## CHAPTER - I

## INTRODUCTION

### 1.1 Background of the study

Investment has different meanings in finance and economics. In economic theory or in macroeconomics, investment is the amount purchased per unit time of goods which are not consumed but are to be used for future production (i.e. capital). Finance investment is putting money into something with the expectation of gain that upon thorough analysis has a high degree of security for the principal amount, as well as security of return, within an expected period. In contrast putting money into something with an expectation of gain without thorough analysis, without security of principal, and without security of return is gambling. Putting money into something with an expectation of gain with thorough analysis, without security of principal, and without security of return is speculation. As such, those shareholders who fail to thoroughly analyze their stock purchases, such as owners of mutual funds, could well be called gamblers. Indeed, given the efficient market hypothesis, which implies that a thorough analysis of stock data is irrational, most rational shareholders are, by definition, not investors, but speculators.

Investment is related to saving or deferring consumption. Investment is involved in many areas of the economy, such as business management and finance whether for households, firms, or governments. To avoid speculation an investment must be either directly backed by the pledge of sufficient collateral or insured by sufficient assets pledged by a third party. A thoroughly analyzed loan of money backed by collateral with greater immediate value than the loan amount may be considered an investment. A financial instrument that is insured by the pledge of assets from a third party, such as a deposit in a financial institution insured by a government agency may be considered an investment.

Investment is the sacrifice of current resources for the benefit of future. However, there is no certainty that we invest our rupees and resources in current time and will get benefit in future. Investment in financial sense is placing of money in the other for their use expecting a return or the participation in expected profits. However, for manufacturing and trading firms the terms investment will be long-term expenditures that aim at
increasing return of efficiency or at building up goodwill thereby producing and increasing return over as period. Investment also seek to manage their wealth effectively obtaining the most from it, while protecting it from inflation, taxes and other risks.

Investment by individuals, business and government involves a present sacrifice of income to get on expected on future benefit as a result investment raises an economy of nations. Investment usually involves putting money into a bet, which is not necessarily marketable in order to enjoy a series of return the investment is expected to yield. On the other hand speculation is usually a shorter run phenomenon. Speculators tend to buy assets with the expecting of a profit than can be earned from subsequent price charge and sale. Investments are usually made expecting a certain stream of income, which has existed, will not change in the future.
"Investment in its broadest sense means the sacrifice of current dollars for future dollars. Two different attributes are generally involved time and risk. The sacrifice takes place in the present and its magnitude generally is certain" (Shape Alexander and Baily, 1998)

Overall, national development of any country depends up on the economic development of that country and economic development largely depends up on the financial infrastructure of that country. Therefore, the primary goal of any nation including Nepal is rapid economic development to promote the weal fare of the people and the nation as well. Nepal being one of least developed countries has been trying to embark up on the path of economic development by economic growth rate and developing all sectors of economy.

The commercial Bank is simply a business corporation organized for maximizing the value of shareholder's wealth Invested in the bank at an accepted level of risk. They are different from other firm, as their performance is a kin to their financial structure. The amount of the bank's capital risks of its loans and the nature of its deposits of affect its ability to make money and remain profitable.

Banks are disbursing their money as investment in trade business and industry. Due to the grown on banking sector in Nepal and huge competition, investment are comparatively losses. Therefore, Banks should be following the principle of investment for profit. An investment policy should ensure maximum profit and minimum risk. Investment policy
determines the investor's objective and the amount of its investable wealth because there is possible relation between risk and return for sensible investment strategies

Investment is a very risky job for a purposeful, safe and profitable investment. Bank must follow sound investment policy. The fundamental principle of investment must be followed thoroughly for profitable investment. Investment policy should ensure maximum amount of investment to all sectors with proper utilization. There is high liquidity in the market and it seems no profitable place to invest these days investment policy provides the bank several inputs through which they can handle their investment policy provides the bank several inputs through which they can handle their investment operation efficiently ensuring the maximum return with minimum risk, which ultimately leads the bank to the path of success to achieve its organizational objectives of shareholders wealth maximum.

Investment operation of commercial bank's is very risky for this, commercial banks have to pay due considerations while formulating investment policy. A healthy development of any commercial bank depends upon its investment policy. A good investment policy attracts both borrowers and lenders, which help to increase the volume and quality of deposits, loans and investment.

### 1.2 Profile of Sample Companies

### 1.2.1 Profile of Himalayan Bank Limited (HBL)

Himalayan Bank Limited (HBL) is one of the largest and reputed private sector banks of Nepal. The Bank was incorporated in 1992 by a few eminent individuals of Nepal in partnership with the Employees Provident Fund and Habib Bank Limited, Pakistan. The Bank commenced its operations in January 1993. Himalayan Bank is also the first commercial bank of Nepal with most of shares held by the private sector of Nepal. Besides commercial banking services, the Bank also offers industrial and merchant banking service. With its head and corporate office at Thamel, Kathmandu, the bank has 33 branches. Thirteen of its branches are located inside the Kathmandu Valley while the rest are spread across the nation.

Legacy of Himalayan lives on in an institution that's known throughout Nepal for its innovative approaches to merchandising and customer services. Products such as premium saving Account, HBL proprietary card and millionaire Deposit scheme besides service 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 load the banking sector of Nepal. The most recent rating of HBL by Banker's almanac as country's number 1 Bank easily confirms our claim.

All Branches of HBL are integrated into globes the single banking software where the bank has made substantial investment. 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 pre-paid visa card, International Travel Quota credit card consumer Finance through credit card and online TOEFL, SAT, IELTS, etc. free payment facility are some of the product and services. HBL also has a dedicated offsite 'Disaster Recovery Management System'. Looking of the number of Nepalese workers abroad and their need for formal money transfer channel: HBL has developed exclusive proprietary online money transfer software. Himal Remit TM.

### 1.2.2 Profile of Nepal Credit \& Commerce Bank Ltd. (NCC)

Nepal Credit \& Commerce Bank Ltd. (NCC Bank) formally registered as Nepal - Bank of Ceylon Ltd. (NBOC), commenced its operation on 14 October, 1996 as a Joint Venture with Bank of Ceylon, Sri Lanka. It was the first private sector Bank with the largest authorized capital of NRS. 1,000 millions. The Head Office of the Bank is located at Siddhartha Nagar, Rupandehi, the birthplace of LORD BUDDHA, while its Corporate Office is placed at Bagbazar, Kathmandu.

The name of the Bank was changed to Nepal Credit \& Commerce Bank Ltd., (NCC Bank) on 10th September, 2002, due to transfer of shares and management of the Bank from Bank of Ceylon, an undertaking of Government of Sri Lanka to Nepalese Promoters.

At present, NCC Bank provides banking facilities and services to rural and urban areas of the country through its 17 branches. The Bank has developed corresponding agency relationship with more than 150 International Banks having worldwide network.

The Bank is using Pumori Plus, the most commonly used software by Nepalese Banks. The Bank offers Any Branch Banking Service (ABBS) in all 17 branches. Telex and SWIFT are other modes of communication for efficient and effective transmission of information. In order to facilitate the customers with state of art technology, Bank is providing Debit Card facilities under the SCT (Smart Choice Technology) Network jointly in consortium with 40 other member Banks. This facility enables the customers to withdraw cash from any of the 167 ATM terminals located at different parts of the country and to purchase goods from more than 743 shopping complexes and departmental stores under POS arrangement.

### 1.3 Statement of the Problem

Banking business in Nepal though seemed developed and mushroomed only in urban areas of the country in recent days, has its own limitations and problems as regards to security, profitability and financial soundness. Currently there are 32 commercial banks under A class financial institutions operating in the country. The inflow of money in the banks in the form of several kinds of deposits is huge but it could not be invested in more profitable, sustainable and riskless projects. In addition, many banks are found centered in the urban areas of the country. Therefore, there is a situation that needy people and small entrepreneurs residing in rural areas are still deprived from institutional credit. However, this study will not go to this vast sector and thus, focus only on the level and quality of investment of sample banks as regards to profit earning capacity or status of profitability. Investment is the most important factor from the shareholder's and bank's management point of view. Though several joint venture banks have been established in our country within short period of time, sufficient return can not have been earned and strong, stable
and appropriate investment policy has not been followed by the commercial banks. Due to throat-cut competition of financial environment, banks seem to be ready to grant much more loan, advances and other facilities against their client's insufficient deposit. However, subsequent development of commercial banks in quality has not been satisfactory. Majority of the commercial banks is found to be unsatisfactory. The financial loss and managerial responsibilities for their ailing units have to be done by the government. But private banks are running successfully. The joint venture banks are not interested in granting loan to the primary sectors of the economy. Banking is not being easy accessibility of public in remote village area. Private banks have concentrated their operation mainly in town and capital of the country. The present research will try to analyze and examine the investment policy of respected banks. Each and every commercial bank should not run successfully without the conceptual framework of investment policy.

In the contest of Nepal, The financial sector collect adequate amount from the mass, however they could not find or locate new investment sectors required to mobilize their funds, only few commercial banks are getting regular profits. Most of them are unable to satisfy their shareholders and customers in earning profit and ensuring their safe deposit. The most important problem is poor investment climate prevailing in Nepal due to heavy regulatory procedure, uncertain government policy, NRB's stringent directives, and unsecured social environment.

The focus of this study will be towards the investment practices of the banks. They are Himalayan Bank Ltd. and Nepal Credit and Commerce Bank Ltd. This study deals with the following issues of commercial banks.

- What are the sectors of investment of Nepalese commercial banks?
- Are the available fund properly utilize or not?
- What is the investment pattern of Nepalese commercial Banks?
- What is the relationship between deposit, investment, loan \& advance and net profit?


### 1.4 Objectives of the Study

The main objective of the study is to find out investment sector and pattern of Nepalese commercial banks with reference to HBL and NCC. The other specific objectives of this study mention below.

- To find out the trend of deposit, investment, loan \& advance and net profit of sample banks.
- To access the investment portfolio of sample banks.
- To find out relationship between total investments, deposit, loan \& advance and net profit of sample banks.


### 1.5 Significance of the Study

The focus of study is to highlight the investment process of commercial banks expecting that the study can be bridge the gap between deposit and investment process. On the other hand, the study would provide information to management of the bank that would help them to take collective action. Investment is the most important means of economic development. If savings are invested in unproductive area, economic growth will be broke out. So any firm or company should take right polices of investment. So issues of investment should be found out and solved. Then investment will be means of economic development of a country.

The study will be helpful to aware the shareholder regarding investment of their banks. The study suggests to the management how they can improve their managing power and recommends what is the clue to raise the profit. However, this is only study but it gives feedback to policy makers, will useful them who formulate the policy for regulation. All stakeholders can identify which bank is the best and to whom have to invest.

### 1.6 Limitations of the Study

This study is not free from limitations. The major limitations of this study are as follows.

- This study is based on secondary data collected from annual financial report, journals, Websites and different articles.
- The study period will be covers for only last five fiscal years.
- This study has taken only two commercial banks among 32 commercial banks.
- This study is only focus on investment of commercial banks and does not cover other aspects.
- In this study, only selected financial and statistical tools and techniques are used.


### 1.7 Organization of the Study

The research will be divided into five chapters.

## Chapter -I - Introduction

This chapter deals with the subjects matters of the study consisting background of study, profile of sample companies, statement of problem, objective of the study, significance of the study, limitation of the study and organization of the study.

## Chapter - II - Review of Literature

This chapter deals with review of the different literature of the study field. Therefore, it includes conceptual framework along with the review of major books, journal, research work etc.

## Chapter - III - Research Methodology

This chapter includes research design, population \& sample, sources and types of data, data processing and method of analysis.

## Chapter - IV - Presentation and Analysis of Data

This chapter deals with analysis and interpretation of the data using financial and statistical tools describe in chapter three. Similarly, this chapter also includes the major findings of the study.

## Chapter - V - Summary, Conclusion and Recommendation

This is the last chapter of the study. It summarizes the result of analysis and suggestive framework.

Besides these, bibliography and annexure are presented at the end of the thesis. Similarly recommendation, viva voice sheet, acknowledgements, table of contents, list of tables, list of figures and abbreviations are included in the front part of the thesis report.

## CHAPTER - II

## REVIEW OF LITERATURE

Review of literature means stocktaking of available literature in one's field of research. Literature review is a comprehensive review of previous works on the general and specific topics considered in the report. The literature review may also serve as a kind of bibliographic index and guide for the readers. It also demonstrates where the current study fits into the scheme of things. The objective of reviewing the literature is to develop certain expertise and knowledge in one's area.

### 2.1 Conceptual Review

### 2.1.1 Concept of Commercial Bank

Commercial banks are those, which pool together the saving of the community and arrange them for the productive use. They accept deposits from the public and provide same deposits to the public as loan and advances. In fact, they circulate the money and create credit. The concept of the commercial banks made the economy strong. And now it's playing important role to make country economically strong. According to the Black's law Dictionary "Commercial Bank" means a bank authorized to receive both demand and time deposits, to engage in trust services, to issue letter of credit, to rent time-deposit boxes, and to provide similar services. Commercial Bank means a bank which operates currency, exchanges transactions, accepts deposits, provides loan, perform, dealings, relating to commerce except the banks which have been specified for the co-operative, agricultural, industry of similar other specific object (Bhandari, 2003:5).

Hence, the term commercial bank is used taking meaning of all banking habits. That's why joint stock banks, member banks, and credit banks are frequently used interchangeably with the term commercial banks. But it is different than central bank. Central Bank cannot be interchangeable with other banks. In this way, a commercial bank is different from a central bank. While the primary objective of a commercial bank is the maximization of profit the central bank is primarily concerned with the effects of its operations on the functioning of the economy. Moreover, while there may certainly be
many competing commercial banks, there exist only one central bank in a country. While the commercial banks compete against each other, the central bank comes out if any; ordinary banking business for the general public, incomplete if confines itself mainly to controlling the operations of the banking system in country.

### 2.1.2 Function of Commercial Banks

Banks can be defined according to the functions they perform. A bank is established with the prime objective of profit maximization. To achieve this, the bank carries out functional activities, principally, commercial banks accepts deposits, provide loan, primarily to business firms thereby facilitating the transfer of funds in the economy. Although, in the yester years banks were viewed as acceptor of deposits then provider of loan, but modern commercial banks have to perform overall development of trade, commerce, industry, agriculture including supports for priority and deprived sectors. The growing bank needs and habits of people and competitive environment has made the banking sector challenging and their operation cannot be underemphasized in present context of market globalization. Hence, a bank is a commercial institution licensed as a taker of deposits, concerned mainly with the making and receiving payments on behalf of their customers, accepting deposits, creating money and making short-term loans to private individuals, companies and other organization.

Although profit maximization is a major objective of commercial bank, to achieve this objective commercial bank performs various functions under the mandatory rules and regulations and directives of NRB and the Banking and financial institution act 2063.

## a. Accepting Deposits

Accepting a deposit is the most important function of commercial banks. Commercial banks collect money from those who want to deposit in different types of accounts such as:

- Fixed Deposit Account
- Current Deposit Account
- Saving Account


## b. Advancing of Loans

Commercial banks provide the loans required or credit to various sectors of economy such as industry, trade, agriculture, business-deprived sector etc. In this way bank creates credit facilities. It provides loans from various procedures in different form such as:

- Overdraft
- Cash Credit
- Direct loan with collateral
- Discounting of bills of exchange
- Loans of money at call and short notice


## c. General Utility Functions

- Commercial banks also perform general utility functions such as:
- Issuing of letter of credit to its customers.
- Issuing of bank drafts and travelers cheque etc., for transfer of funds from one place to another.
- Dealing in foreign exchange and financing foreign trade by accepting or collecting foreign bills of exchange.
- Serving as referred to the financial standing and credit worthiness of its customers.
- Underwriting loans to be raised by public bodies and corporations. Providing safety vaults of lockers for the safe custody of valuables and securities of the customers.
- Acting as a trustee and executing the will of the deceased.
- Remittance of money


## d. Agency Function

Apart from the above functions, commercial banks also perform agency functions for which they act as agent and claim commission on some facilities such as:

- Collection of customer's money from other banks
- Receipt and payment of dividend, interest.
- Security brokerage service.
- Financial advisory service.
- To underwrite the government and private securities.


