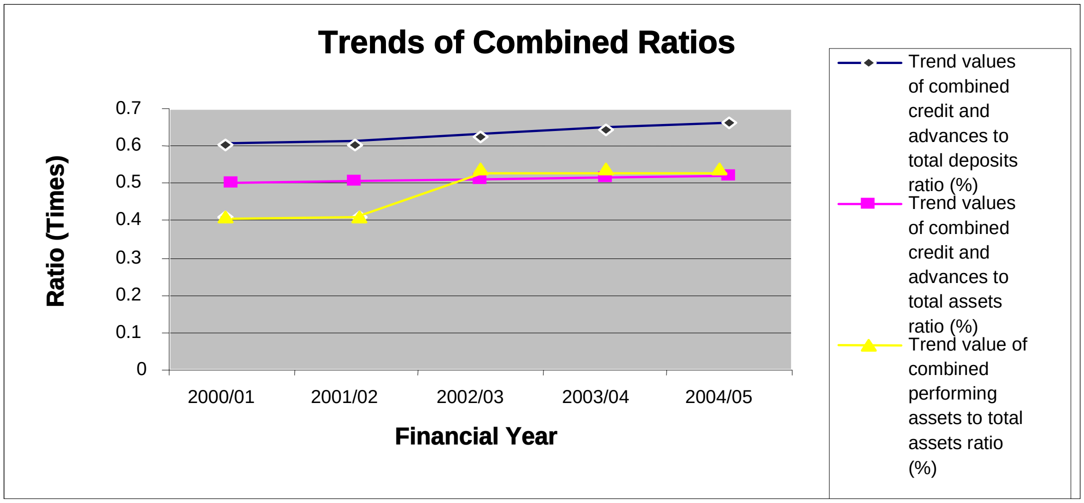
The trend value of the combined credit and advances to total assets ratio is also in increasing trend. It is 0.529 in the first year of research period and 0.538, 0.547, 0.556, 0.565 times in the respective following years of research period.

The trend value of combined performing assets to total assets is also in increasing trend for the research period. It is 0.488 in the first year of research period and 0.498, 0.507, 0.516, 0.525 times in the respective following years of research period.

In overall,the trend values indicates that in the research period of time the amount of credit and advances to total deposits are increasing more than credit and advances to total assets and performing assets to total assets.

Figure 4.2.2(D)

Trends of Combined ratios



4.2.3. Statistical Analysis

A. Standard Chartered Bank Ltd.

The data related to overall credit risk management is given below; the table 4.2.3(A_1) shows the financial model i.e. risk index and probability of book value insolvency. Risk index indicates that the higher the risk better the performance of the bank, book value insolvency relates to the thickness of the book value cushion available absorb accounting losses. All the calculation based on accounting data of the bank, risk index and book value insolvency is base on the financial data of five years.

Table 4.2.3(A_1)

Risk Index and Book value Insolvency

S.No	Description	Figure
1.	Risk Index	105.33
2.	Probability of value insolvency	0.0045

Source: Annex-IV

The above table indicates the following decisions:

- ✓ Bank has the higher Risk Index.
- ✓ Probability of the book value insolvency is less than 1 percentage.

The entire figure suggests that the bank's total credit management is very good and reasonable. Higher risk index attribute bank has a higher expected ROA, strong capital position and stable earning ROA. And its book value insolvency shows that it has a high level of cushion to absorb accounting losses.

Table 4.2.3(A_2)

Correlation Coefficient of SCBNL

S.No	PLL	Correlation	P.E	Interpretation	Remarks
1	ROA	- 0.4891	0.2295	Low degree of –ve correlation	Insignificant
2	ROE	0.5184	0.2206	Moderate degree of +ve correlation	Significant

Source: Annex-V

Table 4.2.3(A_2) shows that the correlation between loan and loan loss provision to ROA and ROE. we can say that there is low degree of negative correlation between PLL and ROA. While there is moderate degree of positive correlation between PLL and ROE. Since correlation is less than probable error in first case therefore it is Insignificant in first case and correlation is more than probable error in second case therefore it is Significant in second case.

