# **CHAPTER-I**

# Introduction

# 1.1 Background of the Study

"Integrated and steady development of the country is possible only when competitive banking service reaches nooks and corns of the country. Commercial banks occupies quite an important place in the framework of every economy because it provides capital for the development of the industry, trade and business investing the saving collected as deposits. Besides these, commercial bank renders a numerous services to their customer in view of facilitating their economic and social life. All the economic activities of each and every country are greatly influenced by the commercial banking business of that country. Commercial banks, by playing active roles, have changed the economic structure of the world" (Subedi, 2004:15).

"Many developing countries like Nepal, there is great challenge to the nation to eliminate the mass-poverty of the country through gradual development of those areas and to provide basic needs to the people who are really very poor. Keeping in view these challenges in front of the country, several important programs have been launched but no vital achievement had got in the past. The growth of nation is only possible when saving and investment propensities are done. In Nepal, the real income is very low that's why the rate of saving is also low so the basic problem is raising the level of saving and investment. These problems can be solved only when the country can grasp the path of developing commercial banks" (Sharma, 1999:56-56).

Commercial banks are the heart financial sector, which occupy important place in the framework of the economy. They hold deposits of people, government and other business units. They make funds available through their lending and investing activities to borrower's individuals, government and business units. By doing so, commercial banks provide capital for the development of the industry, business and services. Commercial banks make sound investment in various sectors of the economy, which boost quality and quantity of investment as well as achieve its own objective of profit maximization. Thus, well formulated and sound investment policies coordinated and planned efforts accelerate the pace of economic growth.

"Credit affected the overall development of the country. The volume of credit is directly-related with the place of development of country, itself. Lending is most fundamental function of bank. The quality of loan, quality of borrower and quality of securities determines the health of any banker. The efficiency of banker lies in how it multiplies the deposit of depositors' safety of funds, liquidity of funds, purpose security of loan, profitability, spread of loan portfolio and compliance with national interest are some of the principles that the banker should follow while granting loan. Expansion of bank credit is followed by increase in production, employment, sales and prices. In a developing economy, the batiks offer more and more credit and increase the resources of the industries, thereby causing faster economic development: banks play a decisive role in (he industrial development of the country. The How of credit is very much like smooth and uniform through out the organs of body credit should How steadily and evenly through various sectors of the economy" (Shrestha. 2002:75).

Nepalese money market and lending procedure is very much affected by its mass poverty. Landlocked position, low social development, political instability and frequent changing policies of the government. Besides these international market plays a vital role while conduct a business in these days so banks and other organizations not only concentrate on their country but the outside world also.

#### 1.1. 1 Brief Introduction of Sample Banks

#### a) Standard Chartered Bank Limited (SCBNL)

Standard Chartered Bank Nepal Limited has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation. Today the Bank is an integral part of Standard Chartered Group who has 75% ownership in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status the largest international bank currently operating in Nepal.

An integral part of the only international banking Group currently operating in Nepal, the bank enjoys an impeccable reputation of a leading financial institution in the country. With 11 points of representation, 7 branches and 9 ATMs across the kingdom and with over 300 local staffs, Standard Chartered Bank Nepal Ltd. is in a position to service its customers through a large domestic network. In addition to which the global network of Standard

Chartered Group gives the Bank the unique opportunity to provide truly international banking in Nepal.

Standard Chartered Bank Nepal Limited offers a full range of banking products and services in Wholesale and Consumer banking, catering to a wide range of customers from, individuals, to mid-market local corporate to multinationals and large public sector companies, as well as embassies, aid agencies, airlines, hotels and government corporations.

The Bank has been the pioneer in introducing 'customer focused' products and services in the country and aspires to continue to be a leader in introducing new products and highest level of service delivery. It is the first Bank in Nepal that has implemented the Anti-Money Laundering policy and applied the 'Know Your Customer' procedure on all the customer accounts.

# b) Himalayan Bank Limited (HBL)

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

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

All Branches of HBL are integrated into Globus (developed by Temenos), the single Banking software where the Bank has made substantial investments. This has helped the Bank provide services like 'Any Branch Banking Facility'. Internet Banking and SMS Banking. Living up to the expectations and aspirations of the Customers and other stakeholders of being innovative, HBL very recently introduced several new products and services. Millionaire Deposit Scheme. Small Business Enterprises Loan, Pre-paid Visa Card. International Travel Quota Credit Card. Consumer Finance through Credit Card and online TOEFL, SAT, 1ELTS, etc. fee payment facility are some of the products and services. HBL also has a dedicated offsite 'Disaster Recovery Management System'. Looking at the number of Nepalese workers abroad and their need for formal money transfer channel; HBL has developed exclusive and proprietary online money transfer software- Himal Remit TM. By deputing our own staff with technical tie-ups with local exchange houses and banks, in the Middle East and Gulf region, HBL is the biggest inward remittance handling Bank in Nepal. All this only reflects that HBL has an outside-in rather than inside-out approach where Customers' needs and wants stand first.

# c) Nepal Bangladesh Bank Ltd. (NBBL)

Nepal Bangladesh Bank Ltd. was established in June 1994 with an authorized capital of Rs.240 million and Paid up capital of Rs.60 million as a. Joint Venture Bank with IFIC Bank Ltd. of Bangladesh. Its Head Office is situated at New Baneshwore, Bijuli Bazar, Kathmandu.

The prime objective of this Bank is to render banking services to the different sectors like industries, traders, businessmen, priority sector, small entrepreneurs and weaker section of the society and every other people who need Banking Services. During the period of 10 years of its operation, it has accommodated a large number of clients and has been able to provide excellent services to its clients.

With a network of 17 branches and a corporate office, the Bank commands the largest network amongst the joint venture banks in Nepal.

# **1.2** Focus of the Study

Banks have today gained paramount trust of the public. Banking industry offers a wide range of services addressing the needs of public in different walks of life. At present, a" large number of banks are operating in Nepal. Naturally, they are rendering a wide range of services. They are trying to keep up pace with the changes taking place in the world. But quantity does not count for quality. The financial institutions of all classes 'A' to 'D' are increasing every year. In a small economy like Nepal, it is a question of great concern as to how so many banks are surviving and reaping profit. The concern is not only about these days but also the sustainability of the operating banks in future days also. Therefore, the report will try to concentrate on three-major private sector banks of Nepal, i.e., Himalayan Bank Limited (HBL), Nepal Bangladesh Bank Ltd (NBBL) and Standard Chartered Bank Nepal Limited (SCBNL). It will focus on the comparative Profit Accountability of these two banks regarding profitability, liquidity, leverage positions, cost minimization, etc.

# 1.3 Objectives of the Study

The main objective of the present study is to analyze the liquidity position as well as the investment policy adopted by HBL, NBBL and SCBNL and comparison of such between themselves. Presently the bankers are facing a huge tension of liquidity and this is not a good signal toward the performance of the banks. The study focuses whether it is backward or forward in investing its fund efficiently in industry average. The specific objectives of the study are given below:

- To evaluate the liquidity, assets management, efficiency and profitability of HBL, NBBL and SCBNL
- To analyze the deposit utilization trend of the HBL, NBBL and SCBNL.
- To analyze the relationship between total investment with other financial variables of HBL, NBBL and SCBNL and comparison between them.
- To recommend the package of workable suggestions and possible guidelines to improve investment policy of HBL, NBBL and SCBNL based on the finding of the study.

# 1.4 Significance of the Study

The present study is to find out the investment policy and practice of the joint venture banks in Nepal. Any bank can perform its lending behavior only when it has sufficient amount to lend it. So first, it should be able to collect sufficient amount in the form of deposits from different sectors.

In Nepal, there are very few resources, which have been made in the area of investment policy of commercial banks. Due to this reason, only few books and resources dealing with this aspect are found but are not sufficient. Whatever the research in the area of investment policies have been made are also not in depth and detailed.

Investment policy is one of the essential and the main functions where the whole banking business is related thus, the study on the major joint venture banks and especially in their lending and investment policies carry a great significance to the shareholders of banks, to the banking professionals, to the students and teachers of banking and commerce. It is expected that this study will provide some relevant findings, which may help the bankers, professionals and interested readers too.

# 1.5 Limitation of the Study

This is simply a partial requirement of MBS program. There are some limitations, which weaken the generalization e.g. inadequate coverage of industries, period taken, reliability of statistical tools used and their variations. The study is limited to the randomly selected joint venture banks and is confined only to the investment policies, operation and practice of these banks.

The following are the major limitations of the present studies:

The whole study is based on the secondary data collected from the banks. Research based on secondary data is not far from limitations due to inherent character. The data published in the annual reports of the respected banks, various journal, periodicals and reports published by central bank and the article, books and news published in the respective subjects shall be taken into consideration. So any mistakes and misrepresentation will affect the outcome of the study. Thus it is assumed that all of data here in are correct an-d accurate.

- ii) The study is conducted among the two joint venture banks i.e. HBL and SCBNL. It is not sure that it will reflect the real status of all joint venture banks. Neither has it represented the local banking system in the country.
- iii) The study covers the analysis of only five years period from 2002/03 to 2006/07 and analysis is concerned in some managerial, financial and accounting aspects and it does not cover the whole areas of the subjected banks.
- iv) Some of statistical as well as financial tools of comparison and analysis should be used in the study. Hence, the drawbacks and weakness of those tools may have an adverse effect on the outcome of the study.
- v) Being a student, resource constraint is the factor, which has limited the scope of the study

# 1.6 Organization of the Study

The study has been organized into five chapters.

- Chapter 1 This chapter deals with the subject matter of the study consisting background of the study, focus of the study, objectives of the study, significance of the study and organization of the study.
- **Chapter 2** This chapter deals with review of literature. It includes conceptual review work along with review on major investment of commercial banks, review of Nepal Rastra Bank directives and review of unpublished studies.
- **Chapter 3** This chapter deals with Research Methodology. It includes research design, nature & sources of data, population & sample, method of data analysis and limitation of the study.
- **Chapter 4** This chapter deals with analysis and interpretation of data using financial and statistical tools and Major Findings are described in third chapter.
- **Chapter 5** This is the last chapter which deals with Summary, conclusions and recommendation of the study.

# **CHAPTER-II**

# **Review of Literature**

# 2.1 Conceptual Review

Lending operation has played a vital role in each and every organization. Many-researcher had conducted their research on their financial performance, profit planning, investment etc. but very few researches have been made in the area of investment policy and practice in the context of Nepal. Besides these, there are many books, articles and other relevant studies concerned with lending and investment policy. Some of the relevant studies, their objectives, findings and conclusion relating to the topic have been reviewed below:

Profits are the prime measurement of success of a firm. The most common objective of a business firm is to maximize profit in one or either way as well as to render service. Moreover, profit is the yardstick of achievement target of an organization.

The accounting concept of company profit is a concept of net business income. Profit is the surplus income that remains after paying expenses and providing for that part of capital used for producing revenue. Profit in accounting sense tends to become a long-term objective of a product but also of the development of market for it. Profit is a signal for the allocation of resources and a yardstick for judging managerial efficiency.

A joint venture bank is an organization designed to make profits, and profits are the primary measure of its success, profits are the acid test of the individual bank's performance. Profit is the expenses inclined to operate the business and it is the primary objective of business.

Thus, "profit is the excess amount over cost of operations. In every organization, it is one of the most essential parts to run business smoothly. Profit is the contribution of all factors of production. No company can survive without making profit for longtime. So, it is taken as ultimate measure of its effectiveness for business firms. It is widely accepted principle that 'profit does not happen, it is managed.' An organization should

plan its activities for achieving a desired profit" (Mahat, 2003:67).

Profit is a controversial term; it is defined and viewed in different senses by different people considering various aspects. "Usually profit does not happen. Profits are managed before making an intelligent approach to the managerial concept of profit. There are, after all, several different interpretations of the term 'profit'. An economist will say that profit is the reward for entrepreneurship for risk taking. A labour leader might say that it is a measure of new efficiency labour has produced and that it provides a base for negotiating a wage increase. An investor will view it as a gauge of the return on his or her money. An internal revenue agent might regard it as the base for determining income taxes: the accountant well defined it simply as the excess of a firm's revenue over the expense of producing revenue in a given fiscal period" (Lynch, 1989:254).

The word 'profit' implies as comparison of the operation of business between two specific dates, which are usually separated by an internal of one year. No company can survive long period without profit, for profit is the ultimate measure of its effectiveness and in a capitalist society, there is no future for a private enterprise, which always incurs loss. Profit is the primary objectives of a business in view of the heavy investment which is necessary for the success of most enterprises, profit in the accounting sense tends to become a long-term objective which measures not only the success of a product but also of the development of the market for it.

The effective operation of a business concern resulting into the excess of income over expenditure fully depends upon as to what extent the management follows proper planning, effective coordination and dynamic control. This requires that management must plan for future financial and physical requirements joint to maintain profitability and productivity of the business concerned.

# 2.1.1 Traditional Approach towards Profit

There is traditional approach of business environment and economic theory associated with the profit for a firm that is - maximization approach. Profit maximization is the most important assumption of economic theory. It always assumes that a firm sets target and strives to maximize the profit, and is discretionary behavior of the firm.

Therefore, in the managerial economics, profit maximization is the central belief.

"Profit is the measurement of the business firm's overall performance. A business firm can claim it to Be successful if it can maintain maximum profit to justify the worth of the return on investment. This helps business firm to save from shortage of funds and provides best opportunities to undertake the expansion of assets to enlarge business" (Shrestha, 2002:35).

Profit maximization objective can be justified as follows:

- Under the condition of free competition. Businessmen pursuing their own self interest also serve the interest of society. It is also assumed that when individual
  - firm pursue the interest of maximizing profits, society's resources are efficiently utilized.
- 2. Firms adopt those ventures which increase profit and unprofitable activities are dropped.
- The firm by pursuing its objective of profit maximization also maximizes social economic welfare.

However, this objective has been criticized on the several grounds as follows:

- 1. It fails to maximize the owners' economic welfare.
- 2. It fails to account timing of return and ignores risk.
- 3. It is not clear that the maximization of profit is of short-rim or long-run.
- 4. It ignores psychic income.
- 5. It assumes that owners are mangers and vice versa.
- 6. It does not clarify whether profit relates to total capital or shareholders' equity.

This objective was regarded suitable and advantageous only in those days when business structures were solely self-financed and relatively small. Obviously, the single owner of the business entertained profit maximization just to increase the individual wealth and power.

# 2.1.2 Modern Approach Towards Profit

Today, business environment has become totally different from that in the past. A firm has several other objectives besides profit maximization. There is security and long-term motive of earning reasonable profit nowadays. In the words of Baumol, sales maximization is the main objective of business. Similarly, the objective of the firm may be to maximize the growth rate, utility of the business or satisfaction of the various associated parties or shareholders' wealth maximization.

The business firms are financed through the funds of equity owners, creditors and professional management. Customers, employees, government and society are connected' with the firm in one or other ways. Therefore, shareholders" wealth maximization should be taken as a normative goal of the firm by setting a standard of reasonable profit and by fulfilling the minimum requirements of the society.

The wealth maximization objective is consistent with the" objective of maximizing owners' economic welfare. Economic welfare maximization of owners is equal to the utility maximization of their consumption overtime. The principle of following timing of returns and risks provides a rational guide for running a business and for efficient allocation of resources in society. "In developing countries, the firms have to determine what the outcome would be before allocating the resources in an attempt to maximize the social benefit side by side in accompanying the maximization of the shareholders' wealth" (Shrestha, 2007:89).

The objectives of profit maximization were given various kinds of threats from all sectors. So a wide range of alternatives are put forwarded by the economists to the concept .of profitability of a firm. Though there are denials towards profitability maximization model, economists still do not have unified views covering the alternative model when markets are perfectly competitive, monopolistically competitive, and duopolistically competitive. Therefore, profit maximization model is still in existence. A business firm still prefers to maximize profits as far as possible. Business has multiple goals and the needs of survival, goodwill, security or growth commonly call for some sacrifice of short-term profits. Most businesses do, however, rate profitability consistently high among their long-term objectives and it could be argued that short-term goals such as security and growth are in fact subordinate to

long-term profitability. Therefore, firm should rather direct its objectives towards reasonable sets of profit.

# 2.1.3 Profit and Profitability

Profit is the prize of entrepreneurship and risk taking. It is the life-blood of each type of business. In a simple term, profit means the residual balance of earnings expected to be available with the firm that is obtained after deducting entire expenses, costs, charges, and provision from total revenue of a period of time. Profit is the resources left to the firm for future growth and expansion or reward to be distributed to the entrepreneurship in the form of dividends, etc.

Shareholders are interested with the growth of the retained earning and at the same time stability in earning. Similarly, management of the bank is concerned about the overall position of the bank. Likewise, government regularity is concerned with the rate of return on the assets and also wants to see the proportion of capital structure of the bank. The general public is also interested towards the concerned matters.

Proper utilization of the bank's resources is an indicator of sound performance. How far the banks have gained over the years depend chiefly on how far they have been able to utilize their resources in an effective manner. So to increase profitability, the bank should properly utilize the resources. So financial performance analysis of a firm consists of different kind of indicators out of which financial statement analysis, ratio analysis, sources & uses of fund are the major indicators to measure the strength and weakness of a firm. A powerful and the most tested tool of financial analysis is the ratio analysis. "It is defined as the systematic use of ratio to interpret the financial statement so that the strengths and weakness of a firm as well as its historical performance and current financial condition can be determined (Khan and Jain, 1992:291)

Profitability ratio is measure of efficiency and the search which provides and incentive to achieve efficiency. It is one of the main indicators to analyzing the financial performance of a firm.

The ratio gives the answer of the following question.

- i. What rate of return does it represent?
- ii. Does the firm adequate earn the profit?
- iii. What is earning per share?
- iv. How much amounts was paid as dividend?

Profit is a motivating factor behind many managerial activities. Much has been written about the role (as opposed to the method of calculation) of profit. Profit plays three roles in the capitalistic society. Profit is the financial reward of risk taking; profit is the financial reward for having monopoly power; profit is the financial reward for the efficient management.