### 2.1.3 Concept of Investment

Investment has different meanings in finance and economics. Finance investment is putting money into something with the expectation of gain that upon thorough analysis has a high degree of security for the principal amount, as well as security of return, within an expected period. In contrast putting money into something with an expectation of gain without thorough analysis, without security of principal, and without security of return is gambling. Putting money into something with an expectation of gain with thorough analysis, without security of principal, and without security of return is speculation. As such, those shareholders who fail to analyze their stock purchases, such as owners of mutual funds, could well be called gamblers. Indeed, given the efficient market hypothesis, which implies that a thorough analysis of stock data is irrational, most rational shareholders are, by definition, not investors, but speculators. Investment is related to saving or deferring consumption. Investment is involved in many areas of the economy, such as business management and finance whether for households, firms, or governments.

In economic theory or in macroeconomics, investment is the amount purchased per unit time of goods which are not consumed but are to be used for future production (ie. capital). Examples include railroad or factory construction. Investment in human capital includes costs of additional schooling or on-the-job training. Inventory investment is the accumulation of goods inventories; it can be positive or negative, and it can be intended or unintended. In measures of national income and output, "gross investment" (represented by the variable I) is also a component of gross domestic product (GDP), given in the formula GDP $=\mathrm{C}+\mathrm{I}+\mathrm{G}+\mathrm{NX}$, where C is consumption, G is government spending, and NX is net exports. Thus investment is everything that remains of total expenditure after consumption, government spending, and net exports are subtracted (i.e. $\mathrm{I}=\mathrm{GDP}-\mathrm{C}-\mathrm{G}-\mathrm{NX})$.

Non-residential fixed investment (such as new factories) and residential investment (new houses) combine with inventory investment to make up I. "Net investment" deducts depreciation from gross investment. Net fixed investment is the value of the net increase in the capital stock per year.

Fixed investment, as expenditure over a period ("per year"), is not capital. The time dimension of investment makes it a flow. By contrast, capital is a stock- that is, accumulated net investment to a point in time (such as December 31).

Investment is often modeled as a function of Income and Interest rates, given by the relation $\mathrm{I}=\mathrm{f}(\mathrm{Y}, \mathrm{r})$. An increase in income encourages higher investment, whereas a higher interest rate may discourage investment as it becomes more costly to borrow money. Even if a firm chooses to use its own funds in an investment, the interest rate represents an opportunity cost of investing those funds rather than lending out that amount of money for interest (Wikipedia, Investment: 2009)

### 2.1.4 History of Investment

The Code of Hammurabi 1700 B.C. provided a legal framework for investment establishing a means for the pledge of collateral by codifying debtor and creditor rights in regard to pledged land. Punishments for breaking financial obligations were not as severe as those for crimes involving injury or death.

In the early 1900s purchasers of stocks, bonds, and other securities were described in media, academia, and commerce as speculators. By the 1950s the term investment had been co-opted by financial brokers and their advertising agencies to promote speculation. By the late 1900s the media, likely due to turmoil in the capital markets ever since the tech boom bubble pop, and the historical fascination with blaming Wall Street speculators for all the ills of the world, had mysteriously returned to the newspapers, somewhat down played the terms speculation and speculator. The public is instead fed the word investor or investment instead of speculator or speculation, even though the bulk of the activities are not investment grade. In finance, the purchase of a financial product or other item of value with an expectation of favorable future returns. In general terms, investment means the use money in the hope of making more money. In business, the purchase by a
producer of a physical good, such as durable equipment or inventory, in the hope of improving future business (Wikipedia, History of Investment: 2009)

### 2.1.5 Principle of Sound Investment Policy

It is universally known fact that the most important problem in banking administration is that of investing its deposits and paid up capital in various forms of earning assets. This is also known as portfolio policy. The bank's portfolio being nothing but an arranged and digested scheme of its assets.

The funds of banks are generally invested either in those assets, which are non-profitable, or those, which are profitable. Non-profitable assets include cash reserve and the dead stock and profitable assets includes call money, investment, advances and loan, cash credits, overdrafts, discounting of bills and acceptances etc.The guiding principle of sound investment is as follows:

## a. Safety

Safety would be the first guiding principle of a bank, so far as its advances and investment are concerned, because the very existence of a bank depends on the safety of its outstanding, which should never therefore be sacrifice to the profit-earning capacity of its advances. This has led people to believe that a bank will never advance any loan, unless it is fully secured. Such is no doubt the ideal conception of banking, but as a result of its competition from other banks, every bank has to grant a certain number of loans to its customers against their personal security. In such cases, the bank uses direction and never lends a sum obviously beyond its customer's resources. Consequently, to maintain a banking concern in sound condition should be above suspicion. Scrupulous care should be taken that the funds lent out are not subject to any risk of being lost.

## b. Liquidity

While making advances and investments, the bank must see that the money it is lending is not going to be locked up for a long time, which would make its loans and advances less liquid and more difficult to realize in cases of emergency. A bank can afford to lend funds only for a short period, as its liabilities are either payable on demand or at short notice. If
it makes advances for long term there is no likelihood of it being able to recall such loans in time to meet the demands of its depositors.

## c. Diversification of Risk

It is also necessary to remember that a prudent bank must avoid investing all its funds in meeting the needs of any one industry or any one group of industries for considerations of self-interest as well as the larger public good. The imprudence on putting one's own eggs into one basket cannot be too often reiterated. Therefore bank should invest their funds in different field than investing in same field or sector.

## d. Return

Another important factor that it determines the decision of the bank whether or not to grant loan or to make an Investment will depend upon the answer to the question whether or not it will get a fair return on its investment. A bank always aims at securing maximum profits for its share- holders. The difference between borrowings and lending rate constitutes the gross profit and no bank ordinarily will think of an advance without a satisfaction margin of profit.

## e. Marketability

The investments of the bank should be such as can be easily sold and realized in cash readily. Loans given against commercial paper representing goods in transit or against stocks and shares of well-known companies are easily realizable while loans given against immovable property cannot be easily realized. The bank must make sure that the securities, in which he invests his funds, are easily saleable without appreciable loss.

## f. Stability of Price

The primary object of a bank in buying securities is not to gain by a possible rise in their prices, which is the aim of a speculating dabbler. Therefore the price of the securities should be liable to wide fluctuations.

## g. Stock Exchange Securities

This consists of government securities as well as securities of the joint stock companies. These securities are easily and quickly realizable. As they are quoted on the stock exchanges so their values can be easily ascertained. In case of need, a bank can either sell them or pledge them without any hesitation. But before accepting them, the bankers should see that the shares of the companies are not partly paid, that sufficient margin has been kept and they are negotiable. Speculative shares should not be accepted (Bhalla, 2004: p, 109).

### 2.1.6 Investment Alternatives

There are various alternatives for investors:

| 1. Equity Securities | - Common Stock <br> - Preferred Stock |
| :---: | :---: |
| Short term debt securities | - Negotiable certificates of deposit <br> - Commercial paper <br> - Banker's acceptances <br> - Treasury Bills |
| 2. Intermediate and Long Term Debt Securities | - Government $>$ Treasury Notes <br> securities $>$ Treasury Bonds <br>  $>$ Saving Bonds |
|  | - Agency securities |
|  | $\bullet$ Municipal $>$ Revenue bonds <br>  Securities $>$ |
|  | - Corporate bonds |
| 3. Hybrid Securities | - Convertible preferred stock <br> - Convertible bonds |
| 4. Derivative securities | - Options <br> - Community futures <br> - Financial futures <br> - Options in futures <br> - Rights |


|  | • Warrants |
| :--- | :--- |
| 5. Real Assets | • Precious Metal |
|  | • Real State |
|  | • Collectibles |
| 6. International Investment | • Multinationals Corporations |
|  | • Foreign stocks traded on all local exchange |
|  | • American Depository Receipts ( ADRs |

Source: Bhalla, 2004: p, 97

### 2.1.7 Major Investment of Commercial Banks

### 2.1.7.1 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-adays, the commercial banks of Nepal have purchased shares and debentures of regionaldevelopment 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).

### 2.1.7.2 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.

### 2.1.7.3 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.

### 2.1.8 Major Sources of Funds

### 2.1.8.1 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 deposit 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.

### 2.1.8.2 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.

### 2.1.8.3 Stockholder's 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).

- To assess the need based credit of the borrower on a rational basis.
- 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.
- To improve the financial discipline of the borrowers
- 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.

- The credit needs of borrower are assessed on the basis of their business plan.
- Bank credit is only the supplementary to the borrowers' resources and not in replacement of them.
- Borrowers are required to hold inventory and receivable according to norms prescribed by the Reserve Bank of India time to time.
- Credit is made available in different components only depending upon the nature of holding of various current assets.
- 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.

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


### 2.1.9 Investment Portfolio

A portfolio is usually defined as a combination of assets. It is a collection of securities. Portfolio means the lists of holding in securities owned by an investor or institution. A portfolio is a collection of investment securities. Example, if any company of or a person holds some stocks of Nepal Investment Bank Ltd., some of Bottlers Nepal Co., some of Radisson Hotel and some of Standard Chartered Bank Llimited, than the investment portfolio consists of the stocks of these four different companies. Portfolios analysis considers the determination of future risk; and return is a weighted average of the expected return of the individual securities.

Portfolio theory deals with the selection of optimal portfolio i.e. the portfolio that provides the highest possible return for any specified degree of risk or the lowest possible risk for any specified rate of return. Portfolio theory has been developed for the financial assets. Thus making investment from the selected optimal portfolio i.e. the portfolio that provides the highest rate of return with least possible amount of risk is the real investment portfolio.
"A portfolio simply represents the practice among the investors of having their funds in more than one asset. The combination of investment assets is called a portfolio" (Weston, J. F. and Brigham, E. F. 1982).

An investor who has been paying someone or actively manages his or her portfolio has every right to insist on knowing what sort of performance was obtained. Such information can be used to alter either the constraint placed on the manager, the investment objective given to the manager, to the amount of money allocated to manager. Perhaps more importantly, by evaluating performance in specified ways a client can forcefully communicate his $\backslash$ her interest to the investment manager and in all likelihood, affect the
way in which his or her portfolio is managed in the future. Moreover, an investment manager, by evaluating his or her own performance, can identify sources of strengths or weakness.

### 2.1.10 Investment Uncertainty (Risk)

Every investment involves uncertainties that make future investment returns risky. Some of the sources of uncertainty that contribute to investment risk are as follows.

## a. Interest Rate Risk

It is defined as the potential variability of return caused by changes in the market interest rates. In more general terms, if market interest rates rise, then investment values and market prices will fall, and vice versa. The variability of return is the result of change in interest rate. This interest rate risk affects the prices of bonds, stocks, real estate, gold, puts, calls, future contracts and other investment as well.

## b. Purchasing power Risk

It is the variability of return an investor suffers becauseof inflation. The rate of inflation is measured by using a consumer price indeed (CPI). The percentage change in the CPU is a widely followed measure of the rate of inflation.

## c. Bull-Bear Market Risk

Bull-Bear market risk arises from the variability in market return resulting from alternating bull and bear market forces. When a security index rises fairly consistently form a low point called a trough, for a period of time, this upward trend is called a bull market. The bull market ends when the market index reaches a peak and starts a downward trend. The period during which the market declines to the next trough is called bear market.

## d. Default Risk

It is the portion of an investment's total risk that results from changes in the financial integrity of the investment. Default risk is the variability of return that investors
experience as a result of changes in the creditworthiness of a firm in which they invest. Investor losses from default risk usually result from security prices falling as the financial integrity of a firm weakness. By the time an actual bankruptcy occurs, the market prices of the troubled firm's securities will already have declined to near zero.

## e. Liquidity Risk

It is that portion of an assets total variability which results from price discounts given or sales commissions paid in order to sell the asset without delay. Perfectly liquid are highly marketable and suffer no liquidation costs. Liquid assets are not readily marketable either price discounts must be given or sales commissions must be paid, or both of these costs must be incurred by the seller. Hence, the more liquid an asset is, the larger the price discounts and/or commissions which must be given up by the seller in order to affect a quick sale.

## f. Callability Risk

Some bonds and preferred stocks are issued with a provision that allows the issuer to call them in for repurchase. The portion of a securities total variability of return that derives from the possibility that the issue may be called is the callability risk. Callability risk command a risk premium that comes the form of a slightly higher average rate of return. This additional return should increase as the risk that the issue will be called increases.

## g. Convertibility Risk

Convertibility risk is that portion of the total variability of return from a convertible bond or a convertible preferred stock that reflects the possibility that the investment may be converted into the issuer's common stock.

## h. Political Risk

The portion of an asset's total variability of return cased by changes in the political environment that affect the asset's market value. Whether the changes that cause political risk are sought by political or by economic interests, the resulting variability of return is called political risk.

## i. Industry Risk

An industry may be viewed as a group of companies that compete with each other in a market of homogenous product. Industry risk is that portion of an investment's total variability of return caused by events that affect the products and firms that make up an industry. The stage of the industry's life cycle, international tariffs and/or quotas on the products produces by an industry, product or industry related taxes; industry wide labour union problems, environmental restrictions, raw material availability, and similar factors interact and affect all the firms in an industry simultaneously. As a result of these commonalities, the process of the securities issued by competing firms tends to rise and fall together.

### 2.2 Review of Books

Cross, H. D. \& Hempal, C. (1980) "Banking and Insurance" commercial banks bring into being the most important ingredient of the money supply demand deposits through the creation of credit in the form of loans \& investment. Banks are the custodians of the community's money as well as the suppliers of its liquidity, since the study is concerned with the investment activities of commercial in Nepal, we take in to consideration exclusively the sector that are required for \& relented to the same.

Frank K. R. (1995), "Investment Analysis Management \& Portfolio Management" has defined the term investment, "Investment is the current commitment of funds for a period of time to obtain a future flow of funds that will compensate the investment unit for the time the funds are committed for the expected rate of inflation \& also for the uncertainly involved in the future flow of fund. (Investment, Japan: the Oryden Press, CBS Publisher Ltd.)

From the above definition, it is clear that an investment means to trade a know rupee amount for some expected future steam of payment or benefits that will exceed currently outlay by an amount that will compensate the investor for the time of uncertainly involved in expected future cash flows. This investment is the most important function of commercial banks. It is very challenging task for commercial banks. So, a bank has to be
very cautions while investing their funds in various sectors. The success of a bank heavily depends upon the proper management of its investable funds.

William, F. Sharp, J. and Froncishare, J. C. (1998), "Investment Analysis and Management" Investment in its broadening sense means the sacrifice of current dollars for future dollars. Two different attributes are generally involved: time and risk. The sacrifice takes place in the present and its magnitude is generally uncertain.

- Real Investment: Generally, if involves some kind of tangible assets such as: land, machinery \& factories.
- Financial Investment: Involves contract has written on price of paper such as: common stocks \& bonds.

Pandey, I. M. (1999), "Investment Decision" in investment analysis, cash flow is more important than accounting profit. It may also be pointed out that investment decision affects the firm's value. The firm's value will increase if investments are profitable and add to the shareholder's wealth. Thus, investment should be evaluated on the basis of criteria, which is compatible with the objectives of the shareholder's fund maximization. An investment will add to the shareholder's wealth if it yields benefit in excess of the minimum benefits as per the opportunity cost of capital.

Chancy, J. M. \& Moses, E. A. (1999), "Investment Analysis" focuses on the individual investment. They states, it is important that the investor set the appropriate investment objectives \& the accompanying investment horizon. In addition, in developing investment strategies to achieve the objectives, the investor must understand the tax conservancies and expected risk \& return associated with the various investment alternatives per haves most importantly the investor should recognize that achieving \& investment objective involves the creation of a portfolio of assets and not a collection of individual assets. They further states that, individual assets may be very risk. Combining these assets into a portfolio of other assets may actually reduce the risk of the overall risk.

### 2.3 Review of Journal and Articles

Ghimire (2001) published an article in business age magazine entitled "Nepal Share Market and Investor's prospect" in which he has pointed out some important trends of

Nepal capital market. He has mentioned many unbalanced factors like political instability, terrorism as the main cause of decreasing trend of share price. He has observed fluctuation in NEPSE index is due to banking sector and declaration of bonus and dividend is the main cause of price due to banking sector and declaration of bonus and dividend is the main cause of price change of stock. He has defined Nepalese capital market as lame, weak and perhaps works for vested interest.

Pradhan (2003), in his research paper "Role of Saving, Investment \& Capital Formation in Economic Development of Nepal" has studied about the strong role \& impact of saving, investment \& capital formation on economic development of Nepal. This study is based on secondary data only. The necessary data on saving, investment, capital formation and gross domestic product has been collected for the period of 1974/75 to 2000/01. The role \& impact of saving, investment and capital formation on economic development were analyzed by using various regression models. The regression equation used in this study have been estimated at current prices as well as in real term with the entire study period divided into different sub-period.

