CHAPTER - I

INTRODUCTION

1.1 Background

Nepal being listed among least developed country is trying to embark upon the path of economic development by economic growth rate & developing all sectors of economy. Nepal is bounded on the North by Tibetan autonomous region in China & on the east, South & west by India. Most of the people the nation are engaged in traditional type of agriculture. The productive activities, which in turn is the result of the investment venture in productive enterprises.

For the strengthening the economy of any country both the private and public sector should play a great role. Both private and public sector have been contributing to our nation. Integrated and speedily development of the country is possible only when competitive banking service reaches nook and corners of the country. Commercial banks occupy an important place in the framework of every economy because they provide capital for the development of industry, trade, business and other resources deficit sectors by investing the saving collected as deposit. All the economic activities of each and every country are greatly influenced by the commercial banking business of the country.

Banks are an essential part of the business activities which are establishment to safe guard people's money and there by using the money in making loans and investment. An investment is the commitment of money that is expected to generate additional money. "Every investment entails some degree of risk, it requires at present certain sacrifice for a future uncertain benefits." (Francis 1998:1)

Financial institutions have catalytic role in the process of economic development. Thus, commercial banks have become the heart of financial system; a key factor in the development in the country is the mobilization of domestic resources and their investment for productive use to the various sectors. To make it more effective, CBs formulate sound investment policies, which help maximize quality of investment and eventually contribute to the economic growth of a country. One of the functions of commercial bank is investment policy, which help to economic development of the country. Investment policy is one such tool that helps for proper utilization of resources.

The word "Investment" sounds very good, attractive and prestigious too. The form "investment" has primary significance in financial sector, which refers to the process of determining the proper area in order to lodge a firm's fund to procure expected gain to profit known as the favorable return by its maximum utility at minimized risks. In Laymen's sense, there is always a return if there is investment. This return may favorable as well as unfavorable to the investor's standpoint.

Investment is concerned with the management of an investor's wealth. Which are the sum of current income and the present value of all future income Funds are invest come from assets already owned borrowed money and saving or forgone consumption by foregoing today and investing the saving, investors expect to enhance their future consumption possibilities i.e. It is invested to increase wealth. Investors also seek to manage their wealth effectively obtaining the most from it while protecting it form inflation, taxes and factors, Investment is the use if money to earn income or profit. The term also refers to the expenditure of funds for capital goods-such items as factories, farm equipment, livestock and machinery. Many people invest part of their income for future financial gain. Others make investments to protect the purchasing power of their saving against rising prices.

"Investment promotes economic growth and contributes to a nation's wealth, when people deposit money in a saving account in the bank for example the bank may invest by lending the funds of various business companies. There firms, in return, may invest the new money in new factories and equipment to increase their production, In addition to borrowing from the banking most companies issue stocks and bonds that they sell to investors to raise capital needed for business expansion. Government also issues bonds to obtain funds to invest in such projects as the construction of dams, roads and schools. All such investment by individuals, business and government involves a present sacrifice of income to get an expected future benefits; as a result investment raises a nations standard of living". (The world Bank Encyclopedia: Vol.10; 323)

1.2 Investment pattern of Nepalese commercial banks

The evolution of the organized financial system in Nepal has a more recent history than in other countries of the world. Banking history of Nepal is not more than six decade. In Nepalese context, the history of development of modern bank started from the establishment of "Nepal Bank Ltd" in 1937 A.D. with put forth effort of government & public as a commercial bank with 10 million authorized capital. Then the government felt the requirement of a central bank and established "Nepal Rastra Bank" in 1956 A.D. As a central bank under NRB act 1956 A.D. It played leading role in development of banking in Nepal & also controlled the monetary culture in the country. Likewise, rising of banking function gets popular & more complicated, thus NRB, suggested for the establishment of another commercial bank & in 1966 A.D. "Rastriya Banijya Bank" was established as a fully government owned commercial bank, now its branches are diversified all over the country. As the country moved towards economic liberalization in 1980 A.D. foreign bank were invited to operate in Nepal. The financial scenario has changed with the introduction of JVB's in 1984. The number of commercial banks has been increasing. Since then various financial institution like, JVB's, Domestic Credit Guarantee Corporation, Employee provide fund, National insurance corporation, NEPAL stock exchange have come in to existence to cater the financial needs of the country thereby assisting financial development of the country.

Only in 1990 A.D. after reestablished of democracy, the government took the liberal policy in banking sector. As an open policy of HMG's to get permission to invest in banking sector from private & foreign investor under commercial bank act 1975 A.D., different private banks are getting permission to establish with the joint venture of other countries. The development of CB's in Nepal is categorized in three phases on the basis of financial institutions policies adopted by the country from time to time.

There are only two banks prior to 1980's they are NBL & RBB. All the three CB's of 1980's were established as JVB. Similarly six CB's of past 1990's were also come in to operating as JVB's. latest five banks including Nepal industrial and commercial bank Ltd., Laxmi bank Ltd., Kumari bank Ltd., Lumbani bank Ltd., Machapuchhre Bank Ltd., were established by private sector of Nepal. consequently the name of the banks are also changed Nepal Arab bank Ltd., Nepal Grindlyas bank Ltd., Nepal Indosuez bank Ltd., Nepal bank of Ceylon Ltd., are known as Nabil Bank Ltd. Nepal Standard Chartered Bank Ltd., Nepal investment bank Ltd., Nepal Credit & Commerce Bank Ltd., respectively.