The promise of profit provides a strong incentive to owners and managers to act efficiently. Therefore, it is common in economic theory to hypothesize that the criteria for evaluating the action of the firm is profit maximization. The basic incentive for business is to produce goods and services. The profit motive is the engine for the free enterprise system. Under conditions of pure competition, economic profits are residual, dynamic and temporary. Profits are constantly changing in amount and among firms. Long run forces in the economy tend to reduce or eliminate economic profit. When losses prevail, market forces tend to make adjustments that can result in profits. The other terms used for profit are surplus, reserves, income, revenue, etc.

There is presence of wide difference between profits in an accounting and in an economic sense.

Profit in accounting sense is the excess of revenue over costs incurred in producing this revenue. This concept of profit is also known as residual concept. But in economics, both implicit and explicit costs are deducted from total sales revenue in determining profits.

# 2.2 Reviews on Major Investment of Commercial Banks

#### 2.2.1 Investment in the Securities

The third line of defense to meet demands for cash and serving, the quick source of funds is the bank's liquid security holding, often called secondary reserves. "These

assets normally compose more than one third of total assets of banks. These typically include holding of shorter-term government bonds like treasury-bills, development bonds, etc., and other securities purchased in the open market and readily converted into cash in the financial market. These security bear low risk, low return, but higher liquidity. The remaining securities where the banks invest in are direct and indirect investments, in the sectors by virtue of statutory requirements are imposed. For example, most of the Nepalese commercial banks feel convenient to invest in the rural development bank's shares as this complies both with NRB regulations for priority sector lending and also they get moderate return from them" (Subedi. 2006:45).

"Commercial banks invest their excess funds in the shares and debentures of other companies. They generally invest when there is excess of funds over the required when there is no alternative opportunity to make investment in the profitable sector. Now-a-days, the commercial banks of Nepal have purchased shares and debentures of regional development banks, NIDC and other development banks, etc. These types of investments are mainly made for their income generating power and for other advantage like tax shelter, etc. Investments are recorded in their cost price or market values whichever is lower." (Subedi, 2006:54).

## 2.2.2 Loans and Advances

This is the primary source of income and most profitable asset to a bank. A bank is always willing to lend as more as possible since they constitute the profitable source of revenue. This occupies the highest proportion of assets of any commercial banks bearing more than 40% of the assets used. But a bank has to be more careful while providing loans and advances since they may not be realized in a short period of time. And sometimes they may turn into bad debt. Therefore, it is not wise to rely on them at the time of emergency for all banks.

A commercial bank hardly lends money for a longer period of time. It lends money for a short period of time that can be collected in a short period of time. The commercial banks are never bound to provide long-term loan because it has to synchronize the loans and advances with the nature of deposits they receive. Loans and advances are provided against the personal security of the borrower or against the security of the immovable and movable properties. Banks provide the loans in the various forms such

as overdraft, cash credit, direct loans and discounting bills of exchange.

#### 2.2.3 Other Assets

The great majority of banks- assets are financial claims. However, banks' assets also include the value of bank buildings, vehicles, equipments, computers (Hardware and Software) and other miscellaneous fixed assets like deferred revenue expenditures, leaseholds and free holds, prepaid expenses and advances. However, only a small portion of total assets is covered in this category.

# 2.3 Reviews on Major Sources of Funds

## 2.3.1 Deposits

The principal liability of a commercial bank is its deposits collected from general public, business and government agencies. It is a direct claim of outsiders to the bank. The total assets of banks are financed by more than 75% from the deposits. Normally, deposits are classified into three categories: demand deposits, saving deposits and fixed deposits.

Demand deposits are permitted for unlimited check writings, but they do not bear any interest liabilities. However, a minimum balance is fixed for the depositors. By the viewpoint of banks, these are the cost free deposits but banks are not confirmed to invest them for a longer period, since can be demanded at any time. This is an easy mean of circulating transactions and suitable for business concerns.

Saving deposits are normally meant for the individuals, non-profit making organizations and other who are for saving motive and also want to earn some interest from the deposits. However, there is a minimum fixed balance. Banks offer interest in the minimum, monthly balance to the saving depositors and also permit withdrawals and deposits to these accounts. However, banks impose some constraints in the maximum one-time withdrawal limit.

If the maximum one time limit is exceeded and minimum balance is not maintained, no interest is offered to the depositors. These deposits are of somehow stable and banks can feel confirmed to invest them in the medium term financings.

Fixed term deposits (also called time deposits) are the major sources for bank's longer-term investments as these deposits bear fixed maturity periods. These deposits are offered a stipulated interest rate (normally higher than the savings rate), a fixed denomination of amount and a prefixed maturity period. Banks tend to offer different interest rates to these deposits accounting to the deposit amount and maturity time. The more amount and longer the maturity period, the higher the interest rate and vice versa.

Nowadays, Nepalese commercial banks have introduced a different type of deposit account: Call Deposit. Banks are happy to find the heavy-corporate source of deposits stable in the time span. Banks are interested to find the single source of heavy deposits constable to invest it in the market. These types of deposits have various benefits. Banks can serve a single corporate deposit or more carefully than various small accounts. The deposits are of constable nature and banks can invest them without hesitation. So, banks provide a special interest rate to such deposit, permit to write checks against them, but also fix a minimum balance for maintaining this account.

# 2.3.2 Borrowings from the Non-Deposit Sources

A sizable amount of funds stem from miscellaneous liability accounts. Bank assets are supported from other non-deposit liabilities with or without costs. Bank borrowings, placements, overnight placements, borrowing from central banks, foreign banks are some examples of nominal cost bearing sources. However, these are short-term liabilities, due to no obligation for banks to maintain reserve for them. These types of liabilities are also important for banks. Other cast free sources of liabilities are accrued interest payables, deferred expenses, accounts payable, deferred tax liabilities, obligations such as bankers' acceptances, banker's checks, matured time deposits, remittance awaiting disposals and other liabilities.

# 2.3.3 Stockholders' Equity/Internal Financing Sources

Every new bank begins with a minimum amount of owners' capital and borrows funds from the public to lever up its operation. These capitals normally account less than 10% value of the total assets. So, banks are the institutions having the greatest financial leverage using from external sources of financing. Though, being a relatively small item, bank's capital account typically includes value of paid up capital, share

premium, statutory and other reserves and retained/ploughed back profits. Usually, the largest item in the capital account is retained earnings, undivided profits, which include accumulated profit over each year after payment of dividends.

The banks are such type of institutions, which deal in money, substitute for money, the deal with credit and credit instruments. Good circulation of credit is very much important for the banks .unsteady and unevenly flow of credit harms the economy. Thus, to collect fund and utilize it in a good investment is not a joke for such organization. The secret of successful banking is to distribute resources between the various joins of assets in such a way as to get a sound balance between liquidity and profitability. So there is cash (in hand quickly) to meet every claim and at the same enough income for the bank to pay its way and earn profits for its shareholders.

Bank is government regulated, profit making organization that operates in comparison with other banks and financial institutions to serve the credit needs of its customers. The primary business of bank is accepting deposit and lending money. Bank accepts deposits from customers who want the safety and convenience of deposit and the opportunity to earn interest on their excess funds. Bank put their depositor's funds to other individuals to other business and to federal state and local government.

A commercial bank must mobilize its deposits and other funds to profitable, secured and marketable sector so that it can earn a handsome profit as well as it should be secured and can be converted into cash whenever needed. Obviously, a firm that is being considered for commercial loans must be analyzed to find out why the firm needs money, how much money the firm needs and when and how it will able to repay the loan.

Bhattacharya, in his book has put the recommendation of Tandem committee to prepare this report in 1975. "However, recommendation skills deserve great significance in the sector to credit appraisal and lending breaking away from the additional methods of appraisal. The system proposed by the committee enjoyed upon the banker". (Bhattacharya, 1998:75).

- i. To assess the need based credit of the borrower on a rational basis,
- ii. To ensure proper end use of bank credit by keeping a closer watch on

- the borrowers business and thus to ensure safety of all bank funds,
- iii. To improve the financial discipline of the borrowers,
- iv. To develop the healthy relationship between the bankers and the borrowers.

The committee examined the existing system of lending recommended the following broad changes in the lending system.

- i. The credit needs of borrower are assessed on the basis of their business plan,
- ii. Bank credit is only the supplementary to the borrowers' resources and not in replacement of them.
- iii. Borrowers are required to hold inventory and receivable according to norms prescribed by the Reserve Bank of India time to time.
- iv. Credit is made available in different components only depending upon the nature of holding of various current assets.
- v. In order to facilitate a close watch on the operation of borrowers, they are required to submit, at regular intervals, data regarding to their business and financial operations, both for the past and future period.

The committee held that any time a business required holding the following current assets for the operations of a business.

- a. Raw materials including stores and other items used in manufacturing process.
- b. Stock in process
- c. Finished goods.

"In India the definition of a business of banking and a large number of permissible functions for banks given in banking regulation act 1948(BR Act) Section 5(b) of the BR act defines banking as accepting for the purpose of lending and investment of deposit of money from public, repayable on demand or otherwise and withdrawal by cheque draft and order or otherwise. As per definition banking in India signifies

- a) Acceptance of deposit from public for the purpose of lending and investment
- b) Repayable on demand or otherwise and withdrawal by cheque, draft

#### and order or otherwise

According to the section 5 (c) of this act, banking company is a company, which transacts the business of banking of India.

Section 7 of the BR act makes it compulsory for every company carrying on the business of banking in India to use as part of its name at least one of the following words. Bank, Banking or Banking Company" (Khub, 2000:45).

"The investment policies of banks are conditioned to great extent, by the national policy framework. Every banker has to apply his own judgments for arriving at a credit decision, keeping of his banker's credit policy in mind." (Rao, 1984:25).

Banking growth and profitability are the result of carefully forecasting finding needs, competitively attracting funds, efficiently burrowing of funds and effectively investing funds in safe but profitable assets. Depending on a bank size, location and national and local economic conditions, a bank may have adequate relatively. Stable sources of low-cost funds or it may have to compete regularly and aggressively for funds at high market prices. For an increasing number of banks the second situation is becoming the norms, as more and more banks are facing the increasing pressure to attract adequate funds at reasonable price.

Lending is the essence of commercial banking. Consequently the formulation and implementation of sound lending among the next important responsibilities, of bank's Directors and management. Well-conceived lending policies and careful lending practices are essential, if a bank is to perform its credit creating function effectively and minimize the risk interest in any extension of credit.

"Of course one of the primary functions of development in banking is deposit mobilization. Without the deposits corning from the public and savers bank will not have the resources to lend. With adequate resources: lending can have a wider average torn meet the credit needs of all the sectors of the economy. Deposit and credit are operation always together and each is interconnected. Unless there are advances, deposit cannot rise" (Shrestha, 2003:28).

From the above definition, we can say that the formulation and implementation of sound lending are among the next important responsibilities of bank directors and management. Well lending policies and careful lending practices are essential, if a bank is to perform its credit creating function effectively and minimize the risk interest in any extension of credit.

Due to the slowdown on the world economy and deteriorating law and other situation of the country, many sectors of the economy are already sick. When any of the economy catches cold, bank starts sneezing. From this perspective, the banking industry or a whole is not robust. However, banks like Nabil having risk management system, sound capital, adequate provision, quality staff and large client base can withstand any contingencies.

Hence, it is felt that appraisal techniques of bank lending in competitive areas have to be more attend towards risk evaluation. A major aspect of this work has been the development of more advanced method for the quantitative measurement of marker risk. The extensive trading in financial instruments provides a good supply of prices statistics and this is a considerable help when it comes to estimating market risks. Much work is now being done in many places to construct models for .better management of credit risks which are still by for the largest risk category for banks. The difficulties here however, are for greater than in the case of market risk.-The estimations of key parameters for model is obstructed by the lack of statistics, moreover, some advances have been made in the estimation of operational risk. i.e. the risk of losses arises from technical problems or inadequate internal controls. Previously, operational risks had attracted less attention than credit and market risks. It changes I the nature of banking operations that have brought them more to the fore.

Financial legislation and regulation need to be sufficiently flexible to accommodate the rapid pace of development in the financial sector. It tends to take considerably larger to amend rules than it vows to create new financial products. But there has to be the foundation of minimum requirement for risk management. In addition, the authorities must be increasingly involved in ensuring that institution themselves posses a basic competence in and understanding of risks, that have to be managed, as

well as adequate systems for their management rather than issuing detailed risk management instructions. In other words, it has become more important to inspect system, defining in a wide sense, to scrutinize them in particular commitment or market risk. Some supervision can be carried out with the market assistance. The authorities prescribe as well as encourage a more open presentation of the institutions risked and profitability in different operation such as transparency emphasize the banks demand on each other as well as what customer requires from their banks.

Effective credit risk management allows reducing risk and potential NPA. It also offers oilier benefits. Once banks understand their risk and their costs, they will be able to determine their profitable business and thus, price product and according to the risks. Therefore, the' banks must have on explicit credit risk strategy supported by organizational changes, risk measurement techniques and fresh credit processes and system. They are fine crucial areas that credit management stand focus on.

- i. Credit sanctioning and monitoring process
- ii. Approval of collateral
- iii. Credit risk arises from new business opportunities
- iv. Credit exposure relatives to capital or total advances
- v. Concentration on correlated risk factors

Apart from these, the bank management should regularly review all the assets quality including portfolio composition, big borrower exposures and development and credit management policy and process. Improving risk management will not be easy or quick. However, Nepalese banker loves little choice. Hopefully, the banks adopt good risk management practices and will be able to reach both strategic and operational benefit.

# 2.4 Review of Nepal Rastra Bank Directives

NRB is the apex institution in the money and capital market. Being the central bank of the nation, it directs, supervise and control the function of commercial banks and other financial institutions. NRB has issued various directives. In order to develop healthy, competitive and secured banking and economic system to ensure national development. The following are the some of the relevant directions that NRB has circulated to the commercial banks (NRB, 2064:5-15).

# 2.4.1 Capital Adequacy Norms

# **Maintenance of Minimum Capital Fund**

Effective from F.Y. 2062/63 (2005/06) the licensed institutions shall maintain minimum capital fund on the basis of their risk-weighted assets, as follows:

Institutions	Required Capital Fund on the basis of weighted risk assets (in	
	percentage)	
	Core Capital	Capital Fund
Banks	6.0%	12.0%

# 2.4.2 Classification of Capital

For the purpose of calculation of Capital Fund, the capital of the banks shall be classified into the following 2 components.

Clarification: For the purpose of this section. "Capital Fund" means the aggregate of the Core capital and Supplementary capital.

# (a) Core Capital

The amounts under the following heads shall be included in the Core Capital:

- (a) Paid Up Capital
- (b) Share Premium
- (c) Irredeemable Preference Shares
- (d) General Reserve Fund
- (e) Accumulated Profit and Loss Account
- (f) Capital ^Redemption Reserve
- (g) Capital Equalization Reserve
- (h) Other Free Reserve

The following items shall be deducted for the purpose of calculation of the Core Capital.

- (a) Goodwill
- (b) Excess amount of investment in shares and debentures of organized institutions than prescribed by Nepal Rastra Bank.
- (c) Entire amount of investment made in shares and debentures

of organized institutions having a financial interest.

(d) Fictitious Assets.

# (b) Supplementary Capital

For the purpose of calculation of Capital Fund, the amount under the following heads, not exceeding one hundred percent of the Core Capital, shall be included under the Supplementary Capital.

## i) General Loan Loss Provision

Under this head, provision made only against the Pass Loan shall be included.

# ii) Assets Revaluation Reserve

The amount of Assets Revaluation Reserve can be included for the purpose of calculating Supplementary Capital subject up to 2 percent of the Total Supplementary Capital, inclusive of the amount of this Reserve.

# iii) Hybrid Capital Instruments

This includes the following instruments.

- (1) Unsecured, fully paid up instruments which are subordinated to (priority of payment after) depositors and creditors, and available to absorb losses as well as convertible into ordinary capital.
- (2) Instruments, which arc non-redeemable at the option of the holder except with the approval of Nepal Rastra Bank.
  However, the licensed institutions cannot hold (purchase) Hybrid Capital Instruments issued by another licensed institution.

# iv) Unsecured Subordinated Term Debt

It includes unsecured and subordinated debt instruments (priority oF payment after the depositors) with a minimum maturity term of over five years and limited life redeemable preference shares. To reflect the diminishing value of these instruments, a discount (amortization) factor of 20 percent during the last five years shall be applied.

The issue of these instruments shall not exceed 50 percent of their core capital.

- a) Exchange Equalization Fund maintained by the licensed institutions authorized to deals-in foreign exchange transactions.
- b) Additional amount of loan loss provision maintained in excess of the requirement.
- c) Provision for Possible Loss on Investment and Investment Adjustment Fund.

# 2.4.3 Total Weighted Risk Assets

For the purpose of calculation of capital fund, the risk-weighted asset has been classified into following two components:

- (a) On-Balance Sheet Risk-Weighted Assets:
- (b) Off-Balance Sheet Risk-Weighted Items.

# 2.4.4 Capital Fund Ratio

This ratio would measure the total capital fund on the basis of total risk-weighted assets of licensed institutions. The Capital Fund Ratio shall be determined as follows:

Capital Fund Raio = 
$$\frac{\text{Core Capital + Supplementary Capiatl}}{\text{Sum of risk - weighted assets}} \times 100$$

Sum of risk-weighted assets = Total on-balance sheet risk – weighted assets + Total off-balance sheet risk – weighted items

# 2.4.5 Actions for Not Complying the Directives Relating to Capital Fund

Where any bank does not maintain minimum Capital Fund, any of the following actions may be initiated:

- (a) Suspension of opening new branch.
- (b) Suspension of access to refinancing facilities of Nepal Rastra Bank.
- (c) Restriction on lending activities of the licensed institution.
- (d) Restriction on acceptance of new deposits.
- (e) Any actions may also be initiated under Section 100 of Nepal Rastra Bank Act-2058.

#### 2.4.6 General Loan Loss Provision

Banks shall classify the loan and advances in accordance with Clauses I lo Section 7. as follows:

# 2.4.7 Classification of Loan and Advances

#### (a) Pass

All Loans and Advances which are not past due or past due for a period up to 3 (three) months shall be included in this category.

#### (b) Substandard

All loans and advances which are past due for a period of more than 3 months

to 6 months shall be included in this category.

# (c) Doubtful

All loans and advances which are past due for a period of more than 6 months or up to 1 (one) year shall be included in this category.

#### (d) Loss

All loans and advances which are past due for a period of more than I (one) year shall be included in this category.