Table 4.2.3(A_3)

Regression Coefficient of SCBNL

S.No	Independent Variable	Dependent Variable	Beta Coefficient	Constant	T-value	Remark
1	PLL	ROA	-0.532	2.62	-0.3966	Insignificant
2	PLL	ROE	1.055	31.61	0.0971	Insignificant

Source: Annex-V & VI

Table 4.2.3(A_3) reveals that the regression coefficient of provision of loan loss for ROA is negative and ROE is Positive but the value is not significant at 5% level of significance, which indicates very low association between the independent variable PLL and dependent variable ROA and ROE. Thus null hypothesis of no relationship between PLL and ROE; and PLL and ROA was accepted.

B. Himalayan Bank Ltd.

The data related to overall credit risk management is given below; the table 4.2.3(B_1) shows the financial model i.e. risk index and probability of book value insolvency. Risk index indicates that the higher the risk better the performance of the bank, book value insolvency relates to the thickness of the book value cushion available absorb accounting losses. All the calculation based on accounting data of the bank, risk index and book value insolvency is base on the financial data of five years.

Table 4.2.3(B_1)

Risk Index and Book Value Insolvency

S.No	Description	Figure
1	Risk Index	40.44
2	Probability of Book Value Insolvency	0.0306

Source: Annex-IV

The table indicates the following decision:

- ✓ Bank has the higher risk index.
- ✓ Probability of book value insolvency is less than one percentage.

The entire figure suggests that the bank's total credit management is good and reasonable. Higher risk index attribute bank has a higher expected ROA, strong capital position and stable earning ROA. And its current position shows that it has a high level of cushion to absorb accounting losses.

Table 4.2.3(B_2)

Correlation Coefficient of HBL

S.No	PLL	Correlation	P.E	Interpretation	Remarks
1	ROA	-0.64809	0.1749	Moderate degree of –ve correlation	Insignificant
2	ROE	-0.8089	0.1043	High degree of –ve correlation	Insignificant

Source: Annex-V

Table 4.2.3(B_2) shows the correlation between loan loss provision to ROA and loan loss provision to ROE. The calculation in the table clearly shows that there is negative correlation between PLL and ROA as well as PLL and ROE. Which means that there is moderate degree of negative correlation between PLL and ROA while there is high degree of negative correlation between PLL and ROE. Since correlation is less than probable error in both case therefore it is Insignificant in first case and second case.

Table 4.2.3(B_3)

Regression Coefficient of HBL

S.No	Independent variable	Dependent variable	Beta coefficient	Constant	t-value	Remarks
1	PLL	ROA	-0.1262	2.0901	0.1889	Insignificant
2	PLL	ROE	-1.5563	24.17	-2.3815	Insignificant

Source: Annex-V & VI

Table 4.2.3(B_3) reveals that the regression coefficient of provision of loan loss for ROE and ROA is negative. But the value is not significant at 5% level of significance, which indicates very low association between the independent variable PLL and dependent variable ROA and ROE. Thus null hypothesis of no relationship between PLL and ROE; and PLL and ROA was accepted.

C. Nepal SBI Bank Ltd.

The data related to overall credit risk management is given below; the table 4.2.3(C_1) shows the financial model i.e. risk index and probability of book value insolvency. Risk index indicates that the higher the risk better the performance of the bank, book value insolvency relates to the thickness of the book value cushion available absorb accounting losses. All the calculation based on accounting data of the bank, risk index and book value insolvency is base on the financial data of five years.

Table 4.2.3(C_1)

Risk Index and Book Value Insolvency

S.No	Description	Figure
1	Risk Index	19.78
2	Probability of Book Value Insolvency	0.1278

Source: Annex-IV

The table indicates the following decision:

- ✓ Bank has the not so higher risk index.
- ✓ Probability of book value insolvency is less than one percentage.

The entire figure suggests that the bank's total credit management is medium and reasonable. Higher risk index attribute bank has a higher expected ROA, strong capital position and stable earning ROA. And its current position shows that it has a high level of cushion to absorb accounting losses.