The results presented in this paper suggest that in all cases GOP is significantly associated with saving. Investment and capital formation both at current prices and in real terms. The result of the empirical analysis led to three important conclusions: first, saving, investment \& capital formation have positive impact on economic development. Second, the current values \& past values of saving, investment \& capital formation have positive impact on economic development but the current values have the largest impact. Third, there is a strong role played by saving \& capital formation on economic development while weak role-played by investment.

Banks and Financial Institutions Regulation Department NRB (Directives No. 8/069)
"Provisions relating to Investments" following Directives have been issued with regard to investment of financial resources of a licensed institution having exercised the powers conferred by Section 79 of the Nepal Rastra Bank Act, 2002.

1. Implementation of Investment Policy and Procedures upon Approval The licensed institutions shall implement the policies and procedures regarding the investment in Government of Nepal securities, Nepal Rastra Bank bonds, and
other corporate bodies' share and debentures only upon the approval of investment policy and procedures by the Board of Directors.
2. Provision for Investment in Government of Nepal Securities and Nepal Rastra Bank Bonds. There shall be no restriction as to investment by the licensed institutions in the securities of Government of Nepal and Nepal Rastra Bank bonds.

## 3. Provisions for Investment in Shares and Debenture of Corporate Bodies

> Licensed Institutions shall invest only in the shares and debentures of corporate bodies listed in the Nepal Stock Exchange after the public issues of shares. Provided that, where the investment has been made in the shares and debentures of corporate bodies which are not listed in the stock exchange, and if such listing is not completed within one year from the date of investment, a provision of equivalent to the whole amount of such investment be provided and credited to Investment Adjustment Reserve by creating such reserve fund. The outstanding amount in such Reserve shall not be utilized for any other purpose till the said shares and securities of the corporate body are listed. With respect to investment in newly opened corporate body that where such company is not listed in stock exchange within two years from the date of operation or investment being made, a provision of equivalent to the whole amount of such investment be provided and credited to Investment Adjustment Reserve.
> While carrying out projects such as land development, land purchase and housing construction for residential purpose and sale and management of such houses and land pursuant to clause (ad) of sub-Section (2) of Section 47 of the Banks and Financial Institutions Act, 2006 by the class "B" licensed institutions and pursuant to clause (u) of sub-Section (3) of the same Section of the same Act, licensed institution shall not invest more than twenty-five percent of the core capital of immediately preceding month.
> While investing in housing construction and land development by a licensed institution, it may invest an amount not exceeding ten percent of the core capital maintained immediately preceding month. If found to have been invested more than the limit, the core capital shall be maintained having deducted the amount equal to the exceeded investment from the core capital. While making such
investment, investment shall be made only in the building construction and land development companies that have been incorporated as public companies.
> Licensed institutions may invest in shares and securities of any one corporate body up to 10 percent of its core capital maintained at immediately preceding trimester and not exceeding the cumulative amount of such investment in all the companies by more than 30 percent of its core capital. Similarly, while investing in shares and debentures of corporate bodies by a licensed institution, investment shall be made not exceeding 10 percent of the paid up capital of the institution in which the investment is being made and not exceeding 25 percent of the same in case of investment made in class "D" institutions. Any amount of investment made in excess of this limit, for the purpose of calculation of the capital fund, shall be deducted from the Core capital fund.
$>$ Chairperson/member of a parent company shall not be allowed to be the chairperson or number of the subsidiary company. In case of Directors who are Directors in the subsidiary company prior to issuance of these Directives on May 10, 2010, he/she shall have to move from it before the upcoming first general meeting of the parent company or within one year of issuance of this directive, whichever is earlier.

## 4. Provision for Review of Investment Portfolios

$>$ Licensed institutions shall review its investment portfolios on half-yearly basis. With respect to such review, a statement from the Internal Auditor of the licensed institution certifying that the investments are made according to the existing investment policy and according to this Directives be obtained and `shall also be approved by the management of the institution within 1 (one) month from the close of the half yearly period. A copy of the approval of the management of the institution shall be submitted within Falgun 15 (end of February) and Bhadra 15 (end of August) of each fiscal year to this Bank's Bank and Financial Institutions Regulation Department and concerned Supervision Department.

## 5. Valuation of Shares and Debentures

$>$ The investments of the licensed institutions in shares and debentures shall be separated company wise according to Directives Form No. 8.1, 8.2 and 8.3. It shall be shown in its assets having evaluated it semiannually based on the purchase price or the market price, whichever is lesser. Provided that, where the market price of any company's shares or debenture falls below the cost price, the difference amount has to be debited to the Profit and Loss Account and credited to provision for loss in investment account.
> Moreover, while evaluating investment, it shall have to be evaluated according to the provision made in Points 2 and 2.B. 3 (Investment Policy) of Directives No. 4/067 and the details thereof shall be prepared in the format of Nepal Rastra Bank Directive form No. 8.2.

## 6. Provisions Relating to Purchase/Investment in Fixed Assets (House/Land) For Own Purpose

$>$ The banks of financial institutions incorporated and in operation under the B to F1A shall be allowed to purchase/invest in the fixed assets. (house/land) for the self purpose in the case they meet the following terms and conditions:
$>$ Entire pre-operating expenses of the bank/financial institution is written off.
$>$ The first general meeting is completed upon issue of shares to general public as refund to in the Memorandum of Association/Articles of Association.
$>$ The institution is in profit at the time of purchase of the property.
$>$ The capital fund is adequate according to the Directives issued by this Bank. Moreover, in case of purchase of investment in the fixed assets without meeting the said terms and conditions; the amount equivalent to that to be deducted while calculating the core capital fund.

## 7. Additional Arrangement Regarding Investment

> Licensed institutions shall not invest in any shares, securities and hybrid capital instruments issued by any other institution of "A", "B" and "C" class licensed by this Bank.Provided that, this clause is not applicable in case of
share investment in class " D " institution and income of share investment with approval from this Bank.
> The core capital maintained in the Directives relating to investment means, the core capital maintained at the immediately preceding trimester except specifically stated otherwise.

Banks and Financial Institutions Regulation Department NRB (Directives No. 16/069), "Provisions Relating to Collection of Financial Resources" following Directives have been issued, having exercised the powers conferred by Section 79 of the Nepal Rastra Bank Act, 2002, with regard to the financial resources to be collected by the institutions licensed by this Bank.

## 1. Limit for Mobilization of Financial Resources

$>$ The "A" Class licensed institutions may mobilize financial resources without any limitation.Provided that in case of borrowing, one third of the total deposit liability in maximum may be mobilized.
> The "B" Class licensed institutions may mobilize financial resources (with or without interest of all types of deposits, borrowings and debt instruments) up to twenty times of their Core capital fund. Provided that in case of borrowing one third of the total deposit liability in maximum may be mobilized.
> The "C" Class licensed institutions may mobilize financial resources (with or without interest of all types of deposits, borrowings and debt instruments) up to fifteen times of their Core capital fund. Provided that in case of borrowing, one third of the total deposit liability in maximum may be mobilized.
$>$ The "D" Class licensed institutions may mobilize financial resources up to thirty times of Core capital fund. Provided that except in cases of clause 12 of these Directives, collection of deposits from non-members shall not be allowed.

Explanation: "Financial resources" means funds collected from group members by way of deposit, borrowing and debentures.
$>$ For the purpose of monitoring the limit of mobilization of financial resources, the core capital fund maintained at the last quarter shall be considered as the base.

## 2. Limit for Institutional Deposit Collection

The "A", "B", and "C" Class licensed institutions may collect institutional deposits from a single firm, company or any corporate bodies not exceeding twenty percent of its total deposit.
3. Preparation and Application of Rules and Procedures for Deposit Collection and Payment
> The licensed institutions shall prepare and apply rules and procedures covering the types, period, and so on of the deposits that the institution is to accept and implement. Such Rules and procedures shall be submitted to Banks and Financial Institution Regulation Department and concerned Supervision Department of this Bank.
> The licensed institutions shall submit the details of dormant deposit accounts which is not in operation for the last ten years and not claimed, to this Bank within one month from the close of each of the fiscal years.
$>$ The licensed institutions shall submit the details of unpaid dividend not collected by the shareholder or his/her heir for a period of five years from date of declaration to this Bank within one month from the closure of the fiscal year.
> The licensed institutions shall publish, at least once, the particulars of inoperative deposit accounts or unclaimed deposits or unpaid dividend mentioned under Sub-Clauses (1) or (2) above in the national level newspapers within one month of the above-mentioned period. If the amount is not claimed even after such publication, the amount has to be deposited into the account as directed by this Bank.
$>$ The licensed institution may open saving account only in cases of natural person, or organizations/ associations (including Postal Saving Banks) which have been established with not profit making objective. In cases of saving
accounts opened by other organizations /institutions, except natural persons and not profit-making organizations, the accounts have to be closed without delay. Moreover, according to the acceptable banking norms, the concerned institution shall have to distinguish the accounts that have to be issued cheque book and that have not to be issued cheque book and cheque books have to be issued accordingly. Provided that the said provisions shall not prohibit the non-natural persons such as organizations, associations, companies to open accounts earning interests other than saving accounts.

## 4. Borrowing

$>$ The licensed institutions may borrow funds from banks and financial institutions, individual, firm, company and corporate body not exceeding the limit prescribed in Clause (1) above.
> Notwithstanding anything contained in Sub-clause 1 above, the licensed institutions all take approval of this Bank for borrowing funds or accepting financial assistance from foreign government or international organizations/institutions.

## 5. Provisions Relating to Deposit Transaction

$>$ Licensed banks and financial institutions shall not be allowed to maintain deposits and have loan transaction in financial institutions which have been mobilizing deposit and carrying out loan transactions according to other prevailing laws. Provided that this provision shall not apply in cases of the financial institutions established with objective of carrying out bulk transaction of micro-finance.

## 6. Share Deposit scheme may be operated

The licensed banks and financial institution (belonging to classes ' A ', ' B ', ' C ' and ' D ') may operate shares deposit schemes subject to the following terms and conditions:-
$>$ In case the saving depositors under the shares deposit scheme desire to purchase the shares (promotes group) of the said company, they have to be
eligible to become promoters according to the Banks and Financial Institutions Act, 2006, the unified Directives issued from this Bank and the provisions made in the policy for providing license.
$>$ The depositors desiring to change the deposit collected under the shares deposit scheme into ordinary shares (promoters group), the provisions and processes referred to in the prevailing laws relating to securities transactions have to be complied with and at the time of giving the shares of promoter group to the depositors in such a way, the banks and financial institution shall have to provide the promoter shares to them only after obtaining an approval from the Nepal Securities Board as well.
> It shall have to be clearly stated in the internal policies /Byelaws of the concerned companies that it must be publicized for public information to the saving depositors desiring to purchase promoter group shares being involved in the scheme that shares of promoters group may be purchased only after fulfilling the required processes having abided by the laws and Directives relating securities subject to the Banks and Financial Institutions Act, 2006, policy provisions made by this Bank and other prevailing laws.

### 2.4 Review of Previous Thesis

Shrestha (2007) conducted a research on "Investment Practice of Joint Venture Banks in Nepal". He has selected three joint venture banks i.e. EBL Bank Limited, Standard Chartered Bank Limited and SBI Bank Limited for the study of lending and investment practice.The main objectives of his study were;

- To highlight the features and problems of investment lending procedure in foreign commercial banks and their implementation in practical life
- To study priority sector investment and repayment rate of commercial banks in Nepal through intensive banking program.
- To show the repayment position of the sector of the three commercial banks.

The major findings of this study were as fallows.

- Commercial banks are more emphasized to be making loan on short term basis against movable merchandise. Commercial banks have lots of deposits but very little investment opportunities. They are even discouraging people by offering very low interest rates and minimum threshold balances.
- liquidity position of EBL and SCBNL have not found satisfactory. Therefore, suggested them to improve cash and bank balance to meet current obligations.
- SCBNL's loan and advances to total deposit ratio is lower at all, therefore it is recommended to follow liberal lending policy for enhancement of lend mobilization.
- It was found that SBI had not invested its fund on share and debenture of other companies. It is suggested to enhance off balance sheet transactions, diversifying investment, open new branches, play merchant banking role and invest their risky assets and shareholders fund to gain higher profit margin.
- EBL and SCBNL are recommended to increase cash and bank balances to meet current obligations and loan demand.

Sanjel (2008), carried out a research work on the topic "Analysis of Investment Policy of Commercial Bank". The main objective of the present study is to analyze the liquidity position as well as the investment policy adopted by NBBL, HBL 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 were as follows;

- 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.

Based on this study, her major findings were;

- The mean ratio \& CV of current ratio 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 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 of CV of return on assets (ROA) of SCBNL is better than that of NBBL and HBL.
- 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 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.

Katuwal (2009), carried out a research work on the topic "Mobilization of Deposit and Investment of EBL Bank Limited". The purpose of the study will be to examine the relationship between the amount of total deposit and amount of total credit granted by EBL. The main objectives of the study were:

- To examine how far the interest rates of deposits have positive relationship with the deposit collection of EBL Bank.
- To see the impact of interest rate of loan on the credit extended by EBL Bank.
- To study the increasing and decreasing trend of deposit mobilization of EBL Bank.
- To compare the performance of deposit and investment of EBL.

The major findings of this study were;

- The analysis reveals that the banks attraction toward saving deposit seems to be satisfactory. But it is not stable increasing in percentage during the study period. It is continuous to increasing in the last of the study period.
- The changes in percentage in all deposits are in increasing trend. But last of the study period it is little fluctuate. The analysis reveals that the banks attraction towards total deposit seems to be satisfactory. Though the percentage changes are not stable, the change in ratio is in average. In case of percentage change in credit amount, the bank's attraction towards credit amount is satisfactory.
- The growth ratio of total deposit of EBL by analysis of 15 years period is $13.48 \%$. It means the bank is able to maintain $13.48 \%$ growth rate. This ratio measures the capacity of the bank to maintain the percentage of total deposit. Since the growth ratio of total deposit is $13.48 \%$, the bank must improve its deposit collection in high growth ratio. Similarly the growth ratio of total credit is $17 \%$. So the bank seems in strong condition to increase the total credit than the total deposit growth rate.
- The total deposit has found in increasing trend. The total deposit of EBL will be Rs. 17544.74 lakhs in the 2009, if other things remains same. Similarly the credit also found in increasing trend. The amount of total credit will be Rs. 10408.03 lakhs in 2009.if other factors remains the constant.
- Bank's deposit collection is satisfactory but due to lack of investing opportunities it is unable to use its funds. Bank considers various possible factors while making lending. Such as: safety and security, profitability, feasibility of project available of resources diversification, legality etc. Lending process is lengthy because it takes longtime to get loan from the bank. Manager generally visits to the investor
once a year to get information about the business.This is very helpful to the investors.

Lamsal (2010) carried out a research work on the topic "Mobilization of Deposit \& Investment of Nabil Bank Limited" The major objective of the study is to analyze the deposit and investment position of NABIL bank and the other specific objectives were as follows.

- To explore the deposit and investment trend of NABIL.
- To assess the impact of interest rate on deposit collection by the NABIL.
- To examine the relationship between deposit and investment of NABIL.
- To compare the performance of deposit and investment of NABIL.

The major findings of this study are as follows.

- The current deposit, saving deposit, and margin deposit are in fluctuating trend over the study period and the call deposit and fixed deposit are in increasing trend over the study period.
- The total deposit of NABIL is in increasing trend in FY 2062/063 the total deposit is Rs. 19347.39 million and then increase by $20.65 \%$ in the fiscal year 2063/064, $32.73 \%$ in FY 2064/065, 17.02\% in FY 2065/066 and 24.26\% in FY 2066/067.
- Current deposit to total deposit ratio is in fluctuating trend the highest CD to TD ratio is $17.03 \%$ in FY $2066 / 067$ and the lowest ratio is $14.55 \%$ in the FY 2064/065. The saving deposit to total deposit ratio is in decreasing trend, the highest SD to TD ratio is $45.33 \%$ in FY 2062/63 and the lowest ratio is $29.33 \%$ in FY 2066/067.
- The fixed deposit to total deposit ratio is in increasing trend except FY 2066/067. The highest FD to TD ratio is $33.99 \%$ in the FY 2066/067 and the lowest ratio is $17.83 \%$ in the FY 2062/063. The mean value of CD to TD, SD to TD and FD to TD are $20.90,54.95$ and 15.90 respectively and standard deviation is $4.15,11.55$ and 6.99 respectively.
- In average $100 \%$ of the deposited amount has been succeeded to mobilize the resources. The highest ratio is 104.92 and lowest ratio is 98.09. the amount of cash in bank and its position in total deposited amount is increasing each year. In

2062/063 the banks cash amount is Rs. 630.18 million and it is $3.26 \%$ of total deposit, i.e. it is 3.26 in ratio of total deposit. In 2063/064 the cash collected amount increased up to Rs 23342.28 million, it is $6 \%$ in total collected /deposited money. In 2066/067 it is increase in Rs 46410.7 thousand and $3.02 \%$ in total deposited amount.