#### **Notes:**

- (1) There is no restriction in classifying the loan and advances from low risk category to high-risk category by the banks. For instance, loans falling under Sub-Standard may be classified into Doubtful or Loss, and loans falling under Doubtful may be classified into Loss category.
- (2) The term Loan and Advances 'also includes Bills Purchased and Discounted.

# 2.4.8 Prohibition to Recover Principal and Interest by Exceeding the Overdraft Limit

Principal and interest on loans and advances shall not be recovered by overdrawing the borrower's current account exceeding the limit of overdraft facility.

#### 2.4.9 Loan Rescheduling and Restructuring

The term "reschedule" means process of extending repayment period/time of credit taken by the borrower and the term "restructuring" means process of changing the nature or conditions of loan/facility, adding or deleting of conditions and change in time limit.

Banks may reschedule or restructure loans only upon submission of a written Plan of Action by the borrower, which is resurrecting on the following grounds. The basis of loan restructuring or rescheduling shall be enclosed with each credit files.

- (a) Evidence of existence of adequate loan documentation and securities.
- (b) Licensed institution is assured on possibility of recovery of restructured or rescheduled loan.

# 2.4.10 Loan Loss Provisioning

The loan loss provisioning on the outstanding loans and advances and bills purchases shall be provided on the basis of classification made as per this Directives, as follows:

Classification of Loan	<b>Loan Loss Provision</b>
Pass	1 Percent
Substandard	25 Percent
Doubtful	50 Percent
Loss	100 Percent

Full provisioning as per Sub-section (1) shall be made against the uninsured priority deprived sector loans and small and medium scale industrial loans.

However, in case of insured loans, the provisioning requirement will be only 25% of the rates stated under Sub-section (I).

# 2.4.11 Regulation Relating to Investment in Share and Securities by Commercial Banks

- Arrangement as to implementation of investment policy under the Approval of the board of directors.
- 2. Bank should prepare written policy relating to investment in shares and securities of the other organized institutions. Such policies should be implemented only under the approval of board of directors.
- 3. There should be one restriction as to investment by the banks in the securities of organized Nepal Government and other securities by NRB.
  - a) Banks may invest in shares and securities of any one of organized institution not exceeding 10% of paid up capital of such organized institution. Any amount of investment more in excess of this limit for pursue of calculation of the capital fund should be deducted from the core capital fund.
  - b) The amount of investment in shares and securities of any one organized institution in which the banks has financial interest should be limited to 10% of the paid up capital of such company and the cumulative amount of such investment in all the companies in which the banks has financial interest should be limited to 20% of the paid up capital of the bank. For the purpose of calculation of capital fund, the amount of such

- investment in shares and securities should be deducted from the core capital fund.
- c) The total amount of investment should be restricted to 30% of the paid up capital of bank. Any amount of investment make in excess of 30% of paid up capital of bank for the purpose of calculation of capital fund should be deducted from the core capital fund.
- d) Bank should invest in the shares and securities of organized institution, which are already listed in stock exchange where arrangement exists for listing within one year.
- e) Where the shares and securities are not listed within the period prescribed provisioning equivalent, the whole amount of such investment be provided and credited to investment adjustment reserve. The outstanding amount in such reserve should not be utilized for any other purpose till the said shares and securities of the organized institution in listed. The outstanding amount in investment adjustment reserve should be included under supplementary capital.
- (f) Banks should not invest in any shares, securities and hybrid capital investment issued by any banks and financial institution licensed by NRB. When such investment exists prior to issuance of this directive, such investment should be brought within the restrictive limitations imposed by this directive within three years i.e. by the close of fiscal year 2061/62.

### 2.4.12 Directive Relating to Interest Rate

Banks will be free to fix interest rates for both deposits and lending, including fixation of types of interest and procedures.

# 2.4.13 Interest Rate To Be Approved

Banks shall implement the Interest rates for deposits and lending, procedures for calculation of interest, penal interest, commission and service charges only after approval. Banks cannot vary (upward or down ward) the interest rate for deposits in excess of 0.5 percent over the published rates.

# 2.4.14 Submission Of Return On Interest Rate

Banks shall compulsorily submit particulars of interest rates on deposits and lending to Banks and Financial Institutions Regulation Department and related Supervision Department Nepal Rastra Bank within 7 days of each quarter ending. Further, banks shall submit the whole arrangements and procedures relating to interest rates as per the Clause 3 above at the time of initial implementation and changes made thereto within 7 days.

#### 2.4.15 Interest Rates to be Published

Banks shall publish the particulars as per Clause 4 above at times of each amendment made in the interest rates on deposit and lending in National daily newspapers.

# **Recognition of Interest Income**

The interest accruals on loan and advances shall be recognized as income on cash basis. Interest accrued but not realized in cash shall be recognized in the \ear of cash realization. Interest receivable for a period shall be debited to "Interest Receivable Account" and credit to "Interest suspense account".

# **2.4.16** Action For Non-Compliance

If the licensed institutions found not complying with the directives relating to branch/offices, actions may be initiated under the Nepal Rastra Bank Act, 2058.

# 2.4.17 Single Borrower Obligor Limit

### 2.4.17.1 Fixation of Limit on Credit and Facilities

Bank may extend to a single borrower or group of related borrowers the amount of fund based loans and advances up to 25 percent of the Core Capital Fund and non fund based off-balance sheet facilities like letters of credit, guarantees, acceptances, commitments up to 50 percent of its Core Capital Fund. Fixation of limit on credit and facilities to single borrower shall be made on the basis of Core Capital Fund as per the latest quarterly balance sheet certified by the Internal Auditor of concerned institution. The Fund-Based loan and Non-Fund Based facilities are separate and accordingly the single borrower limit shall not be calculated by aggregating the both.

# 2.4.17.2 Related Parties Are To Be Considered As a Group:

For the purpose of the above prescribed exposure limits, "group of related borrowers"

shall be treated as a single group under the following circumstances:

- (a) Where a company holds 25% or more shares in another company, then both of such companies,
- (b) A person, firm, directors of a company, shareholders of a private company, partners of partnership firm, proprietor and spouse, son, daughter, adopted son, adopted daughter, parents, step mother, and brothers and sister, sisters who are supported by such director, shareholders, partner. Proprietor residing jointly in the same house or separately.
- (c) Those companies in which the persons mentioned under Sub-clause (b) above, individually or jointly hold 25% or more shares.
- (d) Even if the director, shareholder, or other relatives as specified in Sub-Clause (b), holds, jointly or individually, less than 25% shares of another company, but the management of that other company is controlled by them in the following ways, then such companies:
  - (1) By being Chairperson of the Board of Directors;
  - (2) By being the Chief Executive of the Company:
  - (3) By appointing more than 25% of the directors;
- (e) Firms, companies stated to be associated as a group, or members of such group, or
- (f) Where one borrower or company as stated in Sub-clause (b) has provided a guarantee to another borrower or company, then such companies.

# 2.4.18 Maintenance of Liquidity

Bank shall maintain mandatory balance with Nepal Rastra Bank at 5 percent.

Added by Circular No Bai.Bi., Ni.,Bi./Bitta-Paripatra/148/1/062/63 dated 2062.4.25/August 8, 2005

- 1. The principal amount paid by the commercial banks against the Nepal government/NRB Bonds shall be eligible for the purpose of calculation of Compulsory Cash Reserve Ratio up to period of receipt of reimbursement.
- 2. Proof as to the principal amount paid shall be submitted by the commercial banks at the time of submission of returns on Compulsory Cash Reserve Ratio to Nepal Rastra Bank. Where a false statement is found to have been-made, a penalty shall be imposed equivalent to the amount applicable on non-fulfillment of the Compulsory Cash Reserve Ratio

- 3. Penalty shall be imposed in case the balance to be maintained as above.
  - (a) For first time shortfall in maintaining the mandatory balance, at the rate percentage of 6% on such shortfall amount.
  - (b) For second time shortfall in maintaining the mandatory balance, at double the rate percentage of the existing bank rate on such shortfall amount.
  - (c) For third time and successive shortfalls in maintaining the mandatory balance, at triple the rate of the existing bank rate on such shortfall amount.
- 4. The penalty at the existing bank rate on shortfall amount shall be on weekly basis. Such shortfall amount shall be multiplied by the percentage of bank rate and divided by 52.
- 5. For the purpose of application of bank rate, the highest refinance rate as prescribed by Nepal Rastra Bank shall be considered as the bank rate and penalty on the shortfall amount shall be calculated at such highest refinance rate.

# 2.4.19 Priority Sector Loan

With the objective of mitigating the unemployment, poverty, economic inequality etc and thus upgrading the deprived and low income people, the project of national development and priority sector lending such sector has been categorized as priority sector loan. "With a view to make credit available to small agricultural, industrial and services sector and promote income at employment opportunities (he NRB has directed the commercial bank to extent at least 12% of their total outstanding loans to the priority sector'. (Shrestha, 2002: 95).

# 2.5 Review of Unpublished Studies

In Nepalese context, very few studies can be found in the topics of finance. But there are some independent studies, which are related to the topics are listed below Sunity Shrestha (1993) in her research "Investment Planning of Commercial Banks in Nepal has made remarkable efforts to examine the investment planning of commercial banks in Nepal. The major findings of the study are as follows.

Since investment policy of commercial banks can be done on the basis of fiscal policy of the government and regulatory procedure the central bank. investment are not made in professional manner.

Since investment planning and operation of commercial banks in Nepal has not found satisfactory in terms of profitability, she has suggested.
 "Commercial banks should take their investment function with proper business attitude and should perform lending and investment operation with proper analysis of the projects".

The banking sector is very much affected by the non-performing loan and it is estimated that non-performing loan in Nepalese banking system is around 16%. So that it has serious implication on economic performance of the country.

Lila Prasad Ojha, (2002) has conducted a research on" Lending Practices: A Study of Nabil 'Bank Limited, Standard Chartered Bank Nepal limited and Himalayan Bank Limited"

# **CHAPTER-III**

# **Research Methodology**

#### 3.1 Introduction:

"Research methodology is the systematic way of solving research problems. Research methodology refers to the overall research process, which a researcher conducts during his/her study, if all the procedures from theoretical foundation to the collection and analysis of data. As most of the data are quantitative, the research is based on the scientific models. It is composed of both parts of technical aspect and logical aspect. On the basis of historical data, research is systematic and organizational effort to investigate a specific problem that needs a solution. This process of investigation involves a series of well thought out activities of gathering, recording and analyzing and interpreting the data with the purpose of finding answer to the problem. Hence, the entire process by which we attempt to solve the problem is called research" (Kothari. 1 990:21).

The main objective of this research report is to analyze, examine and interpret the lending and investment procedure of private owned commercial banks with the help of various financial statements, statistical tools and non-financial subject matters. As the study intends to show the effectiveness of lending operation in a concern, it requires an appropriate and research methodology.

# 3.2 Research Design

"Research design is a controlling part for the collection of the data and it helps to collect the accurate information, which is related to the research topic Research design is the plan structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance through the analysis of data" (Kothari, 1990:22).

The first step of the research design to collect necessary information and data concerning to the study. Therefore, research design means the definite procedure and techniques, which guide the study as profound ways of doing research. In this way a descriptive and analytical survey will be done. The justification for the choice of these

methods is preferred because it concludes reliable data and information covering a long time and avoids numerical complex variables.

#### 3.3 Nature and Sources of Data

The data used in this thesis is secondary type, which have been taken mainly from the published data and financial statements of the sampled banks. These include annual reports for the last five years and report of each year. Besides these, the following sources of data are also be considered.

- a. NRB reports
- b. Various publications dealing in the subject matter of the study
- c. Various articles published in Newspapers

# 3.4 Population and Sample

Population refers to the industries of the same nature and its services and product in general. Thus, this research work is designed with investment policy, operation and practice in Nepalese commercial banks. The total number of commercial banks in Nepal is the population of the study. There are 25 commercial banks operating in the country which are the population of this research study. Out of this population, only three banks namely Himalayan Bank Limited, Nepal Bangladesh Bank Limited and Standard Chartered Bank Limited constitute the sample of the study

# 3.5 Method of Data Analysis

Data collected from various sources are managed, analyzed and presented in proper tables and formats. To analyze the collected data, various tools are used which is as follows.

#### 3.5.1 Financial Tools

Different types of financial tools such as liquidity ratio, asset/liability management ratio, activity ratio, profitability ratio are used whenever necessary in this study.

# 3.5.1.1 Liquidity Ratio

Liquidity ratio means the liquidity position of a firm. Liquidity position refers to the position of assets that is representative of the total liquid assets. This ratio measures

the firm's ability to meet its current liabilities. However, excessive liquid assets refers to idle and un-productivity of the firm.

#### Current Ratio

Current ratio is the relationship of current assets and current liabilities. Current assets are those assets, which can be converted into cash within short period of time. Current liabilities are those items, which are paid with in one year. Current ratio measures paying ability of short-term debt the firm. Traditionally, 2:1 is standard ratio, but it is a conservative outlook about the coverage of current liabilities. Current ratio is calculated by dividing current asset by current liabilities.

#### Note:

Current Assets = Inventories. Sundry debtors, Cash and Bank balance, Receivable/Accrual incomes, Loan and Advance, Disposable and Investment etc.

Current liabilities = Creditors. Short-term loan. Bank overdraft. Cash credit. Outstanding expenses. Provision for taxation. Proposed dividend & I Unclaimed dividend etc.

Banking industry has its survival in its ability to create credit and its creation ability depends upon its liquidity ratio. The liquidity ratio of banking industry depends upon the banking habit of the people. The present scenario of banking demands the low rate of liquidity. As a financial analytical tool, the following two liquidity ratio has been used to come into the facts and findings of the study.

- a) Liquid fund to total deposit ratio
- b) Cash to interest sensitive deposit ratio

As far as the banking organizations of Nepal, NRB has directed the commercial banks to maintain 2% of the total deposit in its own vault and to maintain 7% of the demand deposits and 4.5% of term deposit with NRB. This requirement is not applicable in case of foreign deposits. Meetings at least these criteria are considered satisfactory for commercial banks in normal business days.

# 3.5.1.2 Profitability Ratio

Profitability ratio is the measure of efficiency and the search, for it provide an incentive to achieve efficiency. The profitability ratios are these ratios, which indicate the degree of success in achieving desired profit levels.

These ratios have also been used to determine the efficiency of the lending, its quality and contribution in total profitability.

# > Return on Equity

It is in important ratio because it judges whether the firm has earned a satisfactory return for its equity holders or not. It indicates how well the firm has deployed the resources of the owners to earn profit. Higher ratio represents sound management and efficient mobilization of the owner's equity. This ratio is calculated by dividing net profit by total shareholder's fund (Net worth).

Return on Equity = 
$$\frac{\text{Net Profit}}{\text{Net Worth}}$$

## > Return on Assets (Net Profit to Total Assets)

This ratio is used to measure in terms of the relationship between net profit after tax and total assets. It measures the profitability of the firm in term of assets employed in the firm. It reflects efficiency of the banks in utilizing its overall resources. This ratio is calculated the net profit tax dividing by total assets.

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

# 3.5.1.3 Activity Ratio

Activity ratio measures the efficiency of an organization from various aspects of its operations. These ratios indicate the efficiency of activity on enterprise to utilize available funds particularly short-term funds. Activity ratios are used to determine the efficiency, quality and the contribution of loans and advances in total profitability.

Following ratios are used under Activity ratio.

# **Loan and Advance to Total Deposit Ratio**

This ratio measures how much extent the bank is successful in utilizing the outsider's funds in the profit generating purpose. This is calculated by using the following formula:

Loan and Advance to Total Deposit Ratio = 
$$\frac{\text{Loan and Advance}}{\text{Total Deposit}}$$

## Total Investment to Total Deposit Ratio

This ratio is calculated to see how efficiently the banks have mobilized their total deposits on investment. Investment function or funds management is gaining a widespread importance in the banking sectors. This ratio is calculated by using the following formula:

$$Total Investment to Total = \frac{Total Investment}{Total Deposit}$$

# 3.5.1.4 Asset/Liability Management Ratio:

Asset/ Liability management ratio measures the proportion of various assets and liabilities in balance sheet. The proper management of assets and liabilities ensure its effective utilization. The banking business converts the liability into assets by the way of its lending and investing functions. Assets and liability management ratio measures its efficiency in multiplying various liabilities in performing assets. The following ratios relating to asset liability management are used to determine the lending strength of subjected banks

Total asset to total liability ratio = 
$$\frac{\text{Total Assets}}{\text{Total Liabilities}}$$

Loan and advance to total asset ratio = 
$$\frac{\text{Loands and advance}}{\text{Total Assets}}$$

#### 3.5.2 Statistical Tools:

The major statistical tools used in this stud} are standard deviation (S.D), Coefficient of Variation (C.V) and Correlation Coefficient (r).

# 3.5.2.1 Standard Deviation (S.D)

It is a statistical measure of the variability of a distribution of return around its mean. It is the square root of the variance and measures the unsystematic risk in investment. It is denoted by Symbolically.

Standared Deviator = 
$$\sqrt{\frac{\sum (x - \bar{x})^2}{N}}$$

Where,

= standard deviation

 $\overline{x}$  = arithmetic mean

N = number of observation

#### 3.5.2.2 Coefficient of Variation:

Coefficient of variation is the percentage variation in mean, standard deviation being considered as the total variation in the mean. Standard deviation is only an absolute measure of dispersion, depending upon the units of measurement. The relative measure of dispersion based on standard deviation is called the coefficient of variation and is given by:

Coefficient of variation (CV) = 
$$\frac{o}{x}$$

Where,

a = standard deviation

 $\overline{\mathbf{x}} = \text{mean}$ 

This is a pure number independent of the units of measurement and thus, is suitable for comparing the variability, homogeneity or uniformity of two or more distributions. For comparing the variability of two distributions we .compute the coefficient of variation for each distribution. A distribution with smaller C.V. is said to be more homogeneous or uniform or less variable than the other and the series with greater C.V. is said to be more heterogeneous or more variable than the other.