Table 4.2.3(C_2)

Correlation Coefficient of NSBIBL

S.No	PLL	Correlation	P.E	Interpretation	Remarks
1	ROA	-0.7984	0.1094	High degree of –ve correlation	Insignificant
2	ROE	-0.8139	0.1018	High degree of –ve correlation	Insignificant

Source: Annex-V

Table 4.2.3(C_2) shows the correlation between loan loss provision to ROA and ROE. The calculation in the table clearly shows there is correlation between loan loss provision and ROA as well as correlation between loan loss provision and ROE is high degree of negative correlation. Since correlation is less than probable error in both case therefore it is Insignificant in first case and second case.

Table 4.2.3(C_3)

Regression Coefficient of NSBIBL

S.No	Independent variable	Dependent variable	Beta coefficient	Constant	T-value	Remarks
1	PLL	ROA	-0.4018	3.9167	-0.2432	Insignificant
2	PLL	ROE	-4.4529	45.2667	-2.4566	Insignificant

Source: Annex-V & VI

Table 4.2.3(C_3) reveals that the regression coefficient of provision of loan loss for ROA and ROE is Negative but the value is not significant at 5% level of significance, which indicates very low association between the independent variable PLL and dependent variable ROA and ROE. Thus null hypothesis of no relationship between PLL and ROA; and PLL and ROE was accepted.

D. Nabil Bank Ltd.

The data related to overall credit risk management is given below; the table 4.2.3(D_1) shows the financial model i.e. risk index and probability of book value insolvency. Risk index indicates that the higher the risk better the performance of the bank, book value insolvency relates to the thickness of the book value cushion available absorb accounting losses. All the calculation based on accounting data of the bank, risk index and book value insolvency is base on the financial data of five year.

Table 4.2.3(D_1)

Risk Index and Book Value Insolvency

S.No	Description	Figure
1	Risk Index	37.32
2	Probability of Book Value Insolvency	0.0359

Source: Annex-IV

The above table indicates the following decisions:

- ✓ Bank has the higher Risk Index.
- ✓ Probability of the book value insolvency is less than 1 percentage.

The entire figure suggests that the bank's total credit management is very good and reasonable. Higher risk index attribute bank has a higher expected ROA, strong capital position and stable earning ROA. And its book value insolvency shows that it has a high level of cushion to absorb accounting losses.

Table 4.2.3(D_2)

Correlation Coefficient of NABIL

S.No	PLL	Correlation	P.E	Interpretation	Remarks
1	ROA	-0.552	0.2097	Moderate degree of -ve correlation	Insignificant
2	ROE	-0.4691	0.2353	Low degree of –ve correlation	Insignificant

Source: Annex-V

Table 4.2.3(D_2) shows the correlation between loan loss provision to ROA and ROE. The calculation in the table clearly shows there is correlation between loan loss provision and ROA is moderate degree of negative correlation where as correlation between loan loss provision and

ROE is low degree of negative correlation. Since correlation is less than probable error in both case therefore it is Insignificant in first case and second case.

Table 4.2.3(D_3)

Regression Coefficient of NABIL

S.No	Independent variable	Dependent variable	Beta Coefficient	Constant	T-value	Remarks
1	PLL	ROA	-0.1946	3.4951	-1.2301	Insignificant
2	PLL	ROE	-0.6922	38.25	-0.0032	Insignificant

Source: Annex-V & VI

Table 4.2.3(D_3) reveals that the regression coefficient of provision of loan loss for ROA and ROE is negative but the value is not significant at 5% level of significance, which indicates very low association between the independent variable PLL and dependent variable ROA and ROE. Thus null hypothesis of no relationship between PLL and ROA; and PLL and ROE was accepted.

E. <u>Everest Bank Ltd.</u>

The data related to overall credit risk management is given below; the table 4.2.3(E_1) shows the financial model i.e. risk index and probability of book value insolvency. Risk index indicates that the higher the risk better the performance of the bank, book value insolvency relates to the thickness of the book value cushion available absorb accounting losses. All the calculation based on accounting data of the bank, risk index and book value insolvency is base on the financial data of five years.