Taking an overview of financial institutions providing banking facility in Nepal, there are 22 commercial banks, 58 finance companies, 14 development banks, 5 rural development banks, 6 micro credit development banks and 34 co-operative societies licensed by NRB (Banking & Financial statistics : 2005; I, iv, vi, vii)

1.3 Profile of NCC Bank Limited

Nepal Credit & Commercial Bank Ltd. (NCC Bank)

Nepal credit & commerce bank Ltd. (NCC bank) formally registered as Nepal bank of Ceylon Ltd. (NBOC), Commenced its operation on 14th October, 1996 as a joint venture with the bank of Ceylon, Sri Lanka. It was the first private sector Bank with the largest authorized capital of Nrs. 100 million. The Head office of the Bank is located at Siddhartha Nagar, Rupandehi, the birth place of Lord Buddha while its corporate office is placed at Bagbazar, Kathmandu.

The name of the bank was changed to Nepal Credit and commerce Bank Ltd. (NCC bank) on 10th September, 2002, due to transfer of share 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 area if the Kingdom through it's 17 branches. The bank has developed corresponding agency relationship with more than 150 international banks having world wide network.

Table 1.1

Capital Structure

Capital	Rs in Billion
Authorized Capital	2
Issued Capital	2
Paid up Capital	1.4

Source: NEPSE 2008/2009

Technology

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 jointing 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 department stores under POS arrangement.

Global Connection

NCC Bank has strategic alliance with ICICI Banks, which facilities our customers to remit their money to more than 670 locations of India through ICICI Bank branches and their correspondent Bank in India.

Customers can affect their money transfer to India either through speed Transfer Arrangement or through Demand Draft Arrangement. Under speed Transfer Arrangement, money can be credited on-line to the beneficiary's account ft the more than 400 branches of ICICI Bank India. Under Demand Draft Arrangement, the Bank can issue draft payable at more than 670 locations in India.

NCC Banks are globally connected through various prominent Banks in Asia, Europe and North America like American Express Bank, Standard Chartered Bank, UBAF etc.

NCC Bank's services across the globe include remittance, draft arrangement, Import and export business, guarantee etc.

1.4 Statement of the Problem

In the recent years, there are many joint venture banks have been introduced in the Nepalese financial system which shows high flow of money in the market but less viable in invest able project. Lack of sound investment policy is the major reason for a commercial bank not to properly utilizing its deposits for a profitable project. This condition will lead the commercial bank to the position of liquidation. They face so many difficulties to mobilize their deposit fund on the profit making investment, so that they can achieve sufficient return from the investment and satisfy their shareholder. The lack of knowledge in financial system leads financial risk, interest rate risk, management risk, business risk, liquidity risk, default risk, interest rate risk management risk, purchasing risk etc. Granting loan against insufficient deposit, overvaluation of goods pledged, land and building mortgaged, risk averting decision regarding loan recovery and negligence in recovery of overdue loan some of the basic lapses and the result of unsound investment policy sighted in the banks. Profit is only possible if the bank makes proper and safe investment. Bank collects money from depositors and makes profit by making proper investment in the form of loan and advances and investment in government securities and bonds and other investment. Bank shares its profit to survive in the competitive market. Therefore, appropriate investment policy is the basic function of all the joint venture banks, commercial banks and financial institutions. In the study of investment policy of NCC Bank. The study basically deals with following issues in the banks.

- Utilization of available fund: Does NCC Bank utilizes its available fund to it?
- Appropriation of fund mobilization and investment policy: is the NCC Bank fund mobilization and investment policy effective and efficient?
- What is the relationship of investment and loan and advances with total deposits and total net profit of the NCC bank?
- Does the investment decision affect the total earning of the bank?

1.5 Objective of the Study

The main objective of the study is to analyze, examine and interpret the investment policies adopted by the NCC Bank. Being the first joint venture banks of Nepal, NCC has adopted its investment policy to invest its funds in different sectors and its investment decision criteria as well as policies may or may not be efficient. The study focuses whether it is backward or forward in investing its fund efficiently in the industry average. The basic objective of the study is the evaluation of investment policy adopted by NCC Bank.

i) To evaluate the liquidity, efficiency, profitable and risk position of NCC bank.

ii) To examine the fund mobilization and investment policy of NCC bank.

iii) To evaluate the growth trend of loan and advances and total investment with financial variables of NCC bank.

iv) To analyze the deposit utilization trend and its projection for next five years of NCC bank.

v) To suggest measures to improve the investment policy of the Banks.

1.6 Need of the Study

The study on investment policy would provide information to management of the bank that would help them to take corrective action; the shareholders would get information from this study so that they can take decision to make investment on shares of various banks. Similarly, depositors can make decision with the help of this study to take the decision to deposit money. Government also gets idea while formulating policy from this study. Optimum investment policy of a deposits the sound health of the bank. This would make a good impact on economy of a country if the banking sectors pose a firm and systematic behavior that is only possible when the government policy of bank consider customer, national and government interest. Successful formulation of investment policy and its effective implementation must be in banking business. Therefore, this study is very essential. The study of commercial banks investment policy focusing on interest rate structure, portfolio management and credit management will strive to disclose the internal weakness and furnish the ideas for improvement. Therefore, the researcher has