#### 3.5.2.3 Coefficient of Correlation

The correlation is a statistical tool, which studies the relationship between two variables, and correlation analysis involves various techniques used for studying and measuring the extent of the relationship between the two variables. Correlation is an analysis of the covariance between two or more variables. The effect of correlation is to reduce the range of uncertainty of our prediction. Two variables are said to be

correlated if the change in one variable results in a corresponding change in the other variable. Correlation coefficient can be either positive or negative. If the values of the two variables deviate in the same direction i.e. if the increase in the values of one variable results, on an average, in a corresponding increase in the values of the other variable or if a decrease in the values of one variable results, on an average, in a corresponding decrease in the values of the other variable, correlation is said be positive or direct. On the other hand, correlation is said to be negative or inverse if the variable deviate in the opposite direction i.e. if the increase (decrease) in the values of one variable results, on the average, in a corresponding decrease (increase) in the values of the other variable. It is also likely that there may be no relationship between the variations of the two series in which case there is said to be no correlation between them. The formula for the coefficient of correlation is given below:

$$r = \frac{n\sum xy - \sum x\sum y}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$$

Where,

r = Correlation coefficient

n= Number of years

x = Sum of X series

y =Sum of Y series

xy = Sum of X and Y series

x2 = Sum of Square of Series X

y2 = Sum of Square of series Y

X & y ^Financial variable of banks

The coefficient of correlation always varies between the two limits of H and -I, when there is perfect positive correlation, its value is +1 and when there is negative correlation its value is —1. Its mid point is 0, which indicates absence of correlation. Lastly, the value of the coefficient of correlation is always between -H and -I. It cannot exceed unity.

## 3.5.2.4 Probable Error

The probable error of the coefficient of correlation is very useful for interpreting value of coefficient of correlation. It helps to determine the reliability value of the coefficient of correlation.

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

Where,

r = Coefficient of correlation

n= No of pairs of observation

P.E= Probable error

It is used in interpretation whether calculated value of r is significant or not.

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

If r> P.E., it is significant.

**CHAPTER-IV** 

Presentation and Analysis of Data

The data collected from various sources have been presented and analyzed in this

chapter. Since, the conclusions to be drawn and recommendations to be made in this

study are based on the presentation and interpretation of data analyzed in this chapter.

4.1 Financial Analysis

The main focus of this chapter is to study, evaluate and analyze various financial

performances that are mainly related to the investment management and fund

mobilization of HBL, NBBL & SCBNL. Many different types of rations are found to

be helping, but only those rations that are related to the evaluation of fund

mobilization and investment are only calculated. The main rations that are studies are:

1. Liquidity ratio

2. Asset management ratio

3. Profitability ratio

4. Growth ration

4.1.1 Liquidity Ratio

A commercial bank bust maintain its satisfactory liquidity position to satisfy the credit

needs of the community, to meet demands for deposits withdrawals, pay maturity

obligation in time and convert non cash assets into cash to satisfy immediate needs

without loss to bank and consequent impact on long run profit. This includes.

4.1.1.1 Current Ratio

The current ratio is the current assets to current liabilities. It shows, either the

company is capable of paying back all its current liabilities or not. It measures the

short term solvency i.e. its ability to meet short-term obligation measures creditors

versus current assets. Current ration can be calculated by dividing current assets by

current liabilities. The standard current ratio is 2:1 however 1:1 is also accepted.

It is calculated as:

Current Ratio=

Current Assets

**Current Liabilities** 

40

Table No. 4.1.1.1
Current Ratio (Times)

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	0.771	0.795	0.807	0.840	0.846	0.812	0.031	3.87
NBBL	1.010	0.932	0.947	0.949	1.114	0.990	0.075	7.62
SCBNL	1.063	1.063	1.041	1.039	1.046	1.050	0.012	1.12

Source: Annual Report of Concern Banks

From Table 4.1.1.1 it is clear that the mean current ratio of SCBNL is more than other Banks and more than 1, it is poor satisfactory but better than others. The mean current ration and it stability of NBBL is better that HBL but not satisfactory, Only SCBNL is being capable to paying current obligation. The current ration of SCBNL is ore stable comparing with others. Current rations of HBL and NBBL have increasing trend in the year 2002/2003 to 2006/2007. Table 1 shows that the ration of SCBNL bank is in fluctuating through out the review period. Similarly, S.D. and C.V. of HBL, NBBL and SCBNL are 0.031 & 3.87, 0.075 & 7.62% and 0.012 & 1.12 % respectively. The current ration of the banks is below the standard of 2:1. Finally, it can be concluded that current ratios of banks are below than normal standard ration but it can't say that the liquidity position of banks is poor. But this ration only indicates the quality of assets and it doesn't distinguish between the types of current assets are either declining in value or being utilized in some others profit generating investment. The coefficient of variation of the ratio reveals that the ration is quite consistent during the study period. From the point of view of working capital policy and utilization of current fund, bank is following the aggressive working capital policy and better utilization of current fund.

## 4.1.1.2 Cash & Bank Balance to Total Deposit Ratio

Cash and bank to total deposit ratio measure the capacity of the bank to meet unexpected demand made by the depositors i.e. current holders, saving, fixed, margin holders and other. Higher ration shows higher liquidity position and ability to cover the deposits or to pay the depositors on time. Cash & bank balance are assets that constitute the banks' first line of defense. It consists of cash on hand, foreign cash on hand, cheques and other cash items, balance at domestic banks and balance held

abroad.

This ration measures the availability of a banks' highly liquid or immediate funds to meet its unanticipated calls on all types of deposits. This ration is computed by dividing cash & bank balance by total deposit. A high ration indicates the greater ability to meet their deposits and vice versa. Moreover, too high ration is unfit as capital will be tied up and opportunity cost will be higher.

It can calculate as follows:

Cash and Bank Balance to Total Deposit Ration= $\frac{\text{Cash and Bank Balance}}{\text{Total Deposit}}$ 

Table No. 4.1.1.2

Cash and Bank Balance to Total Deposit Ratio

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	0.094	0.091	0.093	0.094	0.095	0.093	0.002	1.64
NBBL	0.085	0.084	0.071	0.083	0.087	0.082	0.006	7.71
SCBNL	0.081	0.075	0.078	0.079	0.081	0.079	0.003	3.19

Source: Annual Report of Concern Banks

The above Table no. 4.1.1.2 shows that the cash & bank balance to total deposit ratio of all three banks have fluctuating trend. In average, HBL has highest ration than others with least consistency and NBBL takes better position than SCBNL

Higher ration of HBL Shows that the HBL is being able to serve the demand of its customers i.e. it is operating at the lower risk. Similarly, S.D. and C.V. of HBL, NBBL and SCBNL are 0.002 & 1.64%, 0.006 & 7.71% and 0.003 & 3.19% respectively. The analysis shows that the banks have made more investment in profit generating activities rather that holding the cash and bank balance or the investment of the bank is high. The coefficient of variation of the ratio reveals that there is some amount of consistency during the study period.

#### 4.1.1.3 Cash & Bank Balance to Current Assets Ratio

This ratio examines the banks' liquidity capacity on the basis of its most liquid assets i.e. cash & bank balance. This ration reveals the ability of the bank to make the quick payment of its customer deposits. A high ratio indicates the sound ability to meet their

daily cash requirements of their customer deposit & vice versa.

Both higher and lower rations are not desirable. The reason is tat if a bank maintains higher ration of cash, it has to pay interest on deposits an some earnings may be lost, In contrast, if a bank maintains low ration of cash, it may fail to make the payment for presented cheques by its customer. So, sufficient and appropriate cash reserve should be maintained properly. It can calculate as follows.

Cash and Bank Balance to Current Assets Ratio= $\frac{\text{Cash and Bank Balance}}{\text{Current Assets}}$ 

Table No. 4.1.1.3

Cash and Bank Balance to Current Asset Ratio

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	0.117	0.107	0.108	0.105	0.105	0.109	0.005	4.59
NBBL	0.079	0.096	0.076	0.090	0.082	0.085	0.008	9.77
SCBNL	0.073	0.066	0.069	0.069	0.073	0.070	0.003	3.92

Source: Annual Report of Concern Banks

The table 4.1.1.3 reveals that, in case of HBL, the ratio has the fluctuating trend. The mean ration of NBBL is higher and C.V. is also higher. All banks have adequate level of current assets. Similarly, C.V. of HBL, NBBL and SCNBL are 0.005 & 4.59%, 0.008 & 9.77% and 0.003 & 3.92% respectively. The coefficient of variation of the ration reveals that there is some amount of inconsistency during the study period.

## 4.1.1.4 Investment on Government Securities to Current Assets Ratio

Investment in government securities means to bear no risk or minimal risk. Due to the lower risk the return from government securities is also lower. So, higher the investments on government securities lower the risk and lower return and vice-versa. This ratio examines that the portion of a commercial banks' current assets, which is invested on different Govt. Securities. More or less, each commercial bank is interested to invest their collected funds on different securities issued by Govt. in

different times to utilize their excess funds and for other purposes. Though Govt. securities are not so liquid as cash & bank balance of commercial bank, They can easily be sold in the market or they can be converted into cash in other ways. This ratio shows the percentage of current assets invested on government securities.

The ratio can be expressed as:

## Investment on Government Securities to Current Assets Ratio

= Investment on Government Securities
Current Assets

Table No. 4.1.1.4

Investment on Government Securities to Current Assets Ratio

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	23.7	21.5	21.2	20.1	20.0	21.3	1.5	6.95
NBBL	18.8	19.3	16.4	17.2	14.6	17.3	1.9	11.07
SCBNL	49.7	47.9	52.5	38.3	44.9	46.7	5.5	11.69

Source: Annual Report of Concern Banks

Table no. 4.1.1.4 reveals that all the banks' investment government securities have fluctuating trend except for HBL. During the study period, SCBNL has maintained highest ratio in fiscal year 2002/2003 i.e. 49.7% and lowest in fiscal year 2005/2006 i.e. 38.3% where as HBL has highest ratio in fiscal year 2002/2003 i.e. 23.7% and lowest ratio in 2006/2007 i.e. 20.5% And from available data, NBBL has higher ration in fiscal year 2003/2004 i.e. 19.3% and lowest in fiscal year 2006/2007 i.e. 14.6% C.V. of SCBNL has highest i.e. 11.69% and NBBL has lowest 6.95%.

In overall, the mean ration of investment on government securities to total current assets of SCBNL is highest than that of NBBL and HBL i.e. 46.7% > 17.3 & 21.3%, it means the liquidity position of SCBNL, from the point of view of investment in government securities is best.

## 4.1.2 Asset Management Ratio

A commercial bank must be able to mange its assets very well to earn adequate profit to satisfy its customers and for its own existence. Assets management, ration measures how efficiently the bank manages the resources at it commends. Through following ratios, assets management ability has been measured.

# 4.1.2.1 Loan and Advances to Total Deposit Ratio

This ration actually measures the extent in which the banks are successful to mobilize the total deposits on loan & advances for the purpose of profit generation. A high ration of loan & advances indicates better mobilization of collected deposited and vice versa. But it should be noted that too high ration might not be better from its liquidity point of view.

This ration is calculated by dividing loan and advances by total deposit.

Loan and advances to Total Deposit Ratio= $\frac{\text{Loan and Advances}}{\text{Total Deposit}}$ 

Table No. 4.1.2.1

Loan and Advances to Total Deposit Ratio

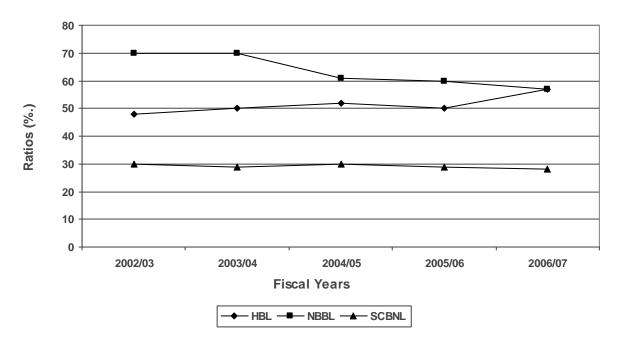
Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	47.6	50.0	52.4	50.6	56.1	51.3	3.2	6.18
NBBL	68.5	69.0	62.0	59.9	56.7	63.2	5.4	8.5
SCBNL	30.4	29.1	30.2	29.3	28.3	29.5	0.8	2.86

Source: Annual Report of Concern Banks

From the comparative table 4.1.2.1, it exhibits that the ratio of HBL, NBBL and SCBNL have fluctuating trend. NBBL has highest of all 68.5% in 2002/2003 and lowest 56.7% in 2006/2007. SCBNL has highest in 2002/2003 i.e. 30.4% and lowest 28.3% in 2006/2007. The mean ratio of loans & advances to total deposit of NBBL has higher i.e. 63.2% than 29.5% of SCBNL and 51.3% of HBL. On the basis of C.V. SCBNL is more stable than HBL and NBBL.

Loans and advances to total deposit ratio of 5 years period are presented in following graph

Figure 4.1.2.1
Loans and Advances to Total Deposit Ratio of HBL, NBBL, SCBNL



# **4.1.2.2** Total Investment to Total Deposit Ratio

A commercial bank may mobilize its bank deposit by investing its fund in different securities issued by government and other financial or non-financial companies. Now effort has been made to measure the extent to which the banks are successful in mobilizing the total deposit in investment.

In the process of portfolio management of bank assets, various factors such as availability of fund, liquidity requirement, central banks' norms etc. are to be considered in general. A high ratio is the indicator of high success to mobilize the banking funds as investment and vice versa.

This ratio is calculated by dividing total investment by total deposit.

Total Investment to Total Deposit Ratio= $\frac{\text{Total Investment}}{\text{Total Deposit}}$ 

Table No. 4.1.2.2

Total Investment to Total Deposit Ratio

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	19.0	19.9	19.2	18.9	18.9	19.2	0.4	2.15
NBBL	20.1	17.2	14.9	12.1	12.4	15.4	3.4	21.9
SCBNL	55.2	53.4	58.2	54.1	60.9	56.3	3.1	5.57

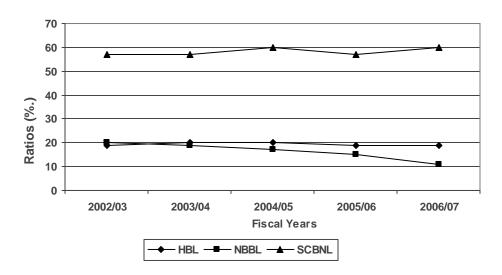
Source: Annual Report of Concern Banks

The above table no. 4.1.2.2 reveals that the ratios of SCBNL and HBL have fluctuating trends whereas NBBL has decreasing trend except in fiscal year 2006/2007. The highest ratio in all is 60.9% of SCBNL in fiscal year 2006/2007 whereas the least ration in all is 12.1% of NBBL in fiscal year 2005/2006. In case of NBBL highest ratio is 20.1% in fiscal year 2002/2003 and for HBL highest ratio is 19.9% in 2003/2004.

Total investment to total deposit ratio of 5 years period are presented in following figure.

Figure 4.1.2.2

Total Investment to Total Deposit Ratio of HBL, NBBL, SCBNL



On the basis of mean ratio SCBNL's capacity to mobilize its deposit on total investment is better than others because its mean ratio in 56.3% which is greater than 15.4% and 19.2 % of NBBL and HBL respectively. On the other hand observing the C.V. of rations it can conclude that HBL's ration during the study period have been more stable than NBBL's & SCBNL's ratio.

#### 4.1.2.3 Loans and Advances to Total Asset Ratio

A commercial bank's working fund (total assets) should play very active role in profit generation through fund mobilization. This ration reflects the extent to which the banks are successful in mobilizing their total assets on loan and advances for the purpose of income generation. Higher ration is preferable as it includes better mobilization of fund as loan and advances and vice versa.

This ratio is calculated by dividing loan and advances by total assets.

Loan and Advances to Total Assets Ratio= $\frac{\text{Loan and Advances}}{\text{Total Assets}}$ 

Table No. 4.1.2.3

Loan and Advances to Total Assets Ratio

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								%)
HBL	42.8	39.7	44.9	42.7	47.3	43.5	2.8	6.54
NBBL	60.7	58.0	53.7	53.6	50.9	55.4	3.9	7.08
SCBNL	27.1	25.1	26.1	25.5	24.3	25.6	1.1	4.15

Source: Annual Report of Concern Banks

The table no. 4.1.2.3 shows that loan and advances to total assets ratios are not similar in all fiscal year under the study period. Highest ratio for SCBNL is 27.1% % lowest is 24.3% in the fiscal year 2002/2003 &206/2007 respectively. For NBBL, highest ration is 60.7% and lowest is 50.9% in fiscal year 2002/2003 & 2006/2007 respectively. And for HBL highest ratio is 44.9% in fiscal year 2004/2005 & lowest ratio is 39.7% in fiscal year 2003/2004 respectively. The highest ratio in all is 60.7% of NBBL.

In average NBBL maintained higher loans and advances to total assets ration i.e. 55.4% than SCBNL i.e. 25.6% & HBL i.e. 43.5%. It shows that NBBL has strong condition to mobilize its total asset as loans and advances. And HBL has second position for it. The C.V. between the above ratios of SCBNL is 4.15% which is lower than the C.V. of HBL & NBBL. The C.V. ratios of SCBNL are more stable but the ratios are in fluctuating trend.

The C.V. of NBBL has higher but not too higher rate so it provides that its ratio is strong than others.

#### 4.1.2.4 Investment on Govt. Securities to Total Assets Ratio

This ratio is very important to know the extent to which the banks are successful in mobilizing their total working fund on different types of Govt. securities to maximize the income. All the deposits of the bank should not be utilized in loans and advances and other credit form the point of view of security and liquidity. Therefore, to some extent, commercial banks seem to be interested to utilize their deposits by purchasing Govt. securities and vice versa.

This ratio is calculated by dividing Investment on Govt. securities by total assets.

Table No. 4.1.2.4

Investment on Govt. Securities to Total Assets Ratio

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	17.1	16.7	16.8	16.0	15.9	16.5	0.5	3.3
NBBL	17.9	15.3	13.5	14.9	14.3	15.2	1.6	10.76
SCBNL	49.3	46.6	53.0	39.5	45.1	45.7	5.0	10.73

Source: Annual Report of Concern Banks

From the above table 4.1.2.4, it is seen that the trends for NBBL, SCBNL & HBL in the ratio have fluctuating trend. The highest ratio for all has in fiscal year 2002/2003 of SCBNL. SCBNL has highest ratio of 49.3%, NBBL has 17.9% and HBL has 17.1%. The lowest ratio for SCBNL is 39.5% in Fiscal year 2005/2006, for NBBL is 13.5% in 2004/2005 and for HBL is 15.9% in 2006/2007.