Table 4.2.3(E_1)

Risk Index and Book Value Insolvency

S.No	Description	Figure
1	Risk Index	78.11
2	Probability of Book Value Insolvency	0.0082

Source: Annex-IV

The table indicates the following decision:

- ✓ Bank has the higher risk index.
- ✓ Probability of book value insolvency is less than one percentage.

The entire figure suggests that the bank's total credit management is good and reasonable. Higher risk index attribute bank has a higher expected ROA, strong capital position and stable earning ROA. And its book value insolvency shows that it has a high level of cushion to absorb accounting losses.

Table 4.2.3(E_2)

Correlation Coefficient of EBL

S.No	PLL	Correlation	P.E	Interpretation	Remarks
1	ROA	0.7392	0.1368	High degree of +ve correlation	Significant
2	ROE	0.3247	0.2699	Low degree of +ve correlation	Significant

Source: Annex-V

Table 4.2.3(E_2) shows the correlation between loan loss provision to ROA and ROE. The calculation in the table clearly shows that there is positive correlation between loan loss provision and ROA is high degree of positive correlation where as correlation between loan loss provision and ROE is low degree of positive correlation. Since correlation is more than probable error in both case therefore it is Significant in first case and second case.

Table 4.2.3(E_3)

Regression Coefficient of EBL

S.No	Independent variable	Dependent variable	Beta coefficient	Constant	T-value	Remarks
1	PLL	ROA	0.2916	0.4615	2.7519	Significant
2	PLL	ROE	1.7141	12.62	0.5437	Insignificant

Source: Annex-V & VI

Table 4.2.3(E_3) reveals that the regression coefficient of provision of loan loss for ROE and ROA is Positive but the value is not significant at 5% level of significance of PLL on ROE, which indicates very low association between the independent variable PLL and dependent variable ROE. And the value is significant at 5% level of significance of PLL on ROA. Thus null hypothesis of no relationship between PLL and ROA is rejected where as null hypothesis of no relationship between PLL and ROE is accepted.

F. <u>Nepal Bangladesh Bank Ltd.</u>

The data related to overall credit risk management is given below; the table 4.2.3(F_1) shows the financial model i.e. risk index and probability of book value insolvency. Risk index indicates that the higher the risk better the performance of the bank, book value insolvency relates to the thickness of the book value cushion available absorb accounting losses. All the calculation based on accounting data of the bank, risk index and book value insolvency is base on the financial data of five years.

Table 4.2.3(F_1)

Risk Index and Book Value Insolvency

S.No	Description	Figure
1	Risk Index	-6.7122
2	Probability of Book Value Insolvency	1.11

Source: Annex-IV

The table indicates the following decision:

- ✓ Bank has the lesser risk index even in negative.
- ✓ Probability of book value insolvency is more than one percentage.

The entire figure suggests that the bank's total credit management is not good and not reasonable. Lower risk index attribute bank has a loser expected ROA, weak capital position and unstable earning ROA. And its book value insolvency shows that it has a low level of cushion to absorb accounting losses.

Table 4.2.3(F_2)

Correlation Coefficient of NBBL

S.No	PLL	Correlation	P.E	Interpretation	Remarks
1	ROA	-0.9947	0.0032	High degree of –ve correlation	Insignificant
2	ROE	-8.6759	-22.4043	High degree of –ve correlation	Significant

Source: Annex-V

Table 4.2.3(F_2) clearly shows that there is negative correlation between PLL and ROA as well as PLL and ROE. Both PLL and ROA as well as PLL and ROE shows high degree of negative correlation. Since correlation is less than probable error it is insignificant in first case and vice versa in second case.

Table 4.2.3(F_3)

Regression Coefficient of NBBL

S.No	Independent variable	Dependent variable	Beta Coefficient	Constant	t-value	Remarks
1	PLL	ROA	0.0065	-0.7115	1	Insignificant
2	PLL	ROE	0.3582	-14.1906	2.889	Significant

Source: Annex-V & VI

Table 4.2.3(F_3) reveals that the regression coefficient of provision of loan loss for ROE and ROA is Positive but the value is not significant at 5% level of significance in first case and it is significant at 5% level of significance in second case, which indicates very low association between the independent variable PLL and dependent variable ROA. Thus null hypothesis of no relationship between PLL and ROA is accepted while PLL and ROE is rejected.