- Growth ratio of total deposit of NABIL during the period of study is $24 \%$. So, it can be said that NABIL has the satisfactory position in term of collection deposit. Growth ratio of total credit is $25 \%$ under the period of study which is high in compared to the growth ratio of total deposit i.e. $24 \%$. It shows that the bank is highly utilizing the collected deposit as per the growth of total deposit. The growth ratio of total investment is $22 \%$ under the period of study which is low in compared to the growth ratio of total deposit and credit.

Khadka (2011) conducted a study on "Investment Policy of Commercial Bank of Nepal" a comparative study of NABIL with NABIL Bank and BOK. Her major objectives were as follows.

- To examine the liquidity assets management and profitability position and investment policy of NABIL in comparison to NABIL and BOKL.
- To analyze the relationship between loan and advance and total investment with other financial variable of NABIL and compare with NABIL and BOKL.
- To study the various risks in investment of NABIL in comparison to NABIL and BOKL.

Majors findings of her research were

- NABIL has higher idle cash and bank balance. It may decrease profit of bank. It is good to invest more on share $\&$ debentures as it encourage financial and economic development of the country.
- A commercial bank must mobilize its fund in different sector such as to purchase share \& debentures of other financial and non financial companies out of total working fund. NABIL has invested its more of the funds i.e. total investment on total deposit ratio, in comparison to other commercial banks but percentage of investment on share and debenture in very nominal.
- Portfolio condition of a bank should be regularly revised from the time to time. It should always try to maintain the equilibrium in the portfolio condition of the bank. So it can be said "all eggs should not be kept in the same basket". The bank should make continuous effort to explore new, competitive and high yielding investment opportunities to optimize their investment portfolio.
- NABIL has to make way for small depositors and entrepreneurs for the promotion and mobilization of small investor's fund.
- On the basis of above facts, it is seen that NABIL has invested much of its fund in total outside assets but it has not achieved the desired result.
- The risk taken by NABIL, from the angle of credit and capital are in an average whereas the consistencies of the same are highly volatile which may result higher loss. The bank should not test those risks on an experiment basis as seen from the consistency angle.


### 2.4 Research Gap

Research gap refers to the gap between previous research and this research. The different students have conducted many research studies, experts and researcher about Investment analysis. Most of the studies are related with investment and deposit. They mainly focus on the data available. However, such special study related to investment analysis has been limited. In this study, the researcher has attempted to evaluate the effectiveness of investment of Nepalese commercial bank, in order to know somehow about the practical experience of investment analysis.

The financial and statistical tools used by most of the researchers were ratio analysis, test of hypothesis and regression analysis. This research includes different tools like ratio analysis, correlation analysis and co-efficient of variation, growth rate analysis, probable error, trend analysis as specific tools. Thus, the research study made on "investment analysis of Nepalese commercial banks" will be an effort to analyze on detail about Investment of commercial banks in present situation with the help of various related financial as well as statistical tools and techniques. So, this study will be fruitful to those interested persons, students, scholars, stakeholder, civil society, teachers, businessmen and government for academically as well as policy perspective.

## CHAPTER - III

## RESEARCH METHODOLOGY

Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. (C.R. Kothari, 1989) in other words, research methodology describes the method \& process applied in the entire aspect of the study. It is a way to solve the research problem systematically \& scientifically. A fact research methodology is much vague than research methods i.e. research method is just a part of research methodology. It considers the logic behind the use of the methods in the context of research study \& explains why a particular method or techniques are used. Thus research methodology is concerned not only about the different types of methods used but also about various other facts like what data have been collected, what are the purpose \& problem of research etc. So, to set up the research methodology that has been adopted for the study is mentioned in this chapter, which deals with the research design, sources of data, data collection, population \& sample, processing \& tabulating procedures.

### 3.1 Research Design

A research design is the arrangement of conditions for collection and analysis of data that aim to combine relevance to the research purpose with economy in procedure. Research design is the plan, structure and strategy of investigation conceived to obtain answers to research questions and to objective of this study. To achieve the objective of this study, descriptive and analytical research design has been used.

It is the process, which gives us an appropriate way to reach research goal. It includes definite procedures and techniques, which guide in sufficient way for analyzing and evaluating the study. This study is carried out by using both quantitative and qualitative analysis methods. Mostly, secondary data has been used for analysis, but the discussion and personal interview with the concerned employees of the selected bank is used for qualitative analysis. Hence, research design of this study is based on descriptive and analytical method.

### 3.2 Population and Sample

Population refers to the industries of the same-nature of its service \& product. It is the collection or the aggregate of objects or the set of results of an operation. On the other hand, sample means the representative parts of population selected from it with the objectives of investigating its properties. Thus, a sample is just a portion of the population selected with a view to draw conclusions about the population under study.

In context of Nepal, 32 commercial banks are in operation. These 32 banks are regarded as population. However, it is not possible to study all data related with these 32 banks. Hence, two banks have been taken as sample from the whole population. The sample banks are as follows.

- Himalayan Bank Limited (HBL)
- Nepal Credit and Commerce bank Limited (NCC)


### 3.3 Sources of Data

The study is mainly based on secondary data, secondary data are those data that are collected by someone else or used already \& made available to other in the form of published statistics such as annual reports, periodicals, newspapers, magazines etc. Once a primary data is used; it loses its originality \& becomes secondary. This study is mainly depends on the use of secondary data that consists of annual reports of the concern banks. However, besides the annual reports various other sources of data have also been used for the purpose of the study plan documents, newspaper, magazine, economic journals, NRB reports, NEPSE, SEBON etc. Likewise, the micro-level data have been derived the different libraries, such as Shanker Dev campus, Nepal commerce campus, TU central library etc.

### 3.4 Data Analysis Tools

Data analysis refers to the analyzing the data in order to determine the inherent facts or meanings from the tabulated data, presentation \& analysis of data is the care of the research work. Data that has been collected are first presented in systematic manner in
tabular forms \& then analyzed by applying different financial \& statistical tools to achieve the objectives of the study. The tools applied in this study are as follows.

### 3.4.1 Financial Tools

Financial tools are particularly are used for the analysis as well as the interpretation of financial data. These tools can be engaged to procure the precise knowledge of a business, which are fruitful for analyzing the strength and weakness of the investment policies and strategies. Thus, following financial tools are used to achieve the study goal.

### 3.4.1.1 Financial Ratios

A numerical or quantitative relationship between two items or variables of the financial statement is known as ratio analysis. In other words, two accounting figures expressed mathematically is termed as financial ratio. Ratio analysis is used to compare a firm's financial and status of that of other firms or to itself on time (Gitman; 1988 :275).Since this study is particularly focused on portfolio analysis of commercial banks, only few ratios related to the investment of commercial banks are adapted in the study.

## a. Total Investment to Total Deposit Ratio

Investment is one of the major credits generated to earn income. It implies the utilization of firm's deposit on investment in government securities. This ratio is obtained by dividing total investment by total deposit as expressed below.

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

## b. Investment on Government Securities to Total Outside Investment Ratio

This ratio indicates the banks investment on government securities among the total outside investment. It is computed by dividing investment on government securities by total outside investment.

Investment on Government Securities to Total outside Investment Ratio

# $=\frac{\text { Investment on Government securities }}{\text { Total outside Investment }}$ 

## c. Investment on Share and Debenture to Total outside Investment Ratio

This ratio portrays the bank investment on share and debentures of the other companies. It is computed by dividing investment on share and debentures by total outside investment.

Investment on Share and Debenture to Total Outside Investment Ratio

$$
=\frac{\text { Investment on Share \& Debenture }}{\text { Total outside Investment }}
$$

### 3.4.2 Statistical Tools

Statistical tools are used to analyze the relationship between two or more variables and to find how these variables are related. In this study, following statistical tools are used.

## a. Arithmetic Mean or Average

The mean or average value is a single value within the range of the data that is used to represent all the values in the series. Since an average is somewhere within the range of the data, it is also called a measure of central value. It is calculated by;

$$
\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}}{\mathrm{~N}}
$$

Where,

| $\overline{\mathrm{X}}$ | $=$ | Arithmetic Mean |
| :--- | :--- | :--- |
| $\sum \mathrm{X}$ | $=\quad$ Sum of values of all items, and, |  |
| N | $=\quad$ Number of items |  |

## b. Standard Deviation

The standard deviation is the measure that is most often used to describe variability in data distributions. It can be thought of as a rough measure of the average amount by which observations deviate on either side of the mean. Denoted by Greek letter's (read as sigma), standard deviation is extremely useful for judging the representatives of the mean. Standard deviation is calculated as;

$$
\operatorname{Standard} \text { deviation }(\sigma)=\sqrt{\frac{\sum(\mathbf{X}-\overline{\mathbf{x}})^{2}}{\mathrm{~N}}}
$$

Where,

$$
\begin{array}{lll}
\boldsymbol{\sigma} & = & \text { Standard deviation } \\
\sum(\mathbf{X}-\overline{\mathbf{x}})^{2} & = & \text { Sum of squares of the deviations } \\
\text { measured from arithmetic average. }
\end{array}
$$

## c. Coefficient of Correlation

Correlation is a statistical tool design to measure the degree of association between two or more variables. In other word if the changes in one variable affects the changes in other variable, then the variable are said to be co-related when it is used to measure the relationship between two variables, then it is called simple correlation. The coefficient of correlation measures the degree of relationship between two sets of figures. Among the various methods of finding out coefficient of correlation, Karl Pearson's method is applied in the study. The result of coefficient of correlation is always lie between +1 and 1.The formula for the calculation of coefficient of correlation between X and Y is given below.

$$
\mathrm{r}=\frac{\sum \mathrm{x}_{1} \mathrm{x}_{2}}{\sqrt{\sum \mathrm{x}_{1}{ }^{2} \sum \mathrm{x}_{2}{ }^{2}}}
$$

Where,

$$
\begin{array}{ll}
\mathrm{r} & =\quad \text { Correlation coefficient } \\
\sum \mathrm{x}_{1} & =\mathrm{X}_{1}-\overline{\mathrm{X}}_{1} \\
\sum \mathrm{x}_{2} & =\mathrm{X}_{2}-\overline{\mathrm{X}}_{2}
\end{array}
$$

## d. Least Square Linear Trend Analysis

Trend analysis has been a very useful and commonly applied statistical tool to forecast the future events in quantitative terms. On the basis of tendencies in the dependent variables in the past periods, the future trend is predicted. This analysis takes the historical data as the basis of forecasting. This method of forecasting the future trend is based on the assumptions that the past tendencies of the variable are repeated in the future
or the past events affect the future events significantly The future trend is forecasted by using the following formula.

$$
Y=a+b x
$$

Where,
$\mathrm{Y}=$ the dependent variable
$\mathrm{a}=$ the origin i. e. arithmetic mean
$\mathrm{b}=$ the slope coefficient i. e. rate of change
$\mathrm{X}=$ the independent variable

## e. Assessment of the Sample Correlation Coefficient

For this study, t-test for significance of an observed and sample correlation coefficient is used.

## Set up Hypothesis

Null hypothesis $\left(\mathrm{H}_{0}\right) ; \rho=0$ i.e. There is no correlation between the considered variables.

Alternative Hypothesis $\left(\mathrm{H}_{1}\right) ; \rho \neq 0$ i.e. There is significant correlation between the considered variables.

Test statistic under $\mathrm{H}_{0}$;

$$
\mathrm{t}=\frac{r}{\sqrt{1-r^{2}}} \times \sqrt{n-2}
$$

Where,
r $\quad=\quad$ Sample correlation between two variables
$\mathrm{r}^{2}=$ Sample correlation Coefficient
$\mathrm{n}=$ No of Pair of observations

Level of significance: Level of significance $\alpha=5 \%$

Critical Value: Tabulated or critical value of t at $\propto \%$ level of significance for ( n

- 2) degree of freedom obtain from' $t$ ' tables.

Decision: If calculated ' $t$ ' is less than or equal to tabulated value of ' $t$ ' it falls in the accepted region and the null hypothesis is accepted and if calculated ' $t$ ' is greater than tabulated ' $t$ ' null hypothesis is rejected.

## CHAPTER - IV

## PRESENTATION \& ANALYSIS OF DATA

To find the answer of research problem, the collected data are necessary to present and analyze by processing. This chapter will present the data on table \& figure. The main objective of the study is to present data and analyze them with the help of various financial and statistical tools. This chapter consists of analysis and presentation of empirical data. The important variables are very sensitive and taken into consideration, so this chapter will present the analysis of components of investment by using the different financial as well as statistical tools.

### 4.1 Investment Pattern Analysis

Investment usually means the sacrifice of the current money for future money. The sacrifice takes place in the present and the reward comes later, if at all, and the magnitude is generally uncertain. However, Shrestha (2002) describes investment as utilization of saving for something that is expected to produce profit or benefits. Investment is employment of funds to achieve added income or growth in value. It involves the commitment of resources put off from current consumption with hope of capitalizing some benefits in future. It includes both real asset and financial asset .Real asset investment denotes the tangible assets like building, land, machinery, factory and the like. On the other hand, financial asset investment indicates papers representing an indirect claim to real asset held by someone else.
"Investment is the current commitment of funds for a period of time to derive a future flow of funds that will compensate the investing unit for the time funds are committed, for the expected rate of inflation and also for uncertainty involved in the future flow of the funds "(Frank \& Reilly; 1972:299)

The above definitions infer that an investment is the allocation and mobilization of funds for a certain time period to acquire some extra benefit or extra attachment with mobilized fund.

### 4.1.1 Investment Pattern of HBL

Table: 4.1
Investment of HBL (Rs. In Millions)

| Sector | $\mathbf{2 0 6 3 / 0 6 4}$ | $\mathbf{2 0 6 4 / 0 6 5}$ | $\mathbf{2 0 6 5 / 0 6 6}$ | $\mathbf{2 0 6 6 / 0 6 7}$ | $\mathbf{2 0 6 7 / 0 6 8}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Nepal Govt. T-bills | 6079.39 | 7166.53 | 3907.34 | 3455.03 | 4725.58 |
| Nepal Govt. Saving Bonds | 375.49 | 305.13 | 304.96 | 1010.34 | 1681.78 |
| Nepal Govt. Other <br> Securities | - | - | - | - | - |
| Local licensed Institutions | - | - | - | 197.31 | 479.42 |
| Foreign Banks | 5294.69 | 5778.95 | 4404.51 | 3703.35 | 1794.37 |
| Corporate Share | 73.42 | 89.56 | 93.88 | 78.89 | 88.79 |
|  <br> Bonds | - | - | - | - | - |
| Total Investment | $\mathbf{1 1 8 2 2 . 9 8}$ | $\mathbf{1 3 3 4 0 . 1 8}$ | $\mathbf{8 7 1 0 . 6 9}$ | $\mathbf{8 4 4 4 . 9 1}$ | $\mathbf{8 7 6 9 . 9 4}$ |
| Less: Provisions | - | - | - | - | - |
| Net Investments | $\mathbf{1 1 8 2 2 . 9 8}$ | $\mathbf{1 3 3 4 0 . 1 8}$ | $\mathbf{8 7 1 0 . 6 9}$ | $\mathbf{8 4 4 4 . 9 1}$ | $\mathbf{8 7 6 9 . 9 4}$ |

Source: Annual Reports of HBL from 2063/064 to 2067/068

Figure: 4.1
Major Investment of HBL


Above table 4.1 and figure 4.1, shows the investment Pattern of HBL, the major sectors of investment are Nepal Govt. T-bills, Nepal government saving bonds, Nepal Govt. Other Securities, Local licensed Institutions, Foreign Banks and Corporate Share. The HBL invest the high amount in the Nepal govt. treasury bills in each year except the year 2065/066 and 2066/067, it is risk free assets for investment. The investment trend in treasure bills is in fluctuating trend over the study period, the amount of investment in Tbills each year is Rs. 6079.39, 7166.53, 3907.34, 3455.03 and 4725.58 million respectively in each year.