The comparative of mean ratio of SCBNL is strong to mobilize its total assets on investment

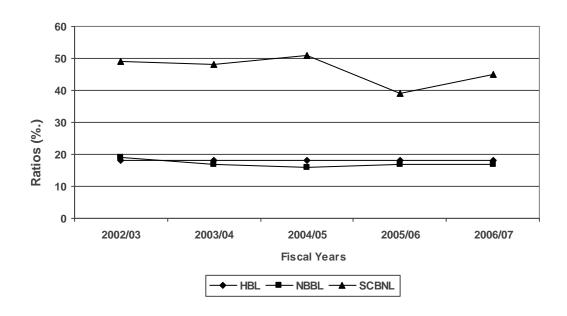
in government securities. The variability of HBL is lowest i.e. 3.3% and NBBL has highest 10.76%

It can be concluded the SCBNL has been more successful it utilizing its fund in government securities than NBBL, & HBL, NBBL & HBL seen tot have lower attention toward the investment on government security.

Investment on Govt. Securities to Total/Assets Ratio of 5 years period is presented to following figure.

Figure 4.1.2.4.1

Investment on Government Securities to Total Assets Ratio of HBL, NBBL, SCBNL

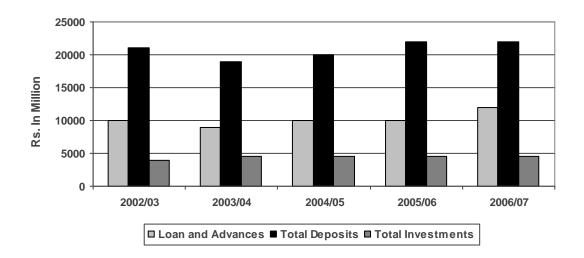


Total Deposit, Loans & Advances, Total Investments Of five years of HBL, is presented in following bar diagrams.

Figure 4.1.2.4.2

Trend and Composition of Total Deposits, Loan & Advances and Total

Investment of HBL (2002/03 to 2006/07)

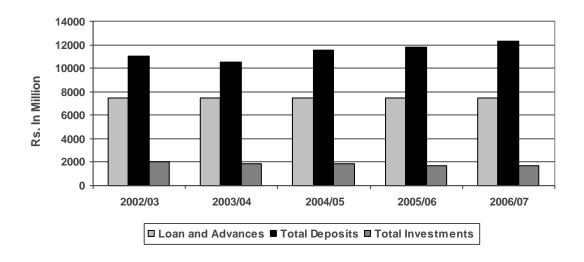


Total Deposit, Loan & Advances, Total Investment of five years of NBBL, as presented in following diagram.

Figure 4.1.2.4.3

Trend and Composition of Total Deposits, Loan & Advances and Total

Investment of NBBL (2002/03 to 2006/2007)

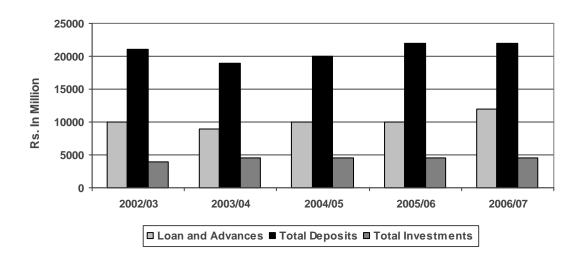


Total Deposit, Loans & Advances, total Investment of five years of SCBNL, is presented in following bar diagram.

Figure 4.1.2.4.4

Trend and Composition of total Deposits, Loan & Advances and Total

Investment of SCBNL (2002/03 to 2006/07)



## 4.1.2.5 Investment on Shares & Debenture to Total Assets Ration

To study the investment management, total investment has been broken down into investment in govt. securities and investment on shares & debentures. Investment on shares and debentures to total assets ratio reflects the extent to which the banks are successful to mobilize their total assets on purchase of shares & debenture of other companies to generate incomes and utilize their excess funds. A high ration indicates more portion of investment on shares & debentures out of total assets (working fund) and vice versa.

This ration is calculated by dividing investment on shares and debentures by total assets.

Investment on shares and debenture to Total Assets Ratio  $= \frac{\text{Investment on Shares and debenture}}{\text{Total Assets}}$ 

Table No. 4.1.2.5

Investment on Shares & Debentures to Total Assets Ratio

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)

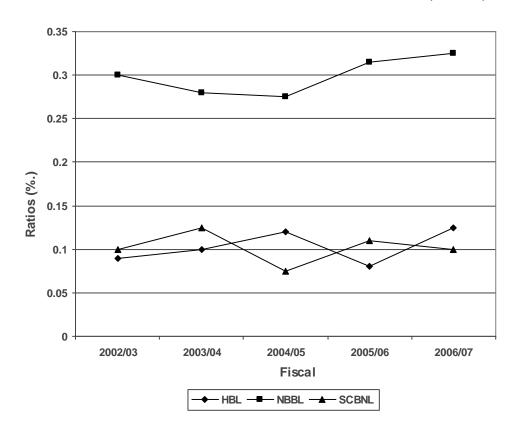
HBL	0.001	0.001	0.001	0.001	0.001	0.001	0.0001	5.86
NBBL	0.003	0.003	0.003	0.003	0.003	0.003	0.0001	7.18
SCBNL	0.001	0.001	0.001	0.001	0.001	0.001	0.0001	3.27

Source: Annual Report of Concern Banks

From the above table 4.1.2.5 it has been found that all three banks have invested very nominal % (percent) of total assets into shares & debentures of other companies. All ratios are below 1%. During the study period, ratio of NBBL is higher that other in each year. The ratios are in same trends. In average, NBBL has maintained higher investment on shares & Debentures to total assets ratio than SCBNL & HBL, but has higher variability. It shows the inconsistency in investment on shares & debentures, showing the lack of efficient & uniform investment policy. Finally, according to average ratio analysis, NBBL is found to be in more aggressive position. Investment on shares & debentures to Total Assets Ratio of % year period is presented in following figure.

Figure 4.1.2.5

Investment on Shares & Debentures to Total Assets Ratio of HBL, NBBL, SCBNL



# 4.1.3 Profitability Ratios

The main objective of commercial bank is to earn profit providing different types of banking service to tits customers, to meet various objectives like to have a good liquidity position, to meet fixed internal obligation, to overcome the future contingencies, to grab hidden investment opportunities, to expand banking transactions in different places, to finance government in need of development funds etc, a commercial bank must have to earn sufficient profit.

Of course, profitability ratios are the best indicators of overall efficiency. Here, mainly those ratios are presented and analyzed which are related with profit as well as fund mobilization, Through the following ratios, effort has been made to measure the profit earning capacity of HBL, NBBL, SCBNL.

#### 4.1.3.1 Return on Loans & Advances

Return on loan & advances ratio measures the earning capacity of a commercial bank on its mobilized fund based on loan and advances. A high ration indicates greater success to mobilize fund as loan & advances and vice versa. This ratio is calculated by dividing net income by loan and advances.

Return on loans & advances= Net Income Loan & Advances

Table No. 4.1.3.1

Return on Loans & Advances

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	2.1	2.5	2.0	2.6	2.5	2.4	0.3	11.84
NBBL	1.0	1.0	1.0	1.0	1.4	1.1	0.2	18.78
SCBNL	8.9	10.8	10.5	11.9	12.3	10.9	1.3	12.25

Source: Annual Report of Concern Banks

From the above table no.4.1.3.1, it shows that HBL, SCBNL and NBBL have somewhat

stable trend, The highest ratio in all is 12.3% of SCBNL.

On the basis of main ratio, SCBNL has highest ratio of 10.9% and NBBL has 1.1% and HBL has 2.4%. The CV of SCBNL is 12.25% where as NBBL & HBL have 18.75% & 11.81% respectively. It shows that NBBL & HBL have lower mean ration and higher variability that mean their efficiency is low as compared with SCBNL. Thus it is concluded that SCBNL has better efficiency to achieve return from loans & advances.

## 4.1.3.2 Return on Total Assets (ROA)

Return on working fund ratio is a ratio, is a measuring rod of the profitability with respect to each financial resource investment of the banks assets. If the banks' total assets are well managed ad efficiently utilized, return on such assets will be higher and vice versa.

Minimizing taxes within the legal option available will also improve the return. This ratio is calculated y dividing net income by total assets.

Return of total assets = 
$$\frac{\text{Net Income}}{\text{Total Assets}}$$

Table No. 4.1.3.2

Return on Total Assets

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	0.9	1.0	0.9	1.1	1.2	1.0	0.1	12.30
NBBL	0.6	0.6	0.5	0.5	0.5	0.3	0.1	14.07
SCBNL	2.4	2.7	2.7	3.0	3.0	2.8	0.2	8.93

Source: Annual Report of Concern Banks

The above table 4.1.3.2 reveals that ROA ratio have fluctuating trend through the study period. The highest ratio of SCBNL is 3.0% in fiscal year 1998/1999 and lowest is 2.23% in 2000/2001. Similarly the highest that of ratio of NBBL is 1.99% in fiscal year 2000/2001 and lowest is 0.59% in 2005/2006 and 2006/2007. And for HBL, the highest ratio is 1.2 fiscal year 2006/2007 and lowest is 0.9 in 2002/2003.

By observing mean ratio, SCBNL seemed to be strong to maintaining high ratio than others.

The CV of SCBNL is 8.93% which shows more consistency than that of NBBL's i.e. 14.07% and HBL's i.e. 12.30%. HBL stands in second position and NBBL gets least.

## 4.1.3.3 Return on Equity (ROE)

Equity capital of any bank is its owned capital. The prime objective of any bank of wealth maximization or in order words to earn high profit and thereby, maximizing return on its equity capital, ROE is the measuring rod of the probability of the bank. It reflects the extent to which the bank has been successful to mobilize its owned capital (equity) and vice versa. This ratio is calculated by dividing net income by equity.

Return on Equity = 
$$\frac{\text{Net Income}}{\text{Equity}}$$

Table No. 4.1.3.3

Return on Equity

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	40.3	33.7	25.7	27.3	23.6	30.1	6.8	22.72
NBBL	18.0	11.7	10.9	10.3	15.6	13.3	3.4	25.24
SCBNL	45.3	39.0	47.4	43.8	40.6	43.2	3.4	7.9

Source: Annual Report of Concern Banks

From the above table 4.1.3.3, it can be clearly seen that SCBNL has fluctuating trend. NBBL has decreasing trend except in 2006/2007. Similarly HBL has also decreasing trend except in 2005/2006.

The highest ratio in all is 47.1% of SCBNL. Highest ratio of SCBNL is 74.4% and lowest is 39.0% NBBL has highest ratio of 18.0% and lowest of 10.3% also the highest ratio of HBL is 40.3% in 2002/2003 and lowest ratio of HBL is 23.6%.

The mean ratio shows that SCBNL have strong to earn high return to equity capital. Others have also good return but comparatively lower i.e. the return of SCBNL has more stable with increasing trend. Comparatively NBBL is failure to earn adequate amount that others.

Thus in overall, it can be concluded that NBBL has not been able to earn high profit through the efficient utilization of its own capital. More over its high CV shows its less homogenous ratios during the study period. This shows lack of efficiency towards investment policy for mobilization of capital resources. HBL stands in average and SCBNL has superior.

#### 4.1.3.4 Total Interest Earned to Total Assets Ratio

To depict the earning capacity of a commercial bank on its total assets, total interest earned to total assets ration is very helpful. In other words, this ratio reflects the extend to which the banks are successful in mobilizing their total assets to generate high incomes as interest. A high ratio is an indicator of high earning power of the bank of its total assets and vice versa. This ratio is calculated by dividing total interest earned by total assets.

Total interest earned to total assets ratio= $\frac{\text{Total interest earned}}{\text{Total assets}}$ 

Table No. 4.1.3.4

Total Interest Earned to Total Asset Ratio

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	5.1	5.2	4.9	4.8	5.3	5.1	0.2	3.99
NBBL	8.5	7.9	8.1	8.5	8.2	8.2	0.3	3.28
SCBNL	4.8	5.0	5.0	5.1	5.0	5.0	0.1	2.32

Source: Annual Report of Concern Banks

The above table no. 4.1.3.4 reveals the fact that the trend of ration of all three banks have been decreasing, except for SCBNL in 2005/2006 for NBBL in 2004/2005 and for HBL in 2003/2004. The highest ratio is 8.5% of NBBL. The highest ratios for SCBNL & HBL are 5.1% & 5.6% respectively.

On the other level, mean ration of NBBL is 8.2%, which is higher than that of SCBNL & NBL, indicates that NBBL's interest earning power, in respect to total assets, seems to be very efficient than SCBNL's & HBL. During the study period the CV of NBBl found to be lower i.e. 3.28% than that of HBL i.e. 3.99% and SCBNL i.e. 2.32%. It indicates that earning ration with respect to total assets of NBBL is more stable than that of SCBNL & HBL comparatively HBL takes next position.

## 4.1.3.5 Total Interest Earned to Total Operating Income Ratio

Total operating income consists of interest income, commission and discount, dividend income, foreign exchange income, non-interest income etc. interest earned to total operating income ratio shows the magnitude of interest income in total income. It also indicates how efficiently bank has mobilized their fund in interest bearing assets i.e. loan & advances, investment in government securities. This ratio is calculated by dividing total interest earned by total operating income.

Total interest earned to total operating income  $ration = \frac{Total\ interest\ earned}{Total\ operating\ income}$ 

Table No. 4.1.3.5

Total Interest Earned to Total Operating Income Ratio

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	83.2	99.7	85.5	85.8	88.0	88.5	6.5	7.36
NBBL	81.5	90.6	87.5	92.9	91.6	88.8	4.6	5.14
SCBNL	66.8	69.9	81.6	77.7	76.2	74.4	6.0	8.07

Source: Annual Report of Concern Banks

Table no.4.1.3.5 shows that ratio of SCBNL ranges from 77.7% in fiscal year 2005/2006 to 66.80% in FY 2002/2003 with decreasing trend except in fiscal year 2004/2005; similarly NBBL has fluctuating trend. Its ratio ranges from 92.9% in fiscal year 2005/2006 to 87.5% in year 2004/2005. The ratio of HBL is in fluctuating trend during the study period. It is ranges from 83.2% in year 2002/2003 to 99.7% in 2003/2004 with more stable.

The main ratio reveals that NBBL has higher ration than SCBNL & HBL i.e. 88.8% > 74.4% & 88.5%. It indicates that NBBL seems to have earned higher amount of interest income in comparison to SCBNL &HBL . Like wise lower CV of NBBL i.e. 5.14% indicates that there is comparatively high degree of stability than that of HBL and SCBNL i.e. 5.14% < 7.36% and 8.17%

In conclusion, NBBL lays its basic emphasis on fund based activities. it has mobilized more funds than that of SCBNL & HBL into the interest bearing assets i.e. loans & advances and government securities.

#### 4.1.3.6 Total Interest Paid to Total Assets Ratio

This ratio measures the percentage of total interest expenses total working fund. A high ratio indicates higher interest expenses on total working fund and vice versa. This ratio is calculated by dividing total interest paid by total assets.

Total interest paid to total assets ratio= $\frac{\text{Total interest paid}}{\text{Total assets}}$ 

Table No. 4.1.3.6
Total Interest Paid to Total Assets Ratio

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C.V.
								(%)
HBL	2.4	2.1	2.4	2.3	2.4	2.3	0.1	5.62
NBBL	5.0	5.0	5.2	5.4	5.4	5.2	0.0	4.0
SCBNL	1.2	1.3	1.4	1.4	1.4	1.4	0.1	7.88

Source: Annual Report of Concern Banks

#### 4.1.4 Growth Ratios:

Only those ratios are analyzed and interpreted which are directly related to the fund mobilization and investment management of a commercial bank. Under this topic, four types of growth ratios are calculated are show in table.

Growth ratios represent how well the commercial banks are maintaining their economic and financial position. Higher ratio indicates better performance of bank vice versa. The growth on distinct variable is measured on growth rate:

- 1. Growth rate of total deposit.
- 2. Growth rate of loan and advance.
- 3. Growth rate of total investment.
- 4. Growth rate of net profit.

Table No. 4.1.4.1

Growth Rate of Total Deposit (%)

Banks	2002/03	2003/04	2004/05	2005/06	2006/07	Mean	S.D.	C. V.
HBL	-	-9.33	10.30	3.82	2.55	6.43	3.79	59.02
NBBL	-	-3.47	10.11	4056	6.66	6.19	2.92	47.22
SNBCL	-	1.09	0.9	3.78	2.95	2.18	1.41	64.76

Source: Annual Report of Concern Banks

From the above table no. 4.1.4.1 growth ratios of total deposit have fluctuating trend. The mean ratio of HBL is highest i. e. 6.43 with greatest volatility than that of NBBL i. e. 6.19 & SCBNL i. e.. It means HBL has greater efficiency in collecting deposits than others one.

Table No. 4.1.4.2

Growth Rate of Loans and Advances (%)

Banks	2002/0	2003/0	2004/0	2005/0	2006/0	Mea	S.D	C. V.
	3	4	5	6	7	n	•	
HBL	-	-4.85	15.44	0.23	13.69	8.55	7.23	84.53
NBBL	-	-2.79	-0.99	1.0	0.99	1.44	0.89	62.28
SNBC	-	-2.9	4.79	0.38	0.27	2.08	2.17	104.0
L								3

Source: Annual Report of Concern Banks

While observing the comparative growth ratio of loan & advances from the table no. 4.1.4.2 SCBNL & NBBL are weaker in increasing loans & advances than HBL. The mean growth ratio of HBL is 8.55% which is greater than that of SCBNL i.e. 2.08% & NBBL i.e. 1.44%. The HBL has least growth ratio and greatest ratio and greatest volatility so the HBL is inefficient in increasing loans and advances than others.