4.3 MAJOR FINDINGS

After analyzing the credit portfolio of the joint venture banks of Nepal from both financial and statistical aspects, the major findings of the study are described below:

4.3.1 Major findings based on analysis of primary data:

i. 58% credit customers knew the all information about the bank policies and almost 42% were little unknown with the bank policies.

ii. Almost 50% of the customers from the sample taken in this topic were satisfied with bank's interest rate. 43% customers were not satisfied with interest rate. 7% customer were not given the clear response.

iii. Almost 75% customers are accepted that the bank officers are visited there project site or analyzed there project in depth.10 % customers denied to visit or analysis of the project by the officers at the time of granting loan. And 15% customers were not given the clear responses.

iv. 52% of the sample customer is accepted that the service charge taken by bank is satisfactory. 41% were not satisfied with the service charge taken by bank. 7% did not give clear response on this matter.

v. 68% customers said that the cooperation followed by the bank officers to them are quite appreciable, 19% customers said that cooperation given by the bank officers are not reached at that level where it has to be and 13% customers were given their clear responses on the bank officers' cooperation.

vi. Almost 78% customers were accepted that bank gave them the expiration notice on their credit. 7% customers clearly denied and 15% customers were confused when they gave their opinion.

vii. Exactly 88% customers said that they used the credit taken by the bank on that project where they clearly specified at the time of loan taking. Almost 3% customers denied using the credit amount taking from the bank used on the same project where they specified. Around 9% customers were confused when they giving the answer for that question

viii. Almost 80% customers were satisfied with their bank in the view point of there overall performance ie. Bank and its policy. 12% customers were unsatisfied with their bank at some circumstances. And almost 8% customers were unable to give the clear response.

ix. Almost 80% customers were on the favor of taking loan from same bank again and again in future too. 5% customers denied to taking loan again from the same bank, they said that the process taken by the bank at the time of granting loan is little irritating. 15% customers can not make the proper decision either they take a loan again or not.

x. More than 88% customers were in the favor of continuing the relationship with their related bank; almost 7% customers were like to switch off the bank if they got another bank which give them more facilities.5% did not give clear response on this matter.

4.3.2 Major findings based on analysis of secondary data:

i. In the case of **SCBNL**., it has a higher index rate and its probability of book value insolvency is less than one percentage. This indicates that a bank has a higher current expected ROA, strong capital position and stable earning. And its current position shows that it has a high level of cushion to absorb accounting loss. Its risk index is highest and probabilility of book value insolvency is lowest among the joint venture bank so it is very good for the bank and for its future point of view. Almost 38.16% of its total deposits, bank uses it as credit and advances which is not too high as well as low. Bank's non-performing loan to gross loan for 5 years is 67.15% (combined), which is little high but it is in decreasing trend. Decreasing of non performing loan is the good sign for the bank. Again by analyzing from statistical aspects, there is insignificant relationship between independent variable PLL and dependent variable ROA & significant relationship Though regression coefficient of the PLL is negative for ROA and positive for ROE. And its t-value is not significant at 5% level of significance. It shows that the slope of the line is statistically insignificant at 5% level of significance. Most of the credit customers of the bank are satisfied with the bank.between PLL and ROE.

ii. Risk index and probability of book value insolvency of **NABIL**. indicate that the bank has low risk, in other word, it shows the better performance of the bank and its current position shows that it has high level of cushion available to absorb accounting loss. Bank's non-performing loan to gross loan for 5 years is just 44.67% (combined), which is very good situation for the bank as it is dominated by performing loan and also it is in decreasing trend. Correlation coefficients regarding PLL with ROA indicate that there is moderate degree of negative relationship between them. Likewise, Correlation coefficients regarding PLL with ROE indicate that there is low degree of negative relationship between them but the result is small and considered it as insignificant. Regression coefficient of PLL is also negative and its value is not significant at 5% level of significance. Hence, most of the credit customers of the bank are satisfied with the bank between PLL and ROE.