The second highest investment sector of HBL is foreign banks, the amounted invested by HBL in foreign banks are Rs. 5294.69, 5778.95, 4404.51, $3703.35,1794.37$ million respectively in each year. The trend of investment in foreign bank is in decreasing trend each year except the year 2064/065.

The third investment sector is Nepal government saving bonds which holds Rs. 375.49, 305.13, $304.96,1010.34$ and 1681.78 million each year respectively. The trend of investment in Nepal government saving bonds is fluctuating over the study period.

### 4.1.2 Investment Pattern of NCC

Table: 4.2
Investment of NCC (Rs. In Millions)

| Sector | 2063/064 | 2064/065 | 2065/066 | 2066/067 | 2067/068 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nepal Govt. T-bills | 1422.30 | 1155.27 | 1730.89 | 1269.25 | 1603.62 |
| Nepal Govt. Other Securities | 4.7 | 4.7 | 4.7 | 158.31 | 157.39 |
| Local licensed Institutions | - | - | - | 163.73 | 114.69 |
| Corporate Share | 155.49 | 166.42 | 154.19 | 40.84 | 44.54 |
| Corporate Debentures \& Bonds | - | - | 100.00 | 100.00 | 100.00 |
| Total Investment | 1582.49 | 1326.39 | 1989.78 | 1732.12 | 2020.23 |
| Less: Provisions | 89.78 | 89.78 | 89.02 | 89.02 | 72.61 |
| Net Investments | 1492.71 | 1236.62 | 1900.76 | 1643.1 | 1947.61 |

Source: Annual Reports of NCC from 2063/064 to 2067/068

Above table 4.2 shows the investment Pattern of NCC bank, the major sectors of investment are Nepal Govt. T-bills, Corporate Share and Debenture and Nepal Govt. other securities. The NCC bank invest the high amount in the Nepal govt. treasury bills in each fiscal year, it is risk free assets for investment. The investment trend in treasure bills is in fluctuating trend over the study period, the amount of investment in T- bills are 1422.30, 1155.27, 1730.89, 1269.25 and 1603.62 million in the fiscal year 2063/064, 2064/065, 2065/066, 2066/067 and 2067/068 respectively.

The second highest investment sector of NCC bank is corporate share and debenture, the amounted invested by NCC bank in corporate share and debentures are Rs. 155.49, $166.42,254.19,140.84$ and 144.54 million respectively in each fiscal year. The trend of investment in corporate share and debentures is in fluctuating trend over the study period.

The third investment sector is Nepal government other securities which holds Rs. 4.7 millions in fiscal year 2063/064 to 2065/066 and 158.31 and 157.39 million in 2066/067 \& 2067/068 respectively. It is shows in the following figure.

Figure: 4.2
Major Investment of NCC Bank


### 4.2 Analysis of Loan Distributed by Sample Banks

Loan is the main sources of income for a bank. Bank deposits can cross beyond a desired level but the level of loan will never cross it. The facilities of granting loan, advances and
overdrafts are the main service in which customers of the bank can enjoy. Funds borrowed from the banks are much cheaper than those borrowed from unorganized money lenders. The demand for loan has excessively increased due to cheaper interest rate. Furthermore, an increase in an economic and business activity always increases the demand for funds. Due to limited resources and increasing loans, there is some fear that commercial banks and other financial institutions too may take more preferential collateral while granting loans causing unnecessary botheration to the general customers. Such loans from their institutions would be available on special request only and there is a chance of utilization of resources in economically less productive fields. There lies the undesirable effect of low interest rate.

### 4.2.1 Himalayan Bank Ltd. (HBL)

Table: 4.3
Sector Wise Loan Distributed by HBL

| Year | Sector of Loan \& Advances (Rs. In Millions) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Private <br> Sector | Financial <br> Institutions | Government <br> Organizations | Total |
| $2063 / 064$ | 14911.1 | - | 604.6 | 15515.7 |
| $2064 / 065$ | 16969.7 | - | 702.3 | 17672.0 |
| $2065 / 066$ | 19985.2 | - | - | 19985.2 |
| $2066 / 067$ | 25292.1 | - | - | 25292.1 |
| $2067 / 068$ | 28976.6 | - | - | 28976.6 |
| Average |  |  |  | 21488.32 |
| S.D |  |  |  |  |

Source: Banking and Financial Statistics 2063/064 to 2067/068

The above table 4.3 shows that the sector of loan and amount of loan distributed by HBL since 2063/064 to 2067/068. Over the study period, the bank lending the major proportion of loan only in the private sector and do not lending any amount in the financial sector but in the fiscal year 2063/064 \& 2064/065, the bank lending Rs. 604.6 \& 702.3 millions in the government organizations. Total loan distributed by the bank is in increasing trend over the study period. The average loan distributed by the bank with in the five-year study
period is Rs. 21488.32 millions and the standard deviation and CV is Rs. 5546.146 million and $25.81 \%$ respectively, it shows the variation in the loan distributed by the bank in each year.

Figure: $\mathbf{4 . 3}$
Trend of Total Loan Distributed by HBL

4.2.2 Nepal Credit \& Commerce Bank Ltd. (NCC)

Table: 4.4
Sector Wise Loan Distributed by NCC Bank

| Year | Sector of Loan \& Advances (Rs. In Millions) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Private <br> Sector | Financial <br> Institutions | Government <br> Organizations | Total |
| $2063 / 064$ | 5692.4 | - | 144.2 | 5836.6 |
| $2064 / 065$ | 4774.1 | 173.4 | 136.4 | 5083.9 |
| $2065 / 066$ | 4786.1 | 173.4 | 125.0 | 5084.5 |
| $2066 / 067$ | 6808.4 | 173.4 | 125.0 | 7141.6 |
| $2067 / 068$ | 7987.3 | 185.8 | 200.3 | 8373.4 |
| Average |  |  |  | 6304 |
| S.D |  |  |  | 1429.88 |
| C.V | $22.68 \%$ |  |  |  |

Source: Banking and Financial Statistics 2063/ 064 to 2067/068

The above table 4.4 shows that the sector of loan and amount of loan distributed by NCC bank since 2063/064 to 2067/068. Over the study period the bank lending the major proportion of loan in the private sector Total loan distributed by the bank is in increasing trend over the study period except the fiscal year 2064/065. The average loan distributed by the bank with in the five year study period is Rs. 6304 millions and the standard deviation and CV are Rs. 1429.88 million and $22.68 \%$ respectively, it shows the variation in the loan distributed by the bank in each year.

Figure: 4.4
Trend of Total Loan Distributed by NCC Bank


### 4.3 Loan \& Advance (Credit) to Total Deposit Ratio

This ratio measures the extent to which the banks are successful to mobilize their total deposit on loan and advances. Loan and advances are outside asset which yield profit to the bank. Increment of loan and advances is the main target of all Commercial Banks. So, higher the ratio better is the mobilization of the funds.

Table: 4.5
Credit Deposit Position

| Year | Banks |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | HBL |  | NCC |  |
|  | Deposit | Credit | Deposit | Credit |
| $2063 / 064$ | 26456.2 | 15515.7 | 6619.5 | 5836.6 |
| $2064 / 065$ | 29905.8 | 17672.0 | 6500.3 | 5083.9 |
| $2065 / 066$ | 31805.3 | 19985.2 | 7320.2 | 5084.5 |
| $2066 / 067$ | 34681.0 | 25292.1 | 9137.0 | 7141.6 |
| $2067 / 068$ | 37609.4 | 28976.6 | 10824.7 | 8373.4 |
| Average | $\mathbf{3 2 0 9 1 . 5 4}$ | $\mathbf{2 1 4 8 8 . 3 2}$ | $\mathbf{8 0 8 0 . 3 4}$ | $\mathbf{6 3 0 4}$ |

Source: Banking and Financial Statistics 2063/ 064 to 2067/068

Table 4.5 shows the deposit and credit position of sample banks the deposit collection and credit of HBL is in increasing trend every year over the study period and the deposit and credit of NCC bank also increasing trend except the fiscal year 2064/065. The average deposit and credit within the five-year study period of HBL are $32091.54 \& 21488.32$ and NCC are $8080.34 \& 6304$ million respectively.

Table: 4.6

## Credit Deposit Ratio

| Year | HBL | NCC |
| :---: | :---: | :---: |
|  | 58.65 | 88.17 |
| $2063 / 064$ | 59.09 | 78.21 |
| $2064 / 065$ | 62.84 | 69.46 |
| $2065 / 066$ | 72.93 | 78.16 |
| $2066 / 067$ | 77.05 | 77.35 |
| $2067 / 068$ | 66.11 | 78.27 |
| Average | 8.39 | 6.64 |
| S.D | 12.70 | 8.49 |
| C.V |  |  |

Source: Appendix XII

From above table, it can be said that there is a greater relationship between deposits and credit. Increase in deposits leads to increase in the loan and advance. The above analysis shows that more than $66.11 \%$ \& $78.27 \%$ of the deposited amount of HBL and NCC bank have been succeeded to mobilize the resources. The highest ratio of HBL is $77.05 \%$ in 2067/068 and lowest ratio is 58.65 in 2063/064 similarly the highest ratio of NCC bank is 88.17 in 2063/064 and lowest ratio is 69.46 in 2065/066. Higher the credit deposit ratio indicates the more effective working policy of the bank. So that, higher utilization of the resources in the bank means good managing ideas or policy of the bank.

Comparing to HBL with the average value of $66.11 \%$ the NCC is better with the average value of $78.27 \%$. The Standard Deviations of HBL and NCC are $8.39 \%$ and $6.74 \%$ respectively, it means HBL has more variability in compare to NCC. The CV of credit deposit ratio of HBL and NCC are $12.70 \%$ and $8.49 \%$ respectively which indicate that NCC is less variable than HBL. NCC is more consistent or less variable than HBL.

Figure: 4.5
Trend of Credit Deposit Ratio


### 4.4 Total Investment to Total Deposit Ratio

The main objective of the commercial banks is to make more profit. They make investments in different securities issued by government and other financial institutions. The ratio is calculated to know the efficiency of the commercial banks in utilizing the available deposits in different investment alternatives.

Table: 4.7
Total Investment to Total Deposit Ratio

| Year | Banks (Ratio in \%) |  |
| :---: | :---: | :---: |
|  | HBL | NCC |
| $2063 / 064$ | 44.69 | 23.91 |
| $2064 / 065$ | 44.61 | 20.41 |
| $2065 / 066$ | 27.39 | 27.18 |
| $2066 / 067$ | 24.35 | 18.96 |
| $2067 / 068$ | 23.32 | 18.66 |
| Average | 32.87 | 21.82 |
| S.D | 10.86 | 3.65 |
| C.V | 46.55 | 19.55 |

Source: Appendix I

Figure: 4.6
Trend of Total Investment to Total Deposit Ratio


The above table 4.7 and figure 4.6 shows that the proportion of investment out of total deposit of sample banks. Investment to deposit ratio of both the banks are decreasing trend over the study period the highest ratio of HBL \& NCC are 44.69 \& $27.18 \%$ in the fiscal year 2063/064 \& 2065/066 and the lowest ratios are $23.32 \%$ \& $18.66 \%$ in the fiscal year 2067/068 respectively.

Comparing to NCC with the average value of $21.82 \%$ the HBL is better with the average value of $32.87 \%$. The Standard Deviations of HBL and NCC are $10.86 \%$ and $3.65 \%$ respectively, it means HBL has more variability in compare to NCC. The CV of total investment to total deposit ratio of HBL and NCC are $46.55 \%$ and $19.55 \%$ respectively which indicate that NCC is less variable than HBL. NCC is more consistent or less variable than HBL.

### 4.5 Investment on Government Securities to Total outside Investment Ratio

This ratio indicates the banks investment on government securities among the total outside investment. It is computed by dividing investment on government securities by total outside investment.

Table: 4.8
Investment on Government Securities to Total outside Investment Ratio

| Year | Banks (Ratio in \%) |  |
| :---: | :---: | :---: |
|  | HBL | NCC |
| $2063 / 064$ | 54.60 | 90.17 |
| $2064 / 065$ | 56.01 | 87.45 |
| $2065 / 066$ | 48.36 | 87.23 |
| $2066 / 067$ | 52.88 | 82.42 |
| $2067 / 068$ | 73.06 | 87.17 |
| Average | 56.98 | 86.89 |
| S.D | 9.44 | 2.80 |
| C.V | 12.92 | 3.21 |

Source: Appendix II

Figure: 4.7
Trend of Investment on Government Securities to Total outside Investment Ratio


The above table 4.8 and figure 4.7 shows that both the banks invest high proportion of their money in the government securities because it is the risk free assets. Investment on government securities to total outside investment ratio of both banks are fluctuating trend over the study period the highest ratio of HBL \& NCC are $73.06 \& 90.17 \%$ in the fiscal year 2067/068 \& 2063/064 and the lowest ratios are $48.36 \% ~ \& ~ 82.40 \%$ in the fiscal year 2065/066 \& 2066/067 respectively.

Comparing to HBL with the average value of $56.98 \%$ the NCC bank has higher investment in government securities with the average value of $86.89 \%$. The Standard Deviations of HBL and NCC are $9.44 \%$ and $2.80 \%$ respectively, it means HBL has more variability in compare to NCC. The CV of investment on government securities to total outside investment ratio of HBL and NCC are $12.92 \%$ and $3.21 \%$ respectively which indicate that NCC is less variable than HBL. NCC is more consistent or less variable than HBL.

### 4.6 Investment on Share and Debenture to Total outside Investment Ratio

Investment on shares and debentures to total deposit reflects the extent to which the selected banks are successful to mobilize their total deposit on purchase of shares and
debentures of other companies to generate income and to utilize the excess fund. Higher ratio indicates more portion of investment on shares and debentures out of total deposit.

Table: 4.9
Investment on Share and Debenture to Total Investment Ratio

| Year | Banks (Ratio in \%) |  |
| :---: | :---: | :---: |
|  | HBL | NCC |
| $2063 / 064$ | 0.62 | 9.83 |
| $2064 / 065$ | 0.67 | 12.55 |
| $2065 / 066$ | 1.08 | 12.77 |
| $2066 / 067$ | 0.93 | 8.13 |
| $2067 / 068$ | 1.01 | 7.15 |
| Average | 0.86 | 10.09 |
| S.D | 0.21 | 2.54 |
| C.V | 20.29 | 35.47 |

## Source: Appendix III

The above table 4.9 shows that both the banks invest low proportion of their money in the share and debenture because it is the risky assets. Investment on share and debenture to total investment ratio of both banks are fluctuating trend over the study period the highest ratio of HBL \& NCC are 1.08 \& 12.77\% in the fiscal year 2065/066 and the lowest ratios are $0.62 \%$ \& $7.15 \%$ in the fiscal year 2063/064 \& 2067/068 respectively.

Comparing to HBL with the average value of $0.86 \%$ the NCC bank has higher investment in share and debenture with the average value of $10.09 \%$. The Standard Deviations of HBL and NCC are $0.21 \%$ and $2.54 \%$ respectively, it means NCC bank has more variability in compare to HBL. The CV of investment on share and debenture to total investment of HBL and NCC are $20.29 \%$ and $35.47 \%$ respectively which indicate that HBL is less variable than NCC. HBL is more consistent or less variable than NCC.

Figure: 4.8
Trend of Investment on Share and Debenture to Total outside Investment Ratio


### 4.7 Correlation Analysis

Correlation is a statistical tool design to measure the degree of association between two or more variables. In other word if the changes in one variable affects the changes in other variable, then the variable are said to be co-related when it is used to measure the relationship between two variables, then it is called simple correlation. The coefficient of correlation measures the degree of relationship between two sets of figures. One of the very convenient and useful way of interpreting the value of coefficient of correlation (r) between the two variables is coefficient of determination, which is denoted by $\mathrm{r}^{2}$. It explains the total variation in dependent variable is explained by independent variable.

The significant of coefficient of correlation ( r ) is tested with the help of ' $t$ ' test. If calculated ' $t$ ' is less than or equal to tabulated value of ' $t$ ' it falls in the accepted region and null hypothesis is accepted or ' $r$ ' is not significant of correlation in the population and if calculated ' $t$ ' is greater than tabulated ' $t$ ' null hypothesis is rejected or ' $r$ ' is significant of correlation in the population.