Table No.4.1.4.3

Growth Rate of Nepal Investment(%)

Banks	2002/0	2003/0	2004/0	2005/0	2006/0	Mea	S.D.	C. V.
	3	4	5	6	7	n		
HBL	-	-5.2	5.91	2.73	2.16	4.0	1.83	45.8
							4	4
NBBL	-	-17.47	-4.53	-15.06	9.2	11.56	5.83	50.4
							6	6
SNBC	-	-2.16	10.11	-3.59	15.92	7.94	6.34	79.8
L								4

Source: Annual Report of Concern Banks

The above comparative table no. 4.1.4.3 shows that growth ratio in total investment of NBBL is higher than that of SCBNL & HBL. HBL has 4.0% and SCBNL has 7.94% & NBBL has 11.56% growth ratio. Among them fluctuation in total investment is seemed HBL has invested more than previous years than others.

Table No. 4.1.4.4

Growth Rate of Net Profit (%)

Banks	2002/0	2003/0	2004/0	2005/0	2006/0	Mea	S.D.	C. V.
	3	4	5	6	7	n		
HBL	-	14.36	9.19	31.68	7.68	15.72	11.0	70.0
							1	2
NBBL	-	-2.81	-1.95	3.61	45.18	13.38	21.2	158.
							0	4
SNBC	-	17.62	1.60	13.91	3.24	9.09	7.88	86.6
L								1

Source: Annual Reports of Bank Concern Banks

Growth rate of net profit is shown in table no 4.1.4.4 HBL has 15.72% mean ratio, ehich is higher than that of SCBNL 9.09% & NBBL 13.38%. But the volatility in growth ratio of net profit of NBBL is higher.

## 4.2 Statistical Analysis

## **4.2.1** Coefficient of Correlation Analysis

Here, some statistical tools such as coefficient of correlation analysis between selected variables, trend analysis, and test of hypothesis are used to achieve the objectives of the study. They are presented below.

Under this topic, Kari Pearson's coefficient of correlation has been used to find out the relationship between deposits and loan & advances, deposit & total investment.

## 4.2.1.1 Coefficient of Correlation between Deposit and Loan & Advances

This measures the degree of relationship between deposit and loan & advances and finds out with the deposit collected are significantly used as loans & advances or not. In this analysis independent variable (x) is deposit and depended variable (y) is loan & advances.

The detail calculation in this regard is shown in Appendix 20, 21 and 22. The following table no. 20 shows the value of "r", "r2", "P.E.(r)", "6.P.E.(r)", between those variables of HBL, NBBL & SCBNL, during the study period.

Table No. 4.2.1.1

Correlation between Deposits and Loans and Advance

Banks	Evaluation Criteria				
	r	r2	P.E.(r)	6.P.E.(r)	
HBL	0.86	0.73	0.077	0.47	
NBBL	0.124	0.01	0.296	1.77	
SCBNL	0.59	0.34	0.193	1.15	

Source: Appendix 20, 21, and 22

From the above table 4.2.1.1 in cases of HBL it is found that the coefficient of correlation between deposits and loans & advances in 0.86. It shows positive relationship between these two variables. Moreover, when we consider the value of coefficient of determination (r2), which is 0.73, it means 73 % of the variation in the dependent variable (loans and advances) has been explained by the independent variable (deposit) and 27% of variation in the dependent variable (loans and advances) has occurred due to other variables. Similarly,

considering the value of 'r' is 0.86 and comparing it with 6.P.E.(r) i.e. 0.47, we can find that the value of 'r' is significant. In other words, there is significant relationship between deposits and loans & advances in case of HBL.

The Kari Pearson coefficient between deposits (independent variable) and loan & advances (dependent variable) in NBBL is 0.124, which indicates positive correlation between these two variables. Similarly the value of coefficient of determination (r2) is found 0.01 (which show that 1.0% of variation in the dependent variable (loans and advances) has been explained by the independent variable (deposits) and 99% of variation in the dependent variable (loans and advances) has occurred due to invariables. Moreover, by application of probable error 0.296%, which means the relationship between deposit & loans and advances, is insignificant.

The correlation coefficient between loans & advances and deposit of SCNBL is 0.59, which indicates positive correlation between these two variables. Similarly the value of coefficient of determination is found 0.34, which shows that 34% of the variable (deposit) and 64% of variation in the dependent variable (loans and Advances) has been explained by the independent variable (deposit) and 66% of variables in the dependent variable (loans and advances) has occurred due to other variables. Moreover, by application of probable error 0.193, which means the relationship between deposit & loans and advances, is significant.

Lastly, we can draw conclusion that thought SCBNL and HBL positive relationship between deposit and loans & advances, but the value of 'r' a 'r2' is lower than that of NBBL, which indicates is not in better condition to grant loan & advances for mobilizing the collected deposits in comparison to HBL and SCBNL.

## 4.2.1.2 Coefficient of Correlation between Deposit and Total investment

The coefficient of correlation between deposit and investment is to measure the degree of relationship between two variables, In correlation analysis, deposit is independent variable (x) and total investment is dependent variable (y). The purpose of computing coefficient of correlation is to justify whether the deposits significantly used in proper way or not and whether there is any relationship between these two variables.

The detail calculation in this regards is shown in Appendix 23-25. The following table no. 21 shows the value of "r", "r2", "P.E.(r)", "6.P.E.(r)", between those variables of HBL, NBBL & SCBNL, during the study period.

Table No. 4.2.1.2

Correlation between Deposits and Loans and Advance

Banks	Evaluation Criteria				
	r	r2	P.E.(r)	6.P.E.(r)	
HBL	0.99	0.98	0.004	0.024	
NBBL	-0.85	0.72	0.082	0.49	
SCBNL	0.84	0.70	0.087	0.52	

Source: Appendix 23, 24, and 25

From the above table 4.2.1.2, we can find that the coefficient of correlation between deposits and total investment in case of HBL is 0.99. It shows positive relationship between these two variables. The same of NBBL is -0.85 and SCBNL has 0.84. Both show positive relationship between these variables except NBBL.

The value of coefficient of determination (r2) of SCBNL IS 0.70, which indicates 70.0% of the variation in the dependent variable (total investment) exists due to variation in deposits but 30.0% of variation in the dependent variable has occurred due to other variables. Similarly the coefficient of determination of NBBL is 0.71, which indicates 72.0% variation in total investment exists due to variation in deposits but 28.0% of variation in dependent variable has occurred due to other variables. The same of HBL is 0.98, which indicates 98% variation in deposits has explained by variation in total investment but 2.0% of variation in the dependent variable has occurred due to other variables.

The value of P.E. (r) of SCBNL is 0.0.087 & 6P.E.(r) is 0.522. It shows that the value of coefficient of correlation is greater than 6 times of probable error. Therefore the value of 'r' is significant. P.E. (r) of NBBL is 0.082 & 6.P.E. (r) is 0.492% and the same of HBL is 0.0004 and 0.024 respectively. This shows NBBL's &HBL is 0.004

and 0.024 respectively. This shows NBBL's & HBL's coefficient of correlation is significant.

In conclusion it can be said that all three banks are successfully in mobilizing their deposit as investment. HBL has higher value of 'r' than others, so it is better position in mobilizing deposit as investment in compare to SCBNL and NBBL.

## 4.2.2 Trend Analysis and Projection for Next Five Years

The objective of this topic is to analyze trend of deposit collection, its utilization in investment and loan & advances of HBL, NBBL & SCBNL. The forest is made for the next five years. The forecast is based on following assumptions:

- a) This main assumption is that other things remain unchanged.
- b) The forecast will be true only when the limitations of least square method are carried out.
- c) The bank will run in present position.
- d) The economy will remain in present stage.
- e) Nepal Rastra bank will not change its guidelines to commercial banks.

## 4.2.2.1 Trend Analysis of Total deposits

Under this topic, an effort has been made to calculate the trend values of deposits of HBL, NBBL & SCBNL for mid July 2002/03 to 2006/07. And forecast for next 5 years till 2011/12. The following table no. 22 shows the trend values of total deposits of 10 years from mid July 2002/03 to 2011/12 of HBL, NBBL & SCBNL (detail in Appendix-26).

Table No. 4.2.2.1

Trend Values of Total Deposits of HBL, NBBL & SBNL

Trend values of total deposits for 10 years from mid July 2002/03 -							
2011/12							
Years	Trend values	Trend values	Trend values				
	HBL	NBBL	SCBNL				
2002/03	1995.22	10174.01	18515.44				
2003/04	20483.75	10721.02	19006.7				
2004/05	21016.28	11268.03	19437.96				

2005/06	21548.81	11815.04	19869.22
2006/07	22081.34	12362.05	20300.48
2007/08	22613.87	12909.06	20731.74
2008/09	23146.4	12909.06	20731.74
2009/10	23678.93	14003.08	21594.26
2010/11	24211.46	14550.09	22025.52
2011/12	24743.99	15097.1	22456.78

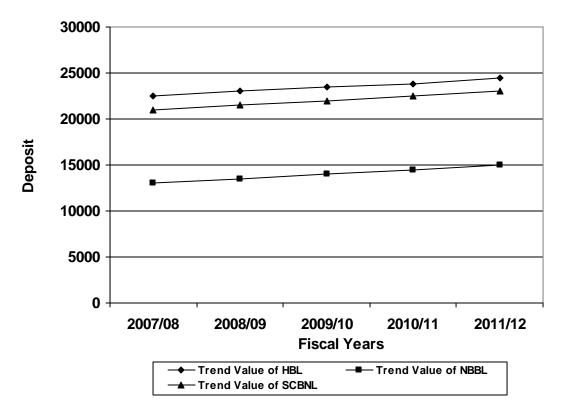
Source: Annual Report of Concern Banks

From the above comparative table 4.2.2.1, it is clear that total deposits of all three banks are in increasing trend. Other things the same, total deposits of HBL, in mid July 2012, will be 24743.99 million, which is the highest under the study period. Similarly the same of SCBNL will be 22456.78 million and the same of NBBL will be 15097.1 million.

From the above trend analysis, it is quite obvious that the deposit collection positions of SCBNL & NBBL in relation to HBL are propositionally bad. The above calculated trend values of total deposits of SCBN, NBBL & HBL are fitted in the line, which is given in Figure 2.8.

Figure 4.2.2.1

Trend Values of Total Deposit of HBL, NBBL, SCBNL



# 4.2.2.2 Trend Analysis of Loan & Advances

Here, the Analysis of loan & advance of HBL, NBBL and SCBNL have been calculated for 5 years fro mid July 2002/03 - 2006/07. The forecast for next 5 years till 2011/12 has also been done.

The following Table no 23 shows that trend values of loans and advances of 10 years form mid July 2002/03 to 2011/12 of HBL, NBBL and SCBNL (detail in Appendix-27)

Table No. 4.2.2.2

Trend values of Total Loans & Advances of HBL, NBBL and SCBNL

Trend values of Total loans & Advances for 10 years from mid July 2002/03 -			
2011/12			
Years	Trend values	Trend values	Trend values
	HBL	NBBL	SCBNL
2002/03	9500.99	7138.92	5626.48
2003/04	10154.21	7112.53	5675.31
2004/05	10807.43	7086.14	5724.14
2005/06	11460.65	7059.75	5772.97
2006/07	12113.87	7033.36	5821.8
2007/08	12767.09	7006.97	5870.63
2008/09	13420.31	6980.58	5919.46
2009/10	14073.53	6980.58	5919.46
2010/11	14726.75	6927.8	6017.12
2011/12	15379.97	6901.41	6065.95

Source: Annual Report of Concern Banks

From the above comparative table no 4.2.2.2 makes clear that the loan and advances of SCBNL, NBBL and HBL are increasing regularly. Other things remaining the same, loan and advances in mid July 2011/12 of HBL will be Rs. 15379.97 million.

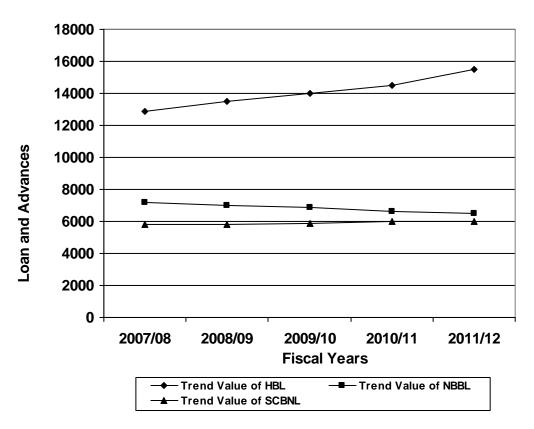
Similarly the trend values of SCBNL and NBBL will be Rs 6065.95 million and 6901.41 million respectively.

From the above trend analysis it is clear that HBL's utilization of deposit in terms of loans and advances is comparatively better than that of SCBNL & NBBL.

The above calculated trend values of loans and advances of SCBNL, NBBL and HBL are the fitted in the trend line, which is given in Figure no 2.9

Figure 4.2.2.2

Trend Values of Loans and Advances of HBL, NBBL, SCBNL



# 4.2.2.3 Trend analysis of Total Investment

Under this topic, an attempt has been made to analyze total investment of HBL, NBBL and SCBNL for 5 Years from 2002/03 to 2006/07 mid July and forecast of the same for next 5 Years till 2011/12.

The following table no 2.2.4 shows that trend values of total investment of HBL, NBBL and SCBNL for 10 years i. e. mid July 2002/03 to 2011/012 (detail in appendix - 28)

Table No 4.2.2.3

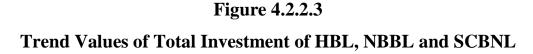
Trend values of Total Investment of HBL, NBBL and SCBNL

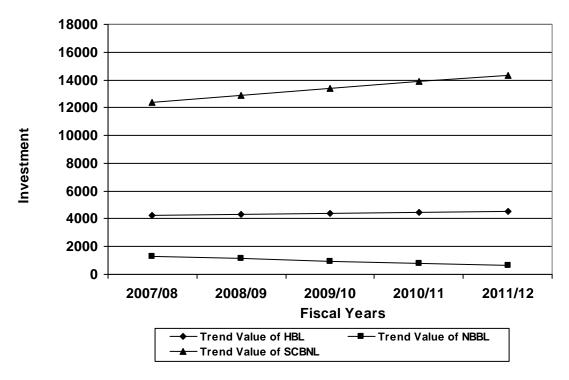
Trend values of Total loans & Advances for 10 years from mid July 2002/03 -2011/12 Years Trend values Trend values Trend values **HBL NBBL SCBNL** 9994.77 2002/03 3875.33 2005.94 2003/04 3951.37 1857.95 10479.17 2004/05 4027.41 1709.96 10963.57 2005/06 4103.45 1561.97 11447.97 2006/07 4179.49 1413.98 11932.37 2007/08 4255.53 1265.99 12416.77 2008/09 4331.57 1118 12901.17 2009/10 4407.61 970.01 13385.57 2010/11 822.02 4483.65 13869.97 2011/12 4559.69 674.03 14354.37

Source: Annual Report of Concern Banks

From the above comparative table 4.2.2.3 of trend value of total investment, it has found that expected amount is in increasing trend. Other things remaining the same total investment in mid July 2011/12 will be Rs 14354.37 million of SCBNL, which is highest amount during the study period. Similarly, trend value of NBBL will be Rs. 4559.69 million and that of HBL will be Rs. 674.03.

From the above trend analysis, it is clear that the increasing trend of SCBNL is more among them. HBL's takes second position and NBBL stands it last for the same. The above calculated trend values of total investment of SCBNL, NBBL & HBL are fitted in the trend line, which is given is Figure No 2.10





# 4.2.3 Test of Hypothesis

Under this topic, effort has been made to the significance regarding the parameter of the population on the basis of sample drawn from the population, Generally, following steps are followed for the test of hypothesis:

- a) Formulation of hypothesis:
- $\int$  Null hypothesis (H<sub>0</sub>)
- Alternative hypothesis  $(H_1)$
- b) Computing the text statistics
- c) Fixing the level of significance
- d) Finding critical region
- e) Making decision

# 4.2.3.1 Hypothesis of t-text

# 4.2.3.1.1 Test of hypothesis on Loan and Advances to Total Deposit Ratio

# 4.2.3.1.1. i Test of hypothesis between SCBNL and NBBL

Null hypothesis,  $H_0: \sim_1 X \sim_2$  i.e. there is no significant difference between mean

ratios of loan & Advances to total deposit of SCBNL

and NBBL

Alternative hypothesis,  $H_{1:} \sim_1 \mid \sim_2$  i.e. There is significant different between ratios of loan & advances to total deposit of SCBNL and NBBL (Two tailed test)

Under  $H_0$ , The test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{S_{23}^{2} \frac{1}{n_{1}} \Gamma \frac{1}{n_{2}}}} \times \frac{63.24 \times 29.46}{\sqrt{15.78 \frac{1}{5} \Gamma \frac{1}{5}}} \times \frac{33.78}{2.51} \times 13.45$$

Source: Appendix - 29

/t/ = 13.45

Tabulated value of 't' for two-tailed test at 5% level of significant for  $(n_1 + n_2 - 2)$  d. f. i. e. 8 d. f. is 2.306

#### **Decision**

Since the calculated value of 't' (i. e. /t/ = 13.45) is more than tabulated value of 't' (i. e. t = 2.306), So H<sub>0</sub> is rejected. In other words, there is significant different between mean ratios of loan & advances to total deposit of NBBL and SCBNL

## 4.2.3.1.1. ii Test of Hypothesis between SCBNL and HBL

Null hypothesis,  $H0 = {}^{\sim}_1 X {}^{\sim}_3$  i.e. there is no significant difference between mean

ratios of loan & Advances to total deposit of SCBNL

and HBL

Alternative hypothesis, H1:  $\sim_1$  |  $\sim_3$  i.e. There is significant different between ratios of loan

& advances to total deposit of SCBNL and HBL (Two

tailed test)

Under  $H_0$ , The test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{S_{13}^{2} + \frac{1}{n_{1}} \Gamma_{n_{2}}^{\frac{1}{1}}}} \times \frac{51.34 \times 29.46}{\sqrt{6.38 + \frac{1}{5} \Gamma_{\frac{1}{5}}}} \times \frac{21.88}{1.59} \times 13.76$$

Source: Appendix - 29

/t/ = 13.76

Tabulated value of 't' for two-tailed test at 5% level of significant for  $(n_1 + n_3 - 2)$  d. f. i. e. 8 d. f. is 2.306

#### **Decision**

Since the calculated value of 't' (i. e. /t/ = 13.76) is more than tabulated value of 't' (i. e. t = 2.306), So H<sub>0</sub> is rejected. In other words, there is significant different between mean ratios of loan & advances to total deposit of SCBNL and HBL.