iii. In the case of **EBL** , risk index is high and probability of book value insolvency is less than one percent. which is very good sign for the bank for its future. Bank's non-performing loan to gross loan for 5 years is just 39.26% which is the tremendous performance by the bank as a view point of credit risk management. Correlation coefficients regarding PLL with ROA and ROE indicate that there is positive relationship between them ie correlation between PLL and ROA is high degree of positive correlation and correlation between PLL and ROE is low degree of positive correlation . Since correlation is more than probable error in both case therefore it is Significant in first case and second case. Regression coefficient of PLL and ROE is also positive and its value is not significant at 5% level of significance but it is significance at 5% level of significance for ROA. Hence, most of the credit customers of the bank are satisfied with the bank between PLL and ROE.

iv. In the case of **NSBIBL,** risk index of the bank is medium and probability of book value insolvency is less than one percent. Bank's non-performing loan to gross loan for 5 years is 39.26% (combined) which is not too high and at maintaining level and also the non-performing loan to gross loan ratio is in decreasing trend. There is insignificant relationship between independent variable provision of loan loss and dependent variables

v. ROA and ROE. Correlation coefficients regarding PLL with ROA and ROE indicate that there is negative relationship between them ie correlation between PLL and ROA is high degree of negative correlation and correlation between PLL and ROE is also high degree of negative correlation. Though the regression coefficient of loan loss provision is negative for bath ROA and ROE. Bank's t-value is not significant at 5% level of significance. Hence, most of the credit customers of the bank are satisfied with the bank between PLL and ROE.

vi. Higher risk index and probability of book value insolvency of **HBL** indicate that bank has low risk, in other word, it shows that the better performance of the bank and its current position shows it has high level of cushion available to absorb accounting loss. Bank's correlation coefficients regarding PLL with ROA and ROE indicates that there is negative relationship between PLL and ROA and the negative relationship between PLL and case one is moderate degree of negative correlation where as case two is high degree of negative correlation. Regression coefficient of loan loss provision is negative for both and bank's t-value is not significant at 5% level of significance. . Hence, most of the credit customers of the bank are satisfied with the bank between PLL and ROE.

vii. The data pertaining to **NBBL** shows that it has higher risk index even in negative that means highest risk among the JVBs and probability of book value insolvency is more than one percent. Bank's non-performing loan to gross loan for 5 years is 55.69% (combined) which is very high and in increasing trend which is dangerous situation to the bank. Correlation coefficient regarding PLL with ROA and ROE indicate that there is negative relationship between them but the result is too small, so it considers as insignificant. Regression coefficient of PLL is positive for both ROA and ROE and its t-value is not significant at 5% level of significance for ROA where as its t-value is significant at 5% level of significance for ROE. Hence, most of the credit customers of the bank are not satisfied with the bank between PLL and ROE.

viii. With the increase in the ratio of credit, the non-performing assets seem to be decreased. It means that the performing assets of the commercial banks have been increasing regularly.

ix. Most of the credit customers of the joint venture banks of Nepal are satisfied with there respective bank. Few customers suggested that bank should decrease its interest rate. As they complain that bank has decreased the deposits interest rate heavily but the credit interest rate has not lowered so much. Therefore sometimes they go under difficulty to pay the interest amount in time. Some of the credit customers of JVBs said that they have not got full cooperation from the bank officers'. This complains is mainly for bank management who do not extend time period of reimbursement of credit when they demanded even when they give the every needed explanation and documents.

x. In the term of activity, all the joint venture banks are able to satisfy the demand of various depositors, creditors and shareholders as well as the government. All banks have provided modern facilities to its customers and have used modern technology. Therefore they can attract good customers. It can be taken as strength of the joint venture banks. In other hand, overdue credits of all commercial banks have increased. It has damaged the income of the bank. Banks have not opened their branches all over the country. Because of that they are unable to grab the opportunity from all over the Nepal like NBL and RBB.