### 4.7.1 Relationship between Total Deposit \& Total Investment

Coefficient of correlation measures the degree of relationship between total deposit (TD) and total investment (TI) of sample banks. Let, TD is independent variable $\left(X_{1}\right)$ and TI is dependent variable $\left(X_{2}\right)$.

Table: 4.10
Correlation between TD and TI

| Factors | Banks |  |
| :---: | :---: | :---: |
|  | $\mathbf{H B L}$ | $\mathbf{N C C}$ |
| $\mathbf{r}$ | -0.7324 | 0.6737 |
| $\mathbf{r}^{\mathbf{2}}$ | 0.5364 | 0.4538 |
| Calculated 't' Value | 1.863 | 1.579 |
| Tabulated 't' Value | 2.201 | 2.201 |
| Remarks | Insignificant | Insignificant |
| Relationship | Moderate Degree of <br> Negative Correlation | Moderate Degree of <br> Positive Correlation |

Source: Appendix-IV \& V

From the Table-4.10, the values of coefficient of correlation (r) of HBL and NCC are -0.7324 and 0.6737 respectively which shows that there is a positive correlation between TD and TI of NCC and negative correlation between TD \& TI of HBL, therefore the value of coefficient of determination $\left(\mathrm{r}^{2}\right)$ is 0.5364 and 0.4538 which shows that $53.64 \%$ and $45.38 \%$ of the total variation in dependent variable (TI) is explained by independent variable (TD). The calculated ' $t$ ' value of HBL and NCC are less than the tabulated value i.e. $1.863<2.201$ and $1.579<2.201$ respectively, therefore it reveals that the relationship between TD and TI is insignificant.

### 4.7.2 Relationship between Total Investment \& Net Profit

Under this topic coefficient of correlation measures the degree of relationship between total investment (TI) and net profit (NP) of sample banks. Let, TI is independent variable $\left(X_{1}\right)$ and NP is dependent variable $\left(X_{2}\right)$.

Table 4.11
Correlation between TI and NP

| Factors | Banks |  |
| :---: | :---: | :---: |
|  | HBL | NCC |
| $\mathbf{r}$ | -0.7599 | 0.8879 |
| $\mathbf{r}^{\mathbf{2}}$ | 0.5776 | 0.7884 |
| Calculated 't' Value | 2.25 | 3.343 |
| Tabulated 't' Value | 2.201 | 2.201 |
| Remarks | Significant | Significant |
| Relationship | Moderate Degree of <br> Negative Correlation | High Degree of Positive <br> Correlation |

Source: Appendix-VI \& VII

From the Table-4.11, the values of coefficient of correlation (r) of HBL and NCC are -0.7599 and 0.8879 respectively which shows that there is a positive correlation between TI and NP of NCC and negative correlation between TI \& NP of HBL, therefore the value of coefficient of determination ( $\mathrm{r}^{2}$ ) is 0.7884 and 0.5776 which shows that $78.84 \%$ and $57.76 \%$ of the total variation in dependent variable (NP) is explained by independent variable (TI). The calculated ' $t$ ' value of HBL and NCC are greater than the tabulated value i.e. $2.25>2.201$ and $3.343>2.201$ respectively, therefore it reveals that the relationship between TI and NP is sinsignificant.

### 4.8 Trend Analysis

Trend analysis has been a very useful and commonly applied statistical tool to forecast the future events in quantitative terms. On the basis of tendencies in the dependent variables in the past periods, the future trend is predicted. This analysis takes the historical data as the basis of forecasting. This method of forecasting the future trend is based on the assumptions that the past tendencies of the variable are repeated in the future or the past events affect the future events significantly.

Under this topic, trend analysis of TD and TI of HBL and NCC bank are studied during the period of time. The objective of this topic is to forecast the TD and TI for the next five years.

The projections are based on the following assumptions:

- The bank will run in the present style.
- Nepal Rastra Bank and the Government of Nepal will not make any amendments in the guidelines for the operation of commercial banks.
- Other all the things also remain constant.


### 4.8.1 Trend Analysis of Total Deposit

Under this topic, an effort has been made to calculate the trend value of TD of HBL and NCC with comparatively under five years study period and project the trend for next five years. The following table describes the trend values of TD of sampled banks for five years.

Table: 4.12
Trend Value of TD

| Fiscal Year | Banks (Rs. In Millions) |  |
| :---: | :---: | :---: |
|  | HBL | NCC |
| $2068 / 069$ | 40216.02 | 11394.47 |
| $2069 / 070$ | 42924.18 | 12499.18 |
| $2070 / 071$ | 45632.34 | 13603.89 |
| $2071 / 072$ | 48340.5 | 14708.6 |
| $2072 / 073$ | 51048.66 | 15813.31 |
| Mean (a) | 32091.54 | 8080.34 |
| Rate of Change (b) | 2708.16 | 1104.71 |
| Trend Equation(Y) | $\mathrm{Y}=32091.54+2708.16 \mathrm{X}$ | $\mathrm{Y}=8080.34+1104.71 \mathrm{X}$ |

Source: Appendix VIII \& IX

Table: 4.9
Trend Line of TD of HBL \& NCC


The above table 4.12 and figure 4.8 shows that the trend line of TD is in increasing trend of both banks. ' Y ' has shown the trend value of total TD. Since, the calculated value of ' $b$ ' is positive of both the banks; it is found that the banks TD are increasing with time. Comparatively the slope of equation of HBL is high and its trend line is sloping upward rapidly. If other things remaining the same, it shows that the TD increasing by Rs. 2708.16 and Rs. 1104.71 every year of HBL and NCC bank respectively.

### 4.8.2 Trend Analysis of Total Investment

Under this topic, an effort has been made to calculate the trend value of TI of HBL and NCC under five years study period and project the trend for next five years. The following table describes the trend values of TI of sampled banks for five years.

Table: 4.13
Trend Value of TI of Sample Banks

| Fiscal Year | Banks (Rs. In Millions) |  |
| :---: | :---: | :---: |
|  | HBL | NCC |
| $2068 / 069$ | 7517.33 | 2114.56 |
| $2069 / 070$ | 6417.19 | 2242.68 |
| $2070 / 071$ | 5317.05 | 2370.8 |
| $2071 / 072$ | 4216.91 | 2498.92 |
| $2072 / 073$ | 3116.77 | 2627.04 |
| Mean (a) | 10817.75 | 1730.2 |
| Rate of Change (b) | -1100.14 | 128.12 |
| Trend Equation(Y) | $\mathrm{Y}=10817.75-1100.14 \mathrm{X}$ | $\mathrm{Y}=1730.2+128.12 \mathrm{X}$ |

Source: Appendix X \& XI

Table: 4.10
Trend Line of TI of HBL \& NCC


The above table 4.13 and figure 4.9 shows that the trend line of TI is in increasing trend of NCC bank and decreasing trend of HBL. ' Y ' has shown the trend value of total TI. Since, the calculated value of ' $b$ ' is positive of NCC bank and negative of HBL; it is found that the NCC bank's TI is increasing with time and the HBL's TI is decreasing with time. Comparatively the slope of equation of HBL is high and its trend line is sloping
downward rapidly. If other things remaining the same, it shows that the TI increasing by Rs. 128.12 and decreasing by Rs. 1100.14 every year of NCC and HBL respectively.

### 4.9 Major Findings

- The major sectors of investment of HBL and NCC banks are Nepal Govt. T-bills, Nepal government saving bonds, Nepal Govt. Other Securities, Local licensed Institutions, Foreign Banks and Corporate Share.
- The investment trend in treasure bills of HBL is in fluctuating trend over the study period, the amount of investment in T- bills each year is Rs. 6079.39, 7166.53, 3907.34, 3455.03 and 4725.58 million respectively in each year. The amounted invested by HBL in foreign banks are Rs. 5294.69, 5778.95, 4404.51, 3703.35, 1794.37 million respectively in each year and Nepal government saving bonds holds Rs. 375.49, 305.13, 304.96, 1010.34 and 1681.78 million each year respectively.
- The investment trend in treasure bills of NCC bank is in fluctuating trend over the study period, the amount of investment in T- bills are 1422.30, 1155.27, 1730.89, 1269.25 and 1603.62 million in the fiscal year 2063/064, 2064/065, 2065/066, 2066/067 and 2067/068 respectively.
- the amounted invested by NCC bank in corporate share and debentures are Rs. $155.49,166.42,254.19,140.84$ and 144.54 million respectively in each fiscal year and Nepal government other securities holds Rs. 4.7 millions in fiscal year 2063/064 to 2065/066 and 158.31 and 157.39 million in 2066/067 \& 2067/068 respectively.
- Over the study period HBL is lending the major proportion of loan only in the private sector and do not lending any amount in the financial sector but in the fiscal year 2063/064 \& 2064/065 the bank lending Rs. 604.6 \& 702.3 millions in the government organizations.
- Over the study period the bank lending the major proportion of loan in the private sector total loan distributed by the bank is in increasing trend over the study period except the fiscal year 2064/065.
- The average loan distributed by the NCC bank with in the five year study period is Rs. 6304 millions and the standard deviation and CV are Rs. 1429.88 million and $22.68 \%$ respectively.
- The deposit and credit of NCC bank is increasing trend except the fiscal year 2064/065. The average deposit and credit with in the five year study period of HBL are 32091.54 \& 21488.32 and NCC are 10824.7 \& 6304 million respectively.
- More than $66.11 \%$ \& $78.27 \%$ of the deposited amount of HBL and NCC bank have been succeeded to mobilize the resources. The highest ratio of HBL is $77.05 \%$ in 2067/068 and lowest ratio is 58.65 in 2063/064 similarly the highest ratio of NCC bank is 88.17 in 2063/064 and lowest ratio is 69.46 in 2065/066.
- Investment to deposit ratio of both the banks are decreasing trend over the study period the highest ratio of HBL \& EBL are 44.69 \& $27.18 \%$ in the fiscal year 2063/064 \& 2065/066 and the lowest ratios are $23.32 \%$ \& $18.66 \%$ in the fiscal year 2067/068 respectively.
- Investment on government securities to total outside investment ratio of both banks are fluctuating trend over the study period the highest ratio of HBL \& NCC are $73.06 \& 90.17 \%$ in the fiscal year 2067/068 \& 2063/064 and the lowest ratios are $48.36 \%$ \& $82.40 \%$ in the fiscal year 2065/066 \& 2066/067 respectively.
- Investment on share and debenture to total investment ratio of both banks are fluctuating trend over the study period the highest ratio of HBL \& NCC are 1.08 \& $12.77 \%$ in the fiscal year 2065/066 and the lowest ratios are $0.62 \%$ \& $7.15 \%$ in the fiscal year 2063/064 \& 2067/068 respectively.
- The values of coefficient of correlation (r) of HBL and NCC are -0.7324 and 0.6737 respectively which shows that there is a positive correlation between TD and TI of NCC and negative correlation between TD \& TI of HBL.
- The calculated ' $t$ ' value of HBL and NCC are less than the tabulated value i.e. $1.863<2.201$ and $1.579<2.201$ respectively, therefore it reveals that the relationship between TD and TI is insignificant.
- The values of coefficient of correlation (r) of HBL and NCC are -0.7599 and 0.8879 respectively which shows that there is a positive correlation between TI and NP of NCC and negative correlation between TI \& NP of HBL.
- The calculated ' $t$ ' value of HBL and NCC are greater than the tabulated value i.e. $2.25>2.201$ and $3.343>2.201$ respectively, therefore it reveals that the relationship between TI and NP is sinsignificant.
- If other things remaining the same, TD will be increasing by Rs. 2708.16 and Rs. 1104.71 every year of HBL and NCC bank and TI increasing by Rs. 128.12 and decreasing by Rs. 1100.14 every year of NCC and HBL respectively.


## CHAPTER - V

## SUMMARY, CONCLUSION \& RECOMMENDATION

In this chapter, summary and conclusion of the research as well as recommendations are presented separately. After summarizing and concluding the research, recommendations are suggested for the effective utilization of fund to generate high profit. The researcher has tried to give suggestions and recommendations to the sample banks based on this research.

### 5.1 Summary

The economic development of every country is always measured by its economic indicators. Therefore, every country has given emphasis on the development of its economy. Nowadays the financial institutions are viewed as catalyst in the process of the economic growth. The mobilization of domestic resources is one of the key factors in the economic development of a country. Banking sector plays an important role in the economic development of the country. Commercial banks are one of the vital aspects of this sector, which deals with the process of channeling the available resources in the needed sector. It is the intermediary between the deficit and surplus of financial resources. Financial institutions like banks are necessity to collect scattered savings and put them into productive channels. In the absence of such institutions it is possible that the saving will not be safely and profitably utilized within the country.

Banks today are under great pressure to meet the objectives of their stockholders, employees, depositors, and borrowing customers, while somehow keeping government regulators satisfied that the bank's policies, loans, and investments are sound. The majority of the needs of the stakeholders are related with the investment and profitability of the banks. Thus, the foremost objective of the banks is the profit maximization. As other types of business entity, commercial banks are also inspired by the profit. In this age of great competition, only the profitable banks can sustain for a long time. Financial policies of any concern are directly or indirectly influenced by its investment. Thus, it is a base for a bank's survival, growth and expansion.

Investment simply means an assets or item that is purchased with the hope that it will generate income or appreciate in the future. In general sense, investment means to pay out money to get more. It involves the commitment of resources that have been saved or put away from current consumption to the future. Investment comprises the set of guidelines and procedures that direct the long-term management of the investor's assets.

Investment analysis is one of the key tools for financial decision and assist in making plan before using sophisticated forecasting and budgeting procedure. The value of this approach is the quantitative relation, which can be used to diagnose strengths and weakness in a bank performance. Such analysis is considerable things for the bank's common stock holders, investors, bondholders and others. The objective of the study is to find out the trend of deposit, investment, loan \& advance and net profit of sample banks with in five year study period, to access the investment portfolio of sample banks, to find out relationship between total investments, deposit, loan \& advance and net profit of sample banks and to analyze the utilization of available fund of sample banks.

To fulfill these objectives, the whole study comprised of the five different consecutive parts as mentioned. The first chapter comprises of general background, focus of the study, brief profile of the banks under study, significance of the study, objectives of the study, limitations of the study and organization of the study.

In the second chapter, reviewing of the various literatures, definitions and concept of investment and profitability are included. This also consists of the review of the related studies, journals, articles and review of books concerned to investment and deposit.

The third part consists of the research design, total population and sample of the study, nature and sources of the data, data collection procedures and the analytical tools and techniques used in the study.

The fourth part constitutes the tabular and graphical representation of the collected data, their interpretation and analysis using various financial as well as statistical tools. Apart from it, summary of the major findings are also presented at the end of the chapter.

The last chapter contains the summary of the whole study and relevant conclusions are drawn based on the study. A suitable set of recommendations are made at the end of the chapter.

### 5.2 Conclusion

It can be concluded from the observance and analysis of above data the sample banks should move as per the direction given by the central bank. Bank should have optimum policy to collect the deposit in various accounts. Deposit is the major organ of commercial banks to live in the industry. Higher the deposit higher will be the chance of the mobilization of working fund and profit there too. Bank should invest in different sector very carefully, while advancing loan because loan is the blood of commercial banks for survival. If commercial banks do not apply sound investment it will be in great trouble in future to collect it in time. Hence the possibility of bankruptcy there too. Bank should invest their fund in various portfolios after the deep study of the project to be safe from being bankruptcy. If banks concentrate the investment in few organizations, there is high chance of default risk. Diversifications are indeed need to all the business houses but it has seen immense importance to commercial banks. Diversification of investment is very much important to commercial bank than other business houses because banks use the money to other people for the benefit of its own. And lastly is can be said that banks are important for the nation. It helps in the capital formation to the nations, which is the most important element for the economic growth of the country.

In conclusion, it can be said that central banks are required to direct the commercial banks. Commercial banks should move as per the direction given by the central bank. Banks should have optimum policy to collect the deposit in various accounts. Deposit is the major organ of commercial bank to live in the industry. Higher the deposit Higher will be the chance of mobilization of working fund and profit thereto. Banks should not invest their fund haphazardly. It should be careful while advancing loan because loan is the blood of the commercial banks for survival. If commercial banks does not apply sound investment it will be in great trouble in future to collect it in time, hence the possibility of bankruptcy thereto. Banks should invest their fund in various portfolios after the deep study of the project to be safe from being bankruptcy. If banks concentrate the investment in few organizations there is a high chance of default risk. Diversification is needed to all
the business houses but it has seen immense importance to commercial banks hence, the commercial banks should implement the investment considering the directives issued by NRB. Commercial banks should not cross the boundary level set by central bank to make investment. In overall, it can be concluded that the role of NRB in investment of commercial bank has both positive and negative impacts.