## 4.2.3.1.1. iii Test of hypothesis between NBBL and HBL

Null hypothesis, H0:  $\sim_2 X \sim_3$  i.e. there is no significant difference between mean ratios of loan & Advances to total deposit of NBBL and HBL

Alternative hypothesis, H1:  $\sim_2$  |  $\sim_3$  i.e. There is significant different between ratios of loan & advances to total deposit of NBBL and HBL (Two tailed test)

Under  $H_0$ , The test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{{s_{12}}^{2} \frac{1}{n_{1}} \Gamma \frac{1}{n_{2}}}} \times \frac{51.34 \times 263.24}{\sqrt{21.19 \frac{1}{5} \Gamma \frac{1}{5}}} \times \frac{Z11.9}{2.91} \times Z4.08$$

Source: Appendix - 29

/t/ = 4.08

Tabulated value of 't' for two-tailed test at 5% level of significant for  $(n_2 + n_3 - 2)$  d. f. i. e. 8 d. f. is 2.306

#### **Decision**

Since the calculated value of 't' (i. e. /t/ = 4.08) is more than tabulated value of 't' (i. e. t = 2.306), So H<sub>0</sub> is rejected. In other words, there is significant different between mean ratios of loan & advances to total deposit of NBBL and HBL

# 4.2.3.1.2 Test of Hypothesis on total Investment to total deposit ratio

# 4.2.3.1.2. i Test of Hypothesis between SCBNL and NBBL

Null hypothesis, H0 :  $\sim_1$  X  $\sim_2$  i.e. there is no significant difference between mean ratios of investment to total deposit of SCBNL and NBBL

Alternative hypothesis, H1 :  $\sim_1$  |  $\sim_2$  i.e. There is significant different between ratios investment to total deposit of SCBNL and NBBL (Two tailed test)

Under  $H_0$ , The test statistics is:

$$t\, X \frac{\overline{X_1}\, Z\, \overline{X_2}}{\sqrt{{s_{12}}^2}\, \frac{1}{n_1}\, \Gamma \frac{1}{n_2}} \,\, X \frac{15.36\, Z\, 56.34}{\sqrt{11.72\, \frac{1}{5}\, \Gamma \frac{1}{5}}} \,\, X \frac{Z\, 40.98}{2.16}\, X\, Z18.97$$

Source: Appendix - 30

/t/ = 18.97

Tabulated value of 't' for two-tailed test at 5% level of significant for  $(n_1 + n_2 - 2)$  d. f. 7 i. e. 7 d. f. is 2.37

#### **Decision**

Since the calculated value of 't' (i. e. /t/=18.97) is more than tabulated value of 't' (i. e. t=2.37), So H<sub>0</sub> is rejected. In other words, there is significant different between mean ratios of total Investment to total deposit of SCBNL and NBBL

#### 4.2.3.1.2. ii Test of Hypothesis between SCBNL and HBL

Null hypothesis, H0 :  $\sim_1$  X  $\sim_3$  i.e. there is no significant difference between mean ratios of investment to total deposit of SCBNL and HBL

Alternative hypothesis, H1 :  $\sim_1$  |  $\sim_3$  i.e. There is significant different between ratios

investment to total deposit of SCBNL and HBL (Two tailed test)

Under H<sub>0</sub>, The test statistics is:

$$t\,\mathbf{X}\frac{\overline{X_{1}}\,\mathbf{Z}\,\overline{X_{2}}}{\sqrt{{s_{12}}^{2}}\,\frac{1}{n_{1}}\Gamma\frac{1}{n_{2}}}\,\mathbf{X}\frac{19.18\,\mathbf{Z}56.34}{\sqrt{6.61\,\frac{1}{5}\,\Gamma\frac{1}{5}}}\,\mathbf{X}\frac{\mathbf{Z}37.16}{1.62}\,\mathbf{X}\,\mathbf{Z}22.93$$

Source: Appendix - 30

/t/ = 22.93

Tabulated value of 't' for two-tailed test at 5% level of significant for  $(n_1+n_2-2)$  d. f.

i. e. 8 d. f. is 2.306

#### **Decision**

Since the calculated value of 't' (i. e. /t/=22.93) is more than tabulated value of 't' (i. e. t=2.306), So H<sub>0</sub> is rejected. In other words, there is significant different between mean ratios of total Investment to total deposit of SCBNL and HBL

#### 4.2.3.1.2. iii Test of Hypothesis between NBBL and HBL

Null hypothesis, H0:  $\sim_2 X \sim_3$  i.e. there is no significant difference between mean ratios of investment to total deposit of NBBL and HBL

Alternative hypothesis, H1 :  $\sim_2$  |  $\sim_3$  i.e. There is significant different between ratios investment to total deposit of NBBL and HBL (Two tailed test)

Under  $H_0$ , The test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{{s_{12}}^{2} \frac{1}{n_{1}} \Gamma \frac{1}{n_{2}}}} \times \frac{19.18 \times 215.36}{\sqrt{6.68 \frac{1}{5} \Gamma \frac{1}{5}}} \times \frac{3.82}{1.63} \times 2.34$$

Source: Appendix - 30

/t/ = 2.34

Tabulated value of 't' for two-tailed test at 5% level of significant for  $(n_2 + n_3 - 2)$  d. f. i. e. 7 d. f. is 2.34

#### **Decision**

Since the calculated value of 't' (i. e. /t/=2.34) is more than tabulated value of 't' (i. e. t=2.37), So H<sub>0</sub> is rejected. In other words, there is significant different between mean ratios of total Investment to total deposit of NBBL and HBL

# 4.2.3.1.3 Test of Hypothesis on Investment on Government Securities to Current Assets Ratio

# 4.2.3.1.3. i Test of Hypothesis between SCBNL and NBBL

Null hypothesis,  $H_0: {}^-_1 X {}^-_2$  i.e. there is no significant difference between mean ratios of investment to Investment on Government Securities to Current Assets of SCBNL and NBBL

Alternative hypothesis,  $H_1: \sim_1 \mid \sim_2$  i.e. There is significant different between ratios investment to Investment on Government Securities to Current Assets SCBNL and NBBL (Two tailed test)

Under  $H_0$ , The test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{{s_{12}}^{2} + \frac{1}{n_{1}} \Gamma \frac{1}{n_{2}}}} \times \frac{46.66 \times 217.26}{\sqrt{17.93 + \frac{1}{5} \Gamma \frac{1}{5}}} \times \frac{29.40}{2.67} \times 11.01$$

Source: Appendix - 31

/t/ = 11.01

Tabulated value of 't' for two-tailed test at 5% level of significant for  $(n_1 + n_2 - 2)$  d. f. 7 i. e. 7 d. f. is 2.37

#### **Decision**

Since the calculated value of 't' (i. e. /t/ = 11.01) is more than tabulated value of 't' (i. e. t = 2.37), So H<sub>0</sub> is rejected. In other words, there is significant different between mean ratios of total Investment to total deposit of SCBNL and NBBL

#### 4.2.3.1.2. ii Test of Hypothesis between SCBNL and HBL

Null hypothesis, H0:  $\sim_1 X \sim_3$  i.e. there is no significant difference between mean ratios of investment to Investment on Government Securities to Current Assets of SCBNL and HBL

Alternative hypothesis, H1 :  $\sim_1$  |  $\sim_3$  i.e. There is significant different between ratios investment to Investment on Government Securities to Current Assets of SCBNL and HBL (Two tailed test)

Under  $H_0$ , The test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{s_{12}^{2} \frac{1}{n_{1}} \Gamma \frac{1}{n_{2}}}} \times \frac{21.3 \times 246.66}{\sqrt{17.27 \frac{1}{5} \Gamma \frac{1}{5}}} \times \frac{X \times 225.36}{2.62} \times 29.67$$

Source: Appendix - 31

/t/ = 9.67

Tabulated value of 't' for two-tailed test at 5% level of significant for  $(n_1+n_3\ -2)$  d. f.

i. e. 8 d. f. is 2.306

#### **Decision**

Since the calculated value of 't' (i. e. /t/=9.67) is more than tabulated value of 't' (i. e. t=2.306), So H<sub>0</sub> is rejected. In other words, there is significant different between mean ratios of Investment on Government Securities to Current Assets Ratio of SCBNL and HBL

#### 4.2.3.1.2. iii Test of Hypothesis between NBBL and HBL

Null hypothesis, H0:  $\sim_2 X \sim_3$  i.e. there is no significant difference between mean ratios of investment to Investment on Government Securities to Current Assets of NBBL and HBL

Alternative hypothesis, H1 :  $\sim_2$  |  $\sim_3$  i.e. There is significant different between ratios investment to Investment on Government Securities to Current Assets of NBBL and HBL (Two tailed test)

Under  $H_0$ , The test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{s_{12}^{2} + \frac{1}{n_{1}} \Gamma \frac{1}{n_{2}}}} \times \frac{21.3 \times 217.26}{\sqrt{2.29 + \frac{1}{5} \Gamma \frac{1}{5}}} \times \frac{4.04}{1.09} \times 3.70$$

Source: Appendix - 31

/t/ = 3.70

Tabulated value of 't' for two-tailed test at 5% level of significant for  $(n_2+n_3\,$  - 2) d. f.

i. e. 7 d. f. is 2.37

#### **Decision**

Since the calculated value of 't' (i. e. /t/=3.70) is more than tabulated value of 't' (i. e. t=2.37), So H<sub>0</sub> is rejected. In other words, there is significant different between mean ratios of Investment on Government Securities to Current Assets Ratio of NBBL and HBL

Alternative hypothesis  $H1: \sim_1 \mid \sim_3$  i.e. There is significant difference between ratios of total investment on government securities to current assets of SCBNL and HBL. (Two tailed test)

Under H0, the test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{S_{13}^{2} + \frac{1}{n_{1}} \Gamma_{n_{2}}^{\frac{1}{n_{2}}}}} \times \frac{21.3 \times 246.66}{\sqrt{17.27 + \frac{1}{5} \Gamma_{\frac{1}{5}}^{\frac{1}{5}}}} \times \frac{2253.6}{2.62} \times 29.67$$

Source: Appendix -31

/t/=9.67

Tabulated value of 't' for two -tailed test at 5% level of significant for  $(n_2+n_3-2)$  d.f. i.e. 8d.f. is 2.306

#### **Decision**

Since the calculated value of 't' (i.e. t=9.67) is more than tabulated value of 't' (i.e. t=2.306), So, H<sub>o</sub> is rejected. In other words, there is significant difference between mean ratios of total investment on government securities to current assets of SCBNL and HBL.

#### 4.2.3.1.3. iii Test Hypothesis between NBBL and HBL

Null hypothesis, Ho:  $^{\sim_2}X^{\sim_3}$  i.e. there is no significant difference between mean ratios of total investment on government securities to

current assets of NBBL and HBL.

Under H0, the test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{S_{12}^{2} + \frac{1}{n_{1}} \Gamma_{n_{2}}^{\frac{1}{1}}}} \times \frac{21.3 \times 217.26}{\sqrt{2.99 + \frac{1}{5} \Gamma_{\frac{1}{5}}}} \times \frac{4.04}{1.09} \times 3.70$$

Source: Appendix -31

/t/=3.70

Tabulated value of 't' for two -tailed test at 5% level of significant for  $(n_2+n_3-2)$  d.f. i.e. 7d.f. is 2.37

#### **Decision**

Since the calculated value of 't' (i.e. /t/=3.70) is more than tabulated value of 't' (i.e. t=2.37), So, H<sub>o</sub> is rejected. In other words, there is significant difference between mean ratios of total investment on government securities to current assets of NBBL and HBL.

# 4.2.3.1.4 Test of Hypothesis on Return on Loans and Advances

#### 4.2.3.1.4. i. Test of Hypothesis between SCBNL and NBBL

Null hypothesis, Ho:  $^{\sim_1}$   $^{\sim_2}$  i.e. there is no significant difference between mean ratios of return on loan & advances of SCBNL and NBBL.

Alternative hypothesis, H1: ~1 | ~2 i.e. There is significant difference between ratios of return on loan & advances of SCBNL and NBBL. (Two tailed test)

Under H0, the test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{S_{23}^{2} \frac{1}{n_{1}} \Gamma \frac{1}{n_{2}}}} \times \frac{1.08 \times 210.86}{\sqrt{1.29 \frac{1}{5} \Gamma \frac{1}{5}}} \times \frac{29.78}{0.71} \times 13.77$$

Source: Appendix -32

/t/=13.77

Tabulated value of 't' for two -tailed test at 5% level of significant for  $(n_1+n_2-2)$  d.f. i.e. 8d.f. is 2.306

#### **Decision**

Since the calculated value of 't' (i.e. /t/=13.77) is more than tabulated value of 't' (i.e. t=2.306), So, H<sub>o</sub> is rejected. In other words, there is significant difference between mean ratios of return on loan & advances of SCBNL and NBBL.

# 4.2.3.1.4. ii Test of Hypothesis between SCBNL and HBL

Null hypothesis, Ho:  $^{\sim_1}X^{\sim_3}$ 

i.e. there is no significant difference between mean ratios of return on loan & advances of SCBNL and HBL.

Alternative hypothesis, H1: ~1 | ~3 i.e. There is significant difference between ratios of return on loan & advances of SCBNL and HBL. (Two tailed test)

Under H0, the test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{S_{13}^{2} + \frac{1}{n_{1}} \Gamma_{n_{2}}^{\frac{1}{1}}}} \times \frac{2.36 \times 210.86}{\sqrt{1.37 + \frac{1}{5} \Gamma_{\frac{1}{5}}}} \times \frac{28.5}{0.548} \times 215.51$$

Source: Appendix -32

/t/=15.51

Tabulated value of 't' for two -tailed test at 5% level of significant for  $(n_1+n_3-2)$  d.f. i.e. 8d.f. is 2.306

#### **Decision**

Since the calculated value of 't' (i.e. /t/=15.51) is more than tabulated value of 't' (i.e. t=2.306), So, H<sub>o</sub> is rejected. In other words, there is significant difference between mean ratios of return on loan & advances of SCBNL and HBL.

# 4.2.3.1.4. iii Test Hypotheses between NBBL and HBL

Null hypothesis, Ho:  $^{\sim_2} X^{\sim_3}$  i.e. there is no s

i.e. there is no significant difference between mean ratios of return on loan & advances of NBBL and HBL.

Under H0, the test statistics is:

$$t \times \frac{\overline{X}_{1} \times \overline{X}_{2}}{\sqrt{S_{12}^{2} + \frac{1}{n_{1}} \Gamma \frac{1}{n_{2}}}} \times \frac{2.36 \times 21.08}{\sqrt{0.1134 + \frac{1}{5} \Gamma \frac{1}{5}}} \times \frac{1.28}{0.045} \times 28.44$$

Source: Appendix -32

/t/ = 28.44

Tabulated value of 't' for two -tailed test at 5% level of significant for  $(n_2+n_3-2)$  d.f. i.e. 8d.f. is 2.306

#### **Decision**

Since the calculated value of 't' (i.e. /t/=28.84) is more than tabulated value of 't' (i.e. t=2.306), So, H<sub>o</sub> is rejected. In other words, there is significant difference between mean ratios of return on loan & advances of NBBL and HBL.

# 4.2.3.2 Test of Hypothesis Using "Analysis of Variance"

The following steps are performed to evaluate the ANOVA

J Formulation of hypothesis:

Null hypothesis (H<sub>o</sub>)

Alternative hypothesis (H<sub>1</sub>)

- ) Computing the test statistics
- Fixing the level of significance
- i) Observed sum of the values of all items of all samples and denoted by T.
- ii) The correction factor is found out.
- iii) The Squares of all items of all samples are added together

- iv) Found out (TSS) by subtracting  $\frac{T^2}{N}$  from the sum of squares of all the items of the samples.
- v) Found out the sum of squares between the samples (SSC) by subtracting  $\frac{T^2}{N}$  from the sum of squares of the totals dividend by the number of items in each sample.
- vi) Found out the sum of square within sample (SSC) by using SSE=TSS SSC

#### 4.2.3.2.1 Test of Hypothesis on Total Investment to Total Deposit Ratio

Null hypothesis, Ho:  $^{\sim_1} X^{\sim_2} Z^{\sim_3}$  i.e. the arithmetic means of total deposit ratio of population from which the samples are drawn are equal to one another.

Alternative hypothesis, (H1):  $a_1 \mid a_2 \mid a_3$  i.e. Arithmetic means of populations are distinct with total investment to total deposit ratio.

Table No. 4.2.3.2.1
One-way ANOVA Table

Sources of	Sum of	Degree of	Mean Sum of	F-ratios
variation	Square	Freedom	Squares	
Between	SSC=	k-1=2	$MSC \times \frac{SSC}{KZ1} \times 0.257$	$F \times \frac{MSC}{10000} \times 257$
Samples			K Z1	MSE
Within	SSE=	N-k=12	$MSE \times \frac{SSE}{N \times Zk} \times 0.001$	
samples			$N \mathbb{Z} k$	
Total	TSS	N-1=14		

Source; Appendix 33

$$TX \quad X_1 \Gamma \quad X_2 \Gamma \quad X_3 X4.544$$

Correction Factor (C.F.) = 
$$\frac{T^2}{N}$$
 X1.37

Sum of square between samples (SSC) = 
$$\frac{(X_1)^2}{n_1} \Gamma \frac{(X_2)^2}{n_2} \Gamma \frac{(X_3)^2}{n_3} Z \frac{T^2}{N} X0.514$$

Total Sum of square (TSS) = 
$$X_1^2 \Gamma - X_2^2 \Gamma - X_3^3 Z \frac{T^2}{N} X_0.528$$

Sum of Square within Samples (SSE) = TSS-SSC=0.014

Tabulated value of F0.05  $^{\circ}_{1}$  X2 and  $^{\circ}_{2}$  X12 is 3.89

#### **Decision**

The calculated value of F(=257) is more than tabulated value of i.e. 3.38 at the given level of significant and degree of freedoms. So  $H_0$  is rejected. In other words, there is significant difference between mean ratios of total investment to total deposit of SCBNL, NBBL and HBL

# 4.2.3.2.2 Test of Hypothesis on Total Investment to Total Assets Ratio

Null hypothesis, Ho:  $^{\sim_1} X^{\sim_2} X^{\sim_3}$  i.e. the arithmetic means of total investment to total assets ratio of population from which the samples are drawn are equal to one another.