CHAPTER –V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter focuses on major findings of the research and factors that affecting the facts. This will give the way to find the weakness and strengths of the bank. So the recommendations on the basis of the findings are determined and suggestions are presented on the areas of improvement to improve the performance of the bank.

5.1 SUMMARY

Banking industry plays the vital role in the processes of development. They not only influence the structure of the economy but also its development process. Bank refers to any firm that is basically concerned with the transaction of money. However, today's banks are established for specific purposes. Different types of banks focus different types of services to their customers although the basic principle is same. Commercial bank, National bank, Agriculture development bank, Finance companies, Co-operative societies are examples of the banking industry.

Commercial banks are those banks, which works from commercial view point. They perfume all kinds of banking functions such as accepting deposits, advancing credits, credit creation, agency functions etc. This activity build industrial environment in the country, create employment and investment opportunity for the people and consequently economy of the country secures people growth. On 30th Kartik, 1994, Nepal Bank Ltd. was established for the first time to provide modern and organized banking facilities. The birth of this bank brought a new landmark in the history of banking facility in the Nepal. Today, 25 commercial banks, which of them 6 are JVBs are operating to provide modern banking services and facilities to boost the economic condition of the country. This is happened within 2 decades when the government of Nepal adopted liberal and market oriented economic policy since from 1980.

When two commercial banks from different countries join hands to form independent enterprise it is said as joint venture bank. Nepal started to allow this policy of JVB in mid 1980, for to enhance local commercial banks performance via competition, efficiency, modernization, and computerization and prompt customer services. Along with that it also brings foreign capital, skills, experience and latest technology and techniques too. The first joint venture bank established in Nepal is 'Nabil Bank Limited' in 1984.

Present situation of Nepalese market is not so good for any kind of business, banking business is almost focus on lending business, which is naturally a risky business. As per present situation banks are playing the vital role in the growth of the Nepalese economy. As loan is the core area of commercial banking, it plays the significance impact on the commercial bank's liquidity and profitability. But the most worry factor in banking industry is the total management of loan. Due to the excessive amount of non-performing assets in commercial banks, there is the wide spread suspicion on the performance on the commercial banks. Moreover, the world economic crisis has been arised from the loans on real state evaluated artificially, this type of risk can damage the whole economy of the country as well. If valuation of property is not done properly by nepelese bank then it can create a critical condition in the Nepal too.

The main focus point of the study is the current condition of commercial banks regarding the credit risk position. So, the objective of the study is to evaluate the credit risk management of the joint venture banks.

There are different types of risk existing in banking business but the major area of risk is credit risk. The credit risk is the potential financial loss resulting from the failure of customers to honor fully the terms of a loan. To face these types of situation, banks should have to use credit risk management, framework and techniques. In practices banks are using five areas for the credit risk management. These are:

- Credit sanctioning and monitoring process
- Approach to collateral
- Credit risks arise from new business opportunities
- Credit exposures relative to capital total advances

- Concentration on correlated risk factor

As suggested by Froot, Scharfstein, there are three pillars where the risk management framework rest on. They are:

- Making good investment decisions create corporate value.
- Proper and prudent look at major market indicators
- Generating enough cash flow internally is the key to making good investments.

For the detail analysis of commercial banks in Nepal, in this study, Nepal's joint venture bank's data are collected. And different data analysis tools are used, the hypothesis tests are done and various limitations are found out. For the analysis of data, mainly this study focuses on loan loss provision of JVBs, ratio analysis and there relation with return on assets and equity are analysis.

On average of 5 years of research period, credit and advances to total deposit ratio of SCBL, NBL, EBL, SBIBL, HBL and NBBL are 38.16, 66.54, 76.03, 78.12, 56.23 and 69.53% respectively. Likewise these banks have credit and advances to total assets ratio are 33.80, 56.49, 64.54, 65.18, 50.88 and 57.33% respectively. Same time, the average performing assets to total assets ratio for the five year research period of SCBL, NBL, EBL, NSBIBL, HBL and NBBL are 32.85, 55.33, 63.56, 60.74, 47.20 and 44.31% respectively. Almost 64% of total deposits of JVBs (as combined) are utilized in credit and advances for the sampled five years, Almost 55% of total assets of JVBs (as combined) are utilized in credit and advances for the sampled five years and combined performing assets to total assets for 2002/03 to 2006/07 is 51% respectively. This indicates that, performing assets are increasing regularly in the research period. As the non-performing credit decreases year by year, banks has been lower credit risk generates which is good sign for any banks.