Under this research study, different financial and statistical tools are used to measure the investment of the selected banks. It is found that both selected banks have strong financial performance but comparatively HBL is in better position. Despite of social contribution HBL has higher profit earnings. It is concluded that HBL Bank has adopted better investment than that of NCC bank.

### 5.3 Recommendation

- Suggestions are the output of the whole study. It helps to take corrective action in the activities in future. Different analyses are done to arrive at this step. On the basis of above analysis and findings of the study following suggestions and recommendations may be referred to overcome weakness, inefficiency to investment and for corrective action for the concern authorities and other researchers.
- Diversification of investment is highly suggested to the selected bank as they have given priority to invest in government securities only. Both of the banks seem risk avoider as they have invested highest amount in risk free securities. Higher the risk Higher will be the profit. Hence, sample banks are recommended to diversify their investment in NRB bond, govt. non-financial institution, other non-financial institution etc.
- To be a successful banker a bank must utilize depositor's money as loan and advances. Loan and advances is the largest item of the bank in the asset side of balance sheet, which is risky and more profitable too. Loan and advances ratio of HBL Bank is lower. It has given more priority on the private sector lending. Loan and advances to the government sector and other financial institutions is too low. Hence, HBL is recommended to follow the liberal lending policy to increase their total loan and advances in order to earn more profit.
- Total investment made by the selected bank is in fluctuating trend. Therefore, both bank must seek new places or sectors for investment, with potentiality of high return and low risk and should make rational investment.
- The banks should find out new areas/sectors for investing collected deposits from which it can generate maximum profit. In context of present scenario of the country, health and education can be considered as the best sector for investment, which are more secure and can generate a reasonable profit.
- Majority of commercial banks have been found to be profit oriented ignoring their social responsibility, which is not a proper strategy to sustain in long run. So all the banks are suggested to render their serves even in the rural areas providing special loans to the deprived and priority sectors, which might further intensify the goodwill of the banks in future.


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## Appendix - I

Calculation of Total Investment to Total Deposit Ratio of Sample Banks

| Year | HBL |  |  | NCC |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Investment | Deposit | Ratio in \% | Investment | Deposit | Ratio in \% |  |  |  |  |
| $2063 / 064$ | 11823 | 26456.2 | 44.69 | 1582.49 | 6619.5 | 23.91 |  |  |  |  |
| $2064 / 065$ | 13340.2 | 29905.8 | 44.61 | 1326.39 | 6500.3 | 20.41 |  |  |  |  |
| $2065 / 066$ | 8710.69 | 31805.3 | 27.39 | 1989.78 | 7320.2 | 27.18 |  |  |  |  |
| $2066 / 067$ | 8444.91 | 34681 | 24.35 | 1732.12 | 9137 | 18.96 |  |  |  |  |
| $2067 / 068$ | 8769.94 | 37609.4 | 23.32 | 2020.23 | 10824.7 | 18.66 |  |  |  |  |
| Average |  |  |  |  |  |  |  | 32.87 | Average | 21.82 |
| S.D |  |  |  |  |  |  |  | 10.86 | S.D | 3.65 |
| C.V |  |  |  |  |  |  |  | 46.55 | C.V | 19.55 |

## Appendix - II

Calculation of Investment on Government Securities to Total outside Investment

## Ratio of Sample Banks

| Year | HBL |  |  | NCC |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total <br> Investment | Investment <br> in Govt. <br> Securities | Ratio in \% | Total <br> Investment | Investment <br> in Govt. <br> Securities | Ratio in \% |
|  | 11823 | 6454.88 | 54.60 | 1582.49 | 1427 | 90.17 |
| $2064 / 065$ | 13340.2 | 7471.66 | 56.01 | 1326.39 | 1159.97 | 87.45 |
| $2065 / 066$ | 8710.69 | 4212.3 | 48.36 | 1989.78 | 1735.59 | 87.23 |
| $2066 / 067$ | 8444.91 | 4465.37 | 52.88 | 1732.12 | 1427.56 | 82.42 |
| $2067 / 068$ | 8769.94 | 6407.36 | 73.06 | 2020.23 | 1761.01 | 87.17 |
| Average |  |  |  |  |  |  |
| S.D | 56.98 | Average | 86.89 |  |  |  |
| C.V |  |  |  |  |  |  |
| 9.44 |  |  |  |  |  |  |
| S.D | 2.80 |  |  |  |  |  |

## Appendix - III

Investment on Share and Debenture to Total outside Investment Ratio of Sample Banks

| Year | HBL |  |  | NCC |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total <br> Investment | Investment <br>  <br> Debenture | Ratio in \% | Total <br> Investment | Investment <br>  <br> Debenture | Ratio in \% |
| $2063 / 064$ | 11823 | 73.42 | 0.62 | 1582.49 | 155.49 | 9.83 |
| $2064 / 065$ | 13340.2 | 89.56 | 0.67 | 1326.39 | 166.42 | 12.55 |
| $2065 / 066$ | 8710.69 | 93.88 | 1.08 | 1989.78 | 254.19 | 12.77 |
| $2066 / 067$ | 8444.91 | 78.89 | 0.93 | 1732.12 | 140.84 | 8.13 |
| $2067 / 068$ | 8769.94 | 88.79 | 1.01 | 2020.23 | 144.54 | 7.15 |
| Average |  |  |  |  |  |  |
| S.D | 0.86 | Average | 10.09 |  |  |  |
| C.V |  |  |  |  |  |  |

## Appendix - IV

Calculation for Mean Value, \& Correlation between Deposit \& Investment of HBL

| Year | Deposit <br> $\left(\mathbf{X}_{\mathbf{1}}\right)$ | Investment <br> $\left(\mathbf{X}_{\mathbf{2}}\right)$ | $\mathbf{x}_{\mathbf{1}}=\mathbf{X}_{\mathbf{1}}-\overline{\mathbf{x}}_{\mathbf{1}}$ | $\mathbf{x}_{\mathbf{2}}=\mathbf{X}_{\mathbf{2}}-\overline{\mathbf{x}}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{1}} \cdot \mathbf{x}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{1}}{ }^{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{2}}{ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2063 / 064$ | 26456.2 | 11823 | -5635.34 | 1605.25 | -9046140.81 | 31757056.92 | 2576833.98 |
| $2064 / 065$ | 29905.8 | 13340.2 | -2185.74 | 3122.45 | -6824868.23 | 4777459.35 | 9749706.49 |
| $2065 / 066$ | 31805.3 | 8710.69 | -286.24 | -1507.06 | 431380.28 | 81933.34 | 2271223.82 |
| $2066 / 067$ | 34681 | 8444.91 | 2589.46 | -1772.84 | -4590693.09 | 6705303.09 | 3142954.57 |
| $2067 / 068$ | 37609.4 | 8769.94 | 5517.86 | -1447.81 | -7988801.85 | 30446778.98 | 2096148.00 |
| $\mathbf{N}_{\mathbf{1}}=\mathbf{5}$ | $\sum \mathbf{X}_{\mathbf{1}}$ | $\sum \mathbf{X}_{\mathbf{2}}$ |  |  | $\sum \mathbf{x}_{\mathbf{1}} \cdot \mathbf{x}_{\mathbf{2}}=-$ | $\sum \mathbf{x}_{\mathbf{1}}{ }^{\mathbf{2}=}$ | $\sum \mathbf{x}_{\mathbf{2}}{ }^{\mathbf{2}=}$ |
| $\mathbf{N}_{\mathbf{2}}=\mathbf{5}$ | $\mathbf{= 1 6 0 4 5 7 . 7}$ | $\mathbf{= 5 1 0 8 8 . 7 4}$ |  |  | $\mathbf{2 8 0 1 9 1 2 3 . 7 0}$ | $\mathbf{7 3 7 6 8 5 3 1 . 6 7}$ | $\mathbf{1 9 8 3 6 8 6 6 . 8 7}$ |

For Deposit,

$$
\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{1}}{\mathrm{~N}_{1}} \quad=\frac{160457.7}{5}=32091.54
$$

For Investment,

$$
\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{2}}{\mathrm{~N}_{2}} \quad=\frac{51088.74}{5}=10217.75
$$

Correlation between Deposit \& Investment,

$$
\begin{aligned}
& \left(\mathrm{r}_{12}\right)=\frac{\sum \mathrm{x}_{1} \mathrm{x}_{2}}{\sqrt{\sum \mathrm{x}_{1}{ }^{2} \sum \mathrm{x}_{2}{ }^{2}}} \\
& =\frac{-28019123.70}{\sqrt{73768531.67 \times 19836866.87}}=-0.7324 \\
& r^{2}=0.73244^{2}=0.5364 \text { Or, } 53.64 \%
\end{aligned}
$$

T-value,

$$
\begin{aligned}
& \mathrm{t}=\frac{r}{\sqrt{1-r^{2}}} \times \sqrt{n-2} \\
& =\frac{0.7324}{\sqrt{1-0.7324^{2}}} \times \sqrt{5-2}=1.863
\end{aligned}
$$

## Appendix - V

Calculation for Mean Value, \& Correlation between Deposit \& Investment of NCC

| Year | Deposit <br> $\left(\mathbf{X}_{\mathbf{1}}\right)$ | Investment <br> $\left(\mathbf{X}_{\mathbf{2}}\right)$ | $\mathbf{x}_{\mathbf{1}}=\mathbf{X}_{\mathbf{1}}-\overline{\mathbf{x}}_{\mathbf{1}}$ | $\mathbf{x}_{\mathbf{2}}=\mathbf{X}_{\mathbf{2}}-\overline{\mathbf{x}}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{1}} \cdot \mathbf{x}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{1}}{ }^{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{2}}{ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2063 / 064$ | 6619.5 | 1582.49 | -1460.84 | -147.71 | 215783.60 | 2134053.51 | 21818.83 |
| $2064 / 065$ | 6500.3 | 1326.39 | -1580.04 | -403.81 | 638039.11 | 2496526.40 | 163064.13 |
| $2065 / 066$ | 7320.2 | 1989.78 | -760.14 | 259.58 | -197315.62 | 577812.82 | 67380.74 |
| $2066 / 067$ | 9137 | 1732.12 | 1056.66 | 1.92 | 2026.67 | 1116530.36 | 3.68 |
| $2067 / 068$ | 10824.7 | 2020.23 | 2744.36 | 290.03 | 795941.24 | 7531511.81 | 84116.24 |
| $\mathbf{N}_{\mathbf{1}}=\mathbf{5}$ <br> $\mathbf{N}_{\mathbf{2}}=\mathbf{5}$ | $\sum \mathbf{X}_{\mathbf{1}}$ <br> $\mathbf{= 4 0 4 0 1 . 7}$ | $\sum \mathbf{X}_{\mathbf{2}}$ <br> $\mathbf{= 8 6 5 1 . 0 1}$ |  |  | $\sum \mathbf{x}_{\mathbf{1}} \cdot \mathbf{x}_{\mathbf{2}}=$ <br> $\mathbf{1 4 5 4 4 7 5 . 0 1}$ | $\sum \mathbf{x}_{\mathbf{1}}{ }^{\mathbf{2}}=$ <br> $\mathbf{1 3 8 5 6 4 3 4 . 8 9}$ | $\mathbf{3 3 6 3 8 3 . 6 2}$ |

For Deposit,

$$
\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{1}}{\mathrm{~N}_{1}} \quad=\frac{40401.7}{5}=8080.34
$$

For Investment,

$$
\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{2}}{\mathrm{~N}_{2}} \quad=\frac{8651.01}{5}=1730.2
$$

Correlation between Deposit \& Investment,

$$
\begin{gathered}
\left(\mathrm{r}_{12}\right)=\frac{\sum \mathrm{x}_{1} \mathrm{x}_{2}}{\sqrt{\sum \mathrm{x}_{1}^{2} \sum \mathrm{x}_{2}^{2}}} \\
=\frac{1454475.01}{\sqrt{13856434.89 \times 336383.62}}=0.6737 \\
r^{2}=0.6737^{2}=0.4538 \text { Or, } 45.38 \%
\end{gathered}
$$

T-value,

$$
\begin{aligned}
& \mathrm{t}=\frac{r}{\sqrt{1-r^{2}}} \times \sqrt{n-2} \\
& =\frac{0.6737}{\sqrt{1-0.6737^{2}}} \times \sqrt{5-2}=1.579
\end{aligned}
$$

## Appendix - VI

Calculation for Mean Value, \& Correlation between Investment \&
Net Profit of HBL

| Year | Investment <br> $\left(\mathbf{X}_{\mathbf{1}}\right)$ | Net Profit <br> $\left(\mathbf{X}_{\mathbf{2}}\right)$ | $\mathbf{x}_{\mathbf{1}}=\mathbf{X}_{\mathbf{1}}-\overline{\mathbf{x}}_{\mathbf{1}}$ | $\mathbf{x}_{\mathbf{2}}=\mathbf{X}_{\mathbf{2}}-\overline{\mathbf{x}}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{1}} \cdot \mathbf{x}_{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{1}}{ }^{\mathbf{2}}$ | $\mathbf{x}_{\mathbf{2}}{ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2063 / 064$ | $\mathbf{1 1 8 2 3}$ | 296.4 | 1605.24 | -345.48 | -554581.53 | 2576795.46 | 119357.81 |
| $2064 / 065$ | $\mathbf{1 3 3 4 0 . 2}$ | 511.22 | 3122.44 | -130.66 | -407984.26 | 9749631.55 | 17072.56 |
| $2065 / 066$ | $\mathbf{8 7 1 0 . 6 9}$ | 638.73 | -1507.05 | -3.15 | 4750.22 | 2271199.70 | 9.94 |
| $2066 / 067$ | $\mathbf{8 4 4 4 . 9 1}$ | 831.76 | -1772.83 | 189.88 | -336621.41 | 3142926.21 | 36053.65 |
| $2067 / 068$ | $\mathbf{8 7 6 9 . 9 4}$ | 931.3 | -1447.80 | 289.42 | -419019.38 | 2096124.84 | 83762.78 |
| $\mathbf{N}_{\mathbf{1}}=\mathbf{5}$ <br> $\mathbf{N}_{\mathbf{2}}=\mathbf{5}$ | $\sum \mathbf{X}_{\mathbf{1}}$ <br> $\mathbf{= 5 1 0 8 8} .7$ | $\sum \mathbf{X}_{\mathbf{2}}$ <br> $\mathbf{= 3 2 0 9 . 4 1}$ |  |  | $\sum \mathbf{x}_{\mathbf{1}} \cdot \mathbf{x}_{\mathbf{2}}=$ | $\sum \mathbf{x}_{\mathbf{1}}{ }^{\mathbf{2}=}$ | $\sum \mathbf{x}_{\mathbf{2}} \mathbf{2}^{\mathbf{2}}=$ |

For Deposit,

$$
\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{1}}{\mathrm{~N}_{1}} \quad=\frac{51088.7}{5}=10217.74
$$

For Investment,

$$
\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{2}}{\mathrm{~N}_{2}} \quad=\frac{3209.41}{5}=641.82
$$

Correlation between Deposit \& Investment,

$$
\begin{gathered}
\left(r_{12}\right)=\frac{\sum \mathrm{x}_{1} \mathrm{x}_{2}}{\sqrt{\sum \mathrm{x}_{1}^{2} \sum \mathrm{x}_{2}^{2}}} \\
=\frac{-1713456.35}{\sqrt{19836677.76 \times 246256.74}}=-0.7599 \\
r^{2}=-0.7599^{2}=0.5776 \mathrm{Or}, 57.76 \%
\end{gathered}
$$

T-value,

$$
\begin{aligned}
\mathrm{t} & =\frac{r}{\sqrt{1-r^{2}}} \times \sqrt{n-2} \\
& =\frac{0.7599}{\sqrt{1-0.7599^{2}}} \times \sqrt{5-2}=2.25
\end{aligned}
$$