Alternative hypothesis, (H1):  $a_1 \mid a_2 \mid a_3$  i.e. Arithmetic means of populations are distinct with total investment to total assets ratio.

Table No. 4.2.3.2.2 One-way ANOVA Table

Sources of	Sum of	Degree of	Mean Sum of	F-ratios
variation	Square	Freedom	Squares	
Between	SSC=	k-1=2	$MSC \times \frac{SSC}{KZ1} \times 0.1962$	$F \times \frac{MSC}{MSE} \times 356.8$
Samples			K ZI	MSE
Within	SSE=	N-k=12	$MSE \times \frac{SSE}{N \times Zk} \times 0.00055$	
samples			$N \mathbf{Z} k$	
Total	TSS	N-1=14		

Source; Appendix 33

$$TX \quad X_1 \Gamma \quad X_2 \Gamma \quad X_3 X3.935$$

Correction Factor (C.F.) = 
$$\frac{T^2}{N}$$
 X1.03

Sum of square between samples (SSC) = 
$$\frac{(X_1)^2}{n_1} \Gamma \frac{(X_2)^2}{n_2} \Gamma \frac{(X_3)^2}{n_3} Z \frac{T^2}{N} X0.3925$$

Total Sum of square (TSS) = 
$$X_1^2 \Gamma - X_2^2 \Gamma - X_3^3 Z \frac{T^2}{N} X_0.3991$$

Sum of Square within Samples (SSE) = TSS - SSC=0.006

Tabulated value of F0.05  $^{\circ}_{1}$  X2 and  $^{\circ}_{2}$  X12 is 3.89

#### **Decision**

The calculated value of F(=356.8) is more than tabulated value of i.e. 3.98 at the given level of significant and degree of freedoms. So  $H_o$  is rejected. In other words, there is significant difference between mean ratios of total investment to total assets of SCBNL, NBBL and HBL

# Test of Hypothesis on Loan & Advances to Total Deposit

Null hypothesis,  $H_0$ :  $\sim_1 X \sim_2 X \sim_3$  i.e. the arithmetic means of loan and advance to total depoist ratio of population from which the samples are drawn are equal to one another.

Alternative hypothesis, (H1):  $a_1 \mid a_2 \mid a_3$  i.e. Arithmetic means of populations are distinct loan and advances to total deposit ratio.

Table No. 4.2.3.2.3
One-way ANOVA Table

Sources of	Sum of	Degree of	Mean Sum of	F-ratios
variation	Square	Freedom	Squares	
Between	SSC=	k-1=2	$MSC \times \frac{SSC}{K \times Z1} \times 0.1419$	$F \times \frac{MSC}{} \times 50.67$
Samples			K Z1	MSE TOOLO
Within	SSE=	N-k=12	$MSE \times \frac{SSE}{N \times Zk} \times 0.0028$	
samples			N Z k	

Total TSS N-1=14

Source; Appendix 33

$$TX \quad X_1 \Gamma \quad X_2 \Gamma \quad X_3 X7.202$$

Correction Factor (C.F.) = 
$$\frac{T^2}{N}$$
 X3.45

Sum of square between samples (SSC) = 
$$\frac{(-X_1)^2}{n_1} \Gamma \frac{(-X_2)^2}{n_2} \Gamma \frac{(-X_3)^2}{n_3} Z \frac{T^2}{N} X0.2839$$

Total Sum of square (TSS) = 
$$X_1^2 \Gamma - X_2^2 \Gamma - X_3^3 Z \frac{T^2}{N} X_0.3176$$

Sum of Square within Samples (SSE) = TSS-SSC=0.0337

Tabulated value of F0.05  $^{\circ}_{1}$  X2 and  $^{\circ}_{2}$  X12 is 3.89

#### **Decision**

The calculated value of F(=50.67) is more than tabulated value of i.e. 3.89 at the given level of significant and degree of freedoms. So  $H_o$  is rejected. In other words, there is significant difference between mean ratios of total investment to total deposit of SCBNL, NBBL and HBL

#### 4.3 Major Findings of the Study

On the basis of presentation, analysis and interpretation of the data regarding the investment policy of the three banks, the major findings of the study can be summarized as follows:

#### **Liquidity Ratio**

The comparative analysis of liquidity of ratio of SCBNL, NBBL and HBL reveals the following facts:

- The mean ratio of CV of current ration of SCBNL is satisfactory. Only the SCBNL seems capable of paying current obligations. The ratio of HBL seems improving but the NBBL 'trend is deteriorating.
- The mean ratio & CV of cash and bank balance to total deposit ratio of HBL is higher. Higher ratio of HBL shows that it is able to serve the demand of its

customers i.e. it is operating at the lower risk. The mean ratio of SCBNL and NBBL are lower than HBL but seems satisfactory. On the basis of CV it can be conducted that the ratio of SCBNL and NBBL are more consistent than that of HBL.

- The mean ratio and CV of cash and bank balance to current assets ratio of HBL in higher. NBBL takes place after HBL, SCBNL is also satisfactory position and has more consistent on the ratios. The ability of HBL to make the quick payment of its customer deposits on the basis of its most liquid assets i.e. cash bank balance is higher.
- The mea ratio & CV of investment in government securities to current assets ratio of SCBNL has been found higher and more consistent. SCBNL has better position, HBL has average and NBBL From the point of view of investment in government securities is poor.

#### **Assets Management Ratio**

- The comparative analysis of assets management ratio reveals the following facts:
- The mean ratio of loan & advances to total deposit of NBBL is higher. HBL seems to be more stable than others. Large proportion of total deposit of NBBL has been utilized on loans & advances than HBL & SCBNL.
- The mean ratio & CV of total investment to total deposit of SCBNL is higher and stable i.e. SCBNL mobilizes its more deposits on investment. HBL stands in average with greater volatility and NBBL made low investment.
- The mean ratio and CV of loan & advances to total assets of NBBL is higher i.e. it mobilizes large proportion of total assets on loans & advances with slightly higher variability. It clearly shows that NBBL focuses to mobilize fund on loans and advances. HBL stands for same on second than SCBNL.
- The mean ratio & CV of investment on government securities to total assets of SCBNL is higher and more stable, i.e. SCBNL is strong to mobilize its total assets on investment government securities. NBBL has greater variability and invested lower proportion and HBL invested moderately.

#### **Profitability Ratio**

The comparative analysis of profitability ratio reveals the following facts.

- The average ratio & CV of return on loans and advances of SCBNL has been found to be better with greater stability, NBBL and HBL have been failure to maintain high return on its loans and advances.
- The mean ratio of CV of return on assets (ROA) of SCBNL is better than that of NBBL and HBL.
- the mean ratio & CV of return on equity (ROE) of SCBNL is better with more stability. HBL has slightly low ration but NBBL has failed to maintain the same for some years. The ROE of SCBNL shows that it has been able to earn high profit through the efficient utilization of its own capital. Moreover, its low CV shows its more homogeneous ratio during the study period. This shows the efficient investment policy for mobilization of capital resources.
- The average ratio of interest earned to total assets of NBBL is higher than that of SCBNL and HBL, indicates that NBBL's interest earning power with respect to total assets seems to be very efficient than SCBNL & HBL. And lower CV indicates consistency in the ratios.
- The average ratio of interest earned to total operating income of HBL is higher, it indicates that HBL seems to have earned higher amount of interest income in comparison to SCBNL and NBBL and CV is less, indicates comparatively high degree of stability. NBBL has slightly lower average ratio. The average ratio of all banks is higher. It shows the large amount of their operating income came from interest income.

#### **Growth Ratio**

- The comparative analysis of growth ratio reveals the following facts:
- The growth ratio & CV of total deposit of NBBL is higher. The CV for each bank is higher than mean, there is no stability in deposit collection. SCBNL has lowest rate & CV on that HBL has less growth rate & CV than NBBL but higher than SCBNL, NBBL is strong to increase deposits.
- The growth ratio of loans and advances of NBBL is higher. HBl has taken second position and SCBNL has least with greater instability. The ratios are in fluctuating trend. NBBL in stronger in increasing loan and advances.

#### **Coefficient of Correlation Analysis**

The coefficient of correlation analysis between different variables (dependent & independent) reveals the following facts:

- The value of coefficient of correlation between deposit and loans & advances of HBL is higher than SCBNL and NBBL, which indicates that HBL is in better position to grant loan & advances for mobilizing the collected deposits in comparison SCBNL and NBBL. NBBL takes second place on the same.
- The value of coefficient of correlation between deposit and total investment of HBL is higher than that of SCBNL and NBBL, so HBL is in better position and NBBL on same SCBNL takes better place after HBL.

### **Trend Analysis**

The comparative trend analysis with the predicted 5 years of SCBNL, NBBL and HBL in terms of deposit, loans & advances and investment reveals following facts.

- Trend values of deposit are in increasing trend. HBL has highly increasing trend in comparison to that of SCBNL and NBBL, which indicates that HBL's deposit collection position in relation to SCBNL and HBL is proportionately better.
- Trend value of loans & advances of NBBL is highly up warded in comparison with SCBNL and HBL. It shows that NBBL is in better in comparison to SCBNL and HBL.
- From trend value of total investment, it has been found that the expected amount is in increasing trend in case of all three banks. It shows that SCBNL's utilization of deposit in terms of total investment is comparatively better than that of NBBL and HBL.

#### **Test of Hypothesis**

The comparative t-test of hypothesis reveals the following facts:

- There is significant different between mean ratio of loan & advances to total deposit of SCBNL and NBBL and HBL and that of between NBBL and HBL.
- There is significant difference between mean ratio of total investment to total deposit of SCBNL and NBBL and also that of SCBNL and HBL. But there is no significant difference between mean ratio of total investment to total deposit of NBBL and HBL.

- There is significant difference between mean ratio of total investment on government securities to current assets to SCBNL and NBBL. But there are no significant differences on that between SCBNL and NBBL and HBL, similarly between NBBL and HBL.
- There is significant difference between mean ratio of return on loans and advances of SCBNL and NBBL & between SCBNL and HBL. But there is no significant difference between that of ratio of NBBL and HBL.

The analysis variance reveals the following facts:

- There is significant difference level of investment pattern with respect to total deposit collected by SCBNL, NBBL & HBL.
- There is significant different level of investment pattern with respect to total assets of SCBNL, NBBL & HBL.
- The loans and advances provided by SCBNL, NBBL & HBL is distinct with respect to total deposit.

# **CHAPTER-V**

# **Summary, Conclusion and Recommendation**

# 5.1 Summary

Nepalese money market and lending procedure is very much affected by its mass poverty. Landlocked position, low social development, political instability and frequent changing policies of the government. Besides these international market plays a vital role while conduct a business in these days so banks and other organizations not only concentrate on their country but the outside world also. Banking industry offers a wide range of services addressing the needs of public in different walks of life. the report will try to concentrate on three-major private sector banks of Nepal, i.e., Himalayan Bank Limited (HBL), Nepal Bangladesh Bank Ltd (NBBL) and Standard Chartered Bank Nepal Limited (SCBNL).

The main objective of the present study is to analyze the liquidity position as well as the investment policy adopted by HBL, NBBL and SCBNL and comparison of such between themselves.

The present study is to find out the investment policy and practice of the joint venture banks in Nepal. Investment policy is one of the essential and the main functions where the whole banking business is related thus, the study on the major joint venture banks and especially in their lending and investment policies carry a great significance to the shareholders of banks, to the banking professionals, to the students and teachers of banking and commerce.

Many-researcher had conducted their research on their financial performance, profit planning, investment etc. but very few researches have been made in the area of investment policy and practice in the context of Nepal.

Profits are the prime measurement of success of a firm. The most common objective of a business firm is to maximize profit in one or either way as well as to render service. Moreover, profit is the yardstick of achievement target of an organization.

The accounting concept of company profit is a concept of net business income. Profit is the surplus income that remains after paying expenses and providing for that part of capital used for producing revenue. Profit in accounting sense tends to become a long-term objective of a product but also of the development of market for it. Profit is a signal for the allocation of resources and a yardstick for judging managerial efficiency.

A joint venture bank is an organization designed to make profits, and profits are the primary measure of its success, profits are the acid test of the individual bank's performance. Profit is the expenses inclined to operate the business and it is the primary objective of business.

The main objective of this research report is to analyze, examine and interpret the lending and investment procedure of private owned commercial banks with the help of various financial statements, statistical tools and non-financial subject matters. As the study intends to show the effectiveness of lending operation in a concern, it requires an appropriate and research methodology.

The data used in this thesis is secondary type, which have been taken mainly from the published data and financial statements of the sampled banks.

Financial and statistical tools are used to analyze the data of the sample banks.

Those are:

#### **Financial tools:**

**Liquidity Ratio** 

**Assets Management Ratio** 

**Profitability Ratio** 

**Growth Ratio** 

### **Statistical tools:**

**Coefficient of Correlation Analysis** 

**Trend Analysis** 

**Test of Hypothesis** 

The analysis variance reveals the following facts: There is significant difference level of investment pattern with respect to total deposit collected by SCBNL, NBBL & HBL. There is significant different level of investment pattern with respect to total assets of SCBNL, NBBL & HBL. The loans and advances provided by SCBNL, NBBL & HBL is distinct with respect to total deposit.

# 5.2 Conclusion

SCBNL has satisfactory current ratio and it is also seen that it is being able to serve its customer's demand, but liquidity capacity of SCBNL on the basis of its most liquid assets i.e. cash & bank balance is seen low because it has invested more in government securities. SCBNL utilizes its current assets investing in government securities rather than cash balance. NBBL kept more current assets as cash and bank balance and has poor capability to pay short term obligation of outsiders. HBL stands at moderate level and has also poor capability towards current obligation.

The overall conclusion can be drawn that the assets management ratio of HBL has been better, mostly in mobilizing its total deposit at loans & advances than on investment on Govt. securities. HBL has been successful in mobilizing their total assets on loans and advances for the purpose of income generation. Also HBL is successful to mobilize its total assets on purchase of shares & debentures of other companies to generate incomes and utilize their excess fund. SCBNL attempts to make investment rather than loans and advances. It shows SCBNL is operating with lower risk of loan loss.

From the data analysis of profitability ratios, it can be concluded that SCBNL is being able to maintain high return on loans advances, total assets and equity and low interest expenses. NBBL is capable to earn interest but had not effective operation of resources. High amount of operating income of HBL came from interest and others are normally generated.

In sum it can be concluded that, growth ratio of NBBL is successful in increasing its sources of fund (deposit collection & lending loans and advances) and increasing net profit. It has been also improving to total investment. The volatility is undesirably high in each ratio every bank.

From all the correlation analysis of variable shows that positive relation between deposit and loans & advances, deposit and total investment, indicating HBL is in better position at all to grant loans & advances second position to grant loan& advances for mobilizing the collected deposit and SCBNL is successful for mobilizing collected deposit as investment in compare to NBBL.

From trend analysis, it is clear that NBBL's utilization of deposit in terms of loan & advances is comparatively higher increasing trend i.e. better than that of SCBNL and HBL. In term of total deposit HBL has higher increasing trend. Similarly the trend of investment of SCBNL has comparatively higher than that of NBBL and HBL.

There is no homogeneity on their policy towards mobilizing loan and advances from their total deposit collection. There is no similarly policy of SCBNL and NBBL in the case of investment from their total deposit, investment on Govt. securities from current assets, deposit mobilization as loans and advances. There is similarly between NBBL ad HBL except deposit mobilizing as loans advances SCBNL and HBL's ratios are closer in case of investment on government securities to current asset and return on loans and advances. It is found that HBL manages moderate policy in above subject matter. But NBBL focused to make loans and advances and SCBNL focused for making investment. The investment policy adopted by SCBNL, NBBL and HBL are distinct. There is no similarly toward total investment, loans and advances and deposit collection policy.

#### 5.2 Recommendation

On the basis of the whole study and conclusions drawn from the study, following suggestions can be provided:

- Although the current ration of SCBNL is satisfactory but there is no appropriate level of most liquid current assets i.e. cash and bank balance. So, SCBNL should keep adequate level of cash balance, reducing investment in government security.
- SCBNL invested large proportion of its deposit collection in government securities, but SCBNL if not do such and if it attempts to invest more in loans & advances, the ROE & ROA will grow with higher rate.
- Reforming portfolio proportion of loans & advances and investment in government securities, SCBNL should try to attract investors (depositors) to collect more deposits. Data show that SCBNL has efficient administration but beside it, the managerial policy is passiveness or risk averse. So, the banks should try to collect more funds and such fund should be invested in loans and advances to generate more overall profitability.
- NBBL is maintaining excess level of cash and bank balance, due to this it is free form liquidity risk, but it is not beneficial to the bank. So, the excess idle cash

- balance should be utilized investing in government securities. It helps to increase ROE and ROA.
- It seems that NBBL adopt the aggressive policy i.e. it attempts to invest more and more in loans and advances. So NBBL has higher loan loss risk. The investment policy of NBBL has to be reconsidered and the proportion of portfolio should be rearranged.
- Meeping large amount of cash balance, NBBL's overall profitability is no satisfactory. Also the operating and other expenses are unnecessarily higher, which results the lower. So, NBBL should try to minimize such expenses.
- The deposit collection pattern is lower than loan and investment provided by NBBL, which is harmful in future, so the bank should try to collect more deposit and should focused towards investors (depositors) attention.
- The large proportion of amount invested by NBBL is shares and debentures clears that NBBL is risk taker bank among three banks. But to provide higher return only aggressive policy is not enough. There should be also good administrative management and appropriate internal & external-environment.
- HBL focused on portfolio management, even though it has not able to generate appropriate level of profitability. Due to higher operating and other charges HBL is no able to make desired level of return.
- The management of HBL Focused only towards policy but failure to mange administration properly, the overall return in lower, so the bank should attempt to minimize its operating & other expenses.
- The level of cash balance and investment in government securities of HBL is to be rearranged by curtaining cash balance. The bank should invest such fund in government securities to make overall profitability.
- The higher proportion of earning retained by the NBBL & HBL which directly affect the ROE. Retained earning of good for financial straightens but reduces the ROE. So the appropriate level of retained earning and other low cost fund that is deposit should be mobilized properly.

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