5.2 CONCLUSION

After analyzing the credit portfolio of joint venture banks of Nepal from both financial and statistical aspects, we can draw some conclusion from the study are described below:

All the joint venture banks have sufficient liquidity. It shows that banks have not got proper investment sectors to utilize their liquid money. Now, in Nepal, many banks and other financial institutions are functioning to collect deposits and invest money somewhere. Therefore monetarization have been increased since liberalization policy taken by the government. Heavy remittance has also help to increase the amount of deposits of the banks. On the other hand, due to political crisis, economic sectors have been fully damaged. Most of the projects have been withdrawn due to security problems. Therefore, banks have maximum liquidity due to lack of safety investment sectors.

All the joint venture banks have utilized most of funds in the form of credit and advances. Almost 64% of total deposits of the bank have been forwarded to customers as a credit and advances. Therefore, it is the major part of utilizing deposits and income generating sector. If the banks have deposits, bank can provide money to its customers as credit and advances. For that banks are attracting deposits from customers and have issued the deposits to the needy area to make profit for the bank.

Provisions for credit and loss have been increasing year by year for all joint venture banks. Due to economic crisis in the country, credit takers are not getting good return from their investment. Because of that situation, credit customers do not return money of the bank in the stipulated time period, therefore the risk of default in credit is increases. That’s why the bank should increase its provision for credit loss which has been guided by NRB.

5.3 RECOMMENDATIONS

These entire figures suggest that the Joint Venture commercial bank's overall management of credit risk is good and reasonable except NBBL. According to the analysis, the following points are highlighted to put forward for the further improvement of all commercial banks:

─ Cash and bank balance of all joint venture banks are high. Unused cash and bank balance do not provide return to the bank. Therefore some percentage of cash and bank balance should be invested somewhere in profitable sectors. There must be a good investment decision which increases the corporate value of the firm. It should be carried out by effectively identify, organize and manage discrete and diverse segmenting order to serve particular status of customers amore effectively.

─ Good liquidity position is very necessary for commercial banks as it should be enough to meet the depositors' obligations as well as for good investment and for expansion.

─ Banks should avoid extending credit merely based on oral information presented at the credit interview. Historical financial and trade records as well as realistic cash flow projections should be obtained for proper assessment of the proposal. Banks also should regularly follow the credit customers to confirm that whether the customers have utilized their credit for the same purpose committed at the time of taking credit from the bank.

─Bank should be sensitive to adverse movements in external factors such as interest rates, exchange rate and commodity prices as it has direct disruption on cash trends of the bank.

─ Banks should strictly band the policy of nepotism and favoritism. On the basis of capability and efficiency, employees' recruitment, placement and promotion should be executed as well as creditors relationship with the employee should also be judge before providing loan. That means Strictly follow the NRB directives about relationship factor.

─ Economic liberalization policy adopted by the government of Nepal has created an environment of strict competition even in the banking sectors. In this context, all the commercial banks are suggested to formulate and implement some sound and effective financial and non-financial strategies to minimize their operational expenses to meet required level of profitability.
Nepal Rastra Bank has formulated various kinds of rules and regulation. Every bank must follow these rules and regulation and central bank must examine timely whether the banks follow the rules and regulation or not. If any bank not follows the rules then central bank must take proper action to that bank.

─ In this research, joint venture banks were taken for the study. Joint venture banks definitely have international relation. Therefore, these banks should make negotiations with the international banks to increase its transactions in the internal arena.

─ Banks are one of the most reputed organizations of our country. So, banks should fulfill some social obligations by extending their resources to rural areas and promoting the development of poor, ethnic and disadvantaged group. In order to do so, they should open their branches in the remote areas with the objective of providing cheaper charge banking services.

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