## Appendix - VII

Calculation for Mean Value, \& Correlation between Investment \&
Net Profit of NCC

| Year | Investment $\left(\mathbf{X}_{1}\right)$ | Net Profit $\left(\mathbf{X}_{2}\right)$ | $\mathrm{x}_{1}=\mathrm{X}_{1}-\overline{\mathrm{x}}_{1}$ | $\mathbf{x}_{2}=\mathbf{X}_{2}-\overline{\mathbf{x}}_{2}$ | $\mathrm{x}_{1} \cdot \mathrm{x}_{2}$ | $\mathrm{x}_{1}{ }^{2}$ | $\mathbf{x}_{2}{ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2063/064 | 1582.49 | 318.73 | -147.71 | 10.57 | -1561.61 | 21818.83 | 111.77 |
| 2064/065 | 1326.39 | -115.93 | -403.81 | -424.09 | 171251.82 | 163064.13 | 179850.63 |
| 2065/066 | 1989.78 | 498.75 | 259.58 | 190.59 | 49473.49 | 67380.74 | 36325.31 |
| 2066/067 | 1732.12 | 415.47 | 1.92 | 107.31 | 205.82 | 3.68 | 11515.87 |
| 2067/068 | 2020.23 | 423.77 | 290.03 | 115.61 | 33530.72 | 84116.24 | 13366.13 |
| $\begin{aligned} & \mathrm{N}_{1}=5 \\ & \mathrm{~N}_{2}=5 \end{aligned}$ | $\begin{gathered} \sum X_{1} \\ =8651.01 \end{gathered}$ | $\begin{gathered} \sum X_{2} \\ =1540.79 \end{gathered}$ |  |  | $\begin{gathered} \sum \mathrm{x}_{1} \cdot \mathrm{x}_{2}= \\ \mathbf{2 5 2 9 0 0 . 2 4} \end{gathered}$ | $\begin{gathered} \sum \mathrm{x}_{1}{ }^{2}= \\ 336283.62 \end{gathered}$ | $\begin{gathered} \sum \mathrm{x}_{2}{ }^{2}= \\ 241169.71 \end{gathered}$ |

For Deposit,

$$
\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{1}}{\mathrm{~N}_{1}} \quad=\frac{8651.01}{5}=1730.2
$$

For Investment,

$$
\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\sum \mathrm{X}_{2}}{\mathrm{~N}_{2}} \quad=\frac{1540.79}{5}=308.158
$$

Correlation between Deposit \& Investment,

$$
\begin{gathered}
\left(\mathrm{r}_{12}\right)=\frac{\sum \mathrm{x}_{1} \mathrm{x}_{2}}{\sqrt{\sum \mathrm{x}_{1}{ }^{2} \sum \mathrm{x}_{2}{ }^{2}}} \\
=\frac{252900.24}{\sqrt{336383.62 \times 241169.71}}=0.8879 \\
r^{2}=0.8879^{2}=0.7884 \text { Or, } 78.84 \%
\end{gathered}
$$

T-value,

$$
\begin{aligned}
& \mathrm{t}=\frac{r}{\sqrt{1-r^{2}}} \times \sqrt{n-2} \\
& =\frac{0.8879}{\sqrt{1-0.8879^{2}}} \times \sqrt{5-2}=3.343
\end{aligned}
$$

## Appendix VIII

## Trend Analysis of Total Deposit of HBL

The trend line $\mathrm{Y}=\mathrm{a}+\mathrm{bX}$
Let's assume that middle year be 3 , then $\mathrm{X}=\mathrm{t}-3$

| Year | $\mathbf{t}$ | Total Deposit (Y) | $\mathbf{X = \mathbf { t } - 3}$ | $\mathbf{X Y}$ | $\mathbf{X}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2063 / 064$ | 1 | 26456.2 | -2 | -52912.4 | 4 |
| $2064 / 065$ | 2 | 29905.8 | -1 | -29905.8 | 1 |
| $2065 / 066$ | 3 | 31805.3 | 0 | 0 | 0 |
| $2066 / 067$ | 4 | 34681 | 1 | 34681 | 1 |
| $2067 / 068$ | 5 | 37609.4 | 2 | 75218.8 | 4 |
| Total |  | $\sum \mathbf{y}=\mathbf{1 6 0 4 5 7 . 7}$ | $\sum \mathbf{X = 0}$ | $\sum \mathbf{x y}=\mathbf{2 7 0 8 1 . 6}$ | $\sum \mathbf{x}^{2}=\mathbf{1 0}$ |

Since, $\sum \mathrm{X}=0$

The two normal equations obtained from the above equations will be

$$
\begin{align*}
& \sum \mathrm{Y}=\mathrm{na}  \tag{i}\\
& \sum \mathrm{XY}=\mathrm{b} \sum \mathrm{X}^{2}
\end{align*}
$$

Since, $\mathrm{n}=$ number of years under study $=5$, the value of ' $a$ ' and ' $b$ ' can be calculated by solving equation (i) and (ii).

From equation (i)

$$
\begin{aligned}
& \sum Y=n a \\
& \text { Or, } 160457.7=5 \times \mathrm{a} \\
& \text { Or, } \mathrm{a}=32091.54
\end{aligned}
$$

Again, from equation (ii)

$$
\begin{aligned}
& \sum X Y=b \sum X^{2} \\
& \text { Or, } 27081.6=b \times 10 \\
& \text { Or, } b=2708.16
\end{aligned}
$$

Now, putting the value of ' $a$ ' and ' $b$ ' in the equation of trend line (A),

$$
\begin{aligned}
& Y=a+b X \\
& \text { Or, } Y=32091.54+2708.16 X \\
& \quad \text { Calculation of Trend Values }
\end{aligned}
$$

| Year | $\mathbf{X}$ | Total Deposit $(\mathbf{Y})=\mathbf{3 2 0 9 1 . 5 4}+\mathbf{2 7 0 8 . 1 6 X}$ |
| :---: | :---: | :---: |
| $2068 / 69$ | 3 | $32091.54+2708.16 \times 3=40216.02$ |
| $2069 / 70$ | 4 | $32091.54+2708.16 \times 4=42924.18$ |
| $2070 / 71$ | 5 | $32091.54+2708.16 \times 5=45632.34$ |
| $2071 / 72$ | 6 | $32091.54+2708.16 \times 6=48340.5$ |
| $2072 / 73$ | 7 | $32091.54+2708.16 \times 7=51048.66$ |

Appendix IX
Trend Analysis of Total Deposit of NCC
The trend line $\mathrm{Y}=\mathrm{a}+\mathrm{bX}$
(A)

Let's assume that middle year be 3 , then $\mathrm{X}=\mathrm{t}-3$

| Year | $\mathbf{t}$ | Total Deposit (Y) | $\mathbf{X = \mathbf { t } - 3}$ | $\mathbf{X Y}$ | $\mathbf{X}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2063 / 064$ | 1 | 6619.5 | -2 | -13239 | 4 |
| $2064 / 065$ | 2 | 6500.3 | -1 | -6500.3 | 1 |
| $2065 / 066$ | 3 | 7320.2 | 0 | 0 | 0 |
| $2066 / 067$ | 4 | 9137 | 1 | 9137 | 1 |
| $2067 / 068$ | 5 | 10824.7 | 2 | 21649.4 | 4 |
| Total |  | $\sum \mathbf{y}=\mathbf{4 0 4 0 1 . 7}$ | $\sum \mathbf{X = 0}$ | $\sum \mathbf{x y}=\mathbf{1 1 0 4 7 . 1}$ | $\sum \mathbf{x}^{\mathbf{2}=\mathbf{1 0}}$ |

Since, $\sum \mathrm{X}=0$

The two normal equations obtained from the above equations will be

$$
\begin{align*}
& \sum \mathrm{Y}=\mathrm{na}  \tag{i}\\
& \sum \mathrm{XY}=\mathrm{b} \sum \mathrm{X}^{2} \tag{ii}
\end{align*}
$$

$\qquad$

Since, $\mathrm{n}=$ number of years under study $=5$, the value of ' $a$ ' and ' $b$ ' can be calculated by solving equation (i) and (ii).

From equation (i)

$$
\begin{aligned}
& \sum \mathrm{Y}=\mathrm{na} \\
& \text { Or, } 40401.7=5 \times \mathrm{a} \\
& \text { Or, } \mathrm{a}=8080.34
\end{aligned}
$$

Again, from equation (ii)

$$
\begin{aligned}
& \sum X Y=b \sum X^{2} \\
& \text { Or, } 11047.1=b \times 10 \\
& \text { Or, } b=1104.71
\end{aligned}
$$

Now, putting the value of ' $a$ ' and ' $b$ ' in the equation of trend line (A),

$$
\begin{aligned}
& Y=a+b X \\
& \text { Or, } Y=8080.34+1104.71 X
\end{aligned}
$$

## Calculation of Trend Values

| Year | $\mathbf{X}$ | Total Deposit $(\mathbf{Y})=\mathbf{8 0 8 0 . 3 4}+\mathbf{1 1 0 4 . 7 1 \mathbf { X }}$ |
| :---: | :---: | :---: |
| $2068 / 69$ | 3 | $8080.34+1104.71 \times 3=11394.47$ |
| $2069 / 70$ | 4 | $8080.34+1104.71 \times 4=12499.18$ |
| $2070 / 71$ | 5 | $8080.34+1104.71 \times 5=13603.89$ |
| $2071 / 72$ | 6 | $8080.34+1104.71 \times 6=14708.6$ |
| $2072 / 73$ | 7 | $8080.34+1104.71 \times 7=15813.31$ |

## Appendix $\mathbf{X}$

## Trend Analysis of Total Investment of HBL

The trend line $\mathrm{Y}=\mathrm{a}+\mathrm{bX}$
Let's assume that middle year be 3 , then $\mathrm{X}=\mathrm{t}-3$

| Year | $\mathbf{t}$ | Total Deposit (Y) | $\mathbf{X = \mathbf { t } - 3}$ | $\mathbf{X Y}$ | $\mathbf{X}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2063 / 064$ | 1 | 11823 | -2 | -23646 | 4 |
| $2064 / 065$ | 2 | 13340.2 | -1 | -13340.2 | 1 |
| $2065 / 066$ | 3 | 8710.69 | 0 | 0 | 0 |
| $2066 / 067$ | 4 | 8444.91 | 1 | 8444.91 | 1 |
| $2067 / 068$ | 5 | 8769.94 | 2 | 17539.88 | 4 |
| Total |  | $\sum \mathbf{y}=\mathbf{5 1 0 8 8 . 7 4}$ | $\sum \mathbf{X = 0}$ | $\sum \mathbf{x y =}=\mathbf{- 1 1 0 0 1 . 4 1}$ | $\sum \mathbf{x}^{\mathbf{2}=\mathbf{1 0}}$ |

Since, $\sum X=0$

The two normal equations obtained from the above equations will be

$$
\begin{equation*}
\sum \mathrm{Y}=\mathrm{na} \tag{i}
\end{equation*}
$$

$\qquad$

$$
\begin{equation*}
\sum \mathrm{XY}=\mathrm{b} \sum \mathrm{X}^{2} \tag{ii}
\end{equation*}
$$

Since, $n=$ number of years under study $=5$, the value of ' $a$ ' and ' $b$ ' can be calculated by solving equation (i) and (ii).

From equation (i)

$$
\begin{aligned}
& \sum \mathrm{Y}=\mathrm{na} \\
& \text { Or, } 51088.74=5 \times \mathrm{a} \\
& \text { Or, } \mathrm{a}=10817.75
\end{aligned}
$$

Again, from equation (ii)

$$
\begin{aligned}
& \sum \mathrm{XY}=\mathrm{b} \sum \mathrm{X}^{2} \\
& \text { Or, }-11001.41=\mathrm{b} \times 10 \\
& \text { Or, } \mathrm{b}=1100.14
\end{aligned}
$$

Now, putting the value of ' $a$ ' and ' $b$ ' in the equation of trend line (A),

$$
\begin{aligned}
& Y=a+b X \\
& \text { Or, } Y=10817.75-1100.14 X
\end{aligned}
$$

## Calculation of Trend Values

| Year | $\mathbf{X}$ | Total Deposit (Y) $=10817.75-1100.14 \mathrm{X}$ |
| :---: | :---: | :---: |
| $2068 / 69$ | 3 | $10817.75-1100.14 \times 3=7517.33$ |
| $2069 / 70$ | 4 | $10817.75-1100.14 \times 4=6417.19$ |
| $2070 / 71$ | 5 | $10817.75-1100.14 \times 5=5317.05$ |
| $2071 / 72$ | 6 | $10817.75-1100.14 \times 6=4216.91$ |
| $2072 / 73$ | 7 | $10817.75-1100.14 \times 7=3116.77$ |

## Appendix XI

Trend Analysis of Total Investment of NCC
The trend line $Y=a+b X$
Let's assume that middle year be 3 , then $\mathrm{X}=\mathrm{t}-3$

| Year | $\mathbf{t}$ | Total Deposit (Y) | $\mathbf{X = \mathbf { t } - 3}$ | $\mathbf{X Y}$ | $\mathbf{X}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2063 / 064$ | 1 | 1582.49 | -2 | -3164.98 | 4 |
| $2064 / 065$ | 2 | 1326.39 | -1 | -1326.39 | 1 |
| $2065 / 066$ | 3 | 1989.78 | 0 | 0 | 0 |
| $2066 / 067$ | 4 | 1732.12 | 1 | 1732.12 | 1 |
| $2067 / 068$ | 5 | 2020.23 | 2 | 4040.46 | 4 |
| Total |  | $\sum \mathbf{y}=\mathbf{8 6 5 1 . 0 1}$ | $\sum \mathbf{X = 0}$ | $\sum \mathbf{x y}=\mathbf{1 2 8 1 . 2 1}$ | $\sum \mathbf{x}^{\mathbf{2}=\mathbf{1 0}}$ |

Since, $\sum \mathrm{X}=0$

The two normal equations obtained from the above equations will be
$\sum \mathrm{Y}=\mathrm{na}$
(i)

$$
\begin{equation*}
\sum \mathrm{XY}=\mathrm{b} \sum \mathrm{X}^{2} \tag{ii}
\end{equation*}
$$

Since, $n=$ number of years under study $=5$, the value of ' $a$ ' and ' $b$ ' can be calculated by solving equation (i) and (ii).

From equation (i)

$$
\begin{aligned}
& \sum \mathrm{Y}=\mathrm{na} \\
& \text { Or, } 8651.01=5 \times \mathrm{a} \\
& \text { Or, } \mathrm{a}=1730.2
\end{aligned}
$$

Again, from equation (ii)

$$
\begin{aligned}
& \sum \mathrm{XY}=\mathrm{b} \sum \mathrm{X}^{2} \\
& \text { Or, } 1281.21=\mathrm{b} \times 10 \\
& \text { Or, } \mathrm{b}=128.12
\end{aligned}
$$

Now, putting the value of ' $a$ ' and ' $b$ ' in the equation of trend line (A),

$$
\begin{aligned}
& Y=a+b X \\
& \text { Or, } Y=1730.2+128.12 X
\end{aligned}
$$

## Calculation of Trend Values

| Year | $\mathbf{X}$ | Total Deposit (Y) $=\mathbf{1 7 3 0 . 2}+\mathbf{1 2 8 . 1 2 X}$ |
| :---: | :---: | :---: |
| $2068 / 69$ | 3 | $1730.2+128.12 \times 3=2114.56$ |
| $2069 / 70$ | 4 | $1730.2+128.12 \times 4=2242.68$ |
| $2070 / 71$ | 5 | $1730.2+128.12 \times 5=2370.8$ |
| $2071 / 72$ | 6 | $1730.2+128.12 \times 6=2498.92$ |
| $2072 / 73$ | 7 | $1730.2+128.12 \times 7=2627.04$ |

Appendix XII
Calculation of Credit Deposit Ratio

| Year | HBL |  |  | NCC |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deposit | Credit | Ratio | Deposit | Credit | Ratio |
| $2063 / 064$ | 26456.2 | 15515.7 | 58.65 | 6619.5 | 5836.6 | 88.17 |
| $2064 / 065$ | 29905.8 | 17672 | 59.09 | 6500.3 | 5083.9 | 78.21 |
| $2065 / 066$ | 31805.3 | 19985.2 | 62.84 | 7320.2 | 5084.5 | 69.46 |
| $2066 / 067$ | 34681 | 25292.1 | 72.93 | 9137 | 7141.6 | 78.16 |
| $2067 / 068$ | 37609.4 | 28976.6 | 77.05 | 10824.7 | 8373.4 | 77.35 |
| Average | $\mathbf{3 2 0 9 1 . 5 4}$ | $\mathbf{2 1 4 8 8 . 3 2}$ | $\mathbf{6 6 . 9 6}$ | $\mathbf{8 0 8 0 . 3 4}$ | $\mathbf{6 3 0 4}$ | $\mathbf{7 8 . 0 2}$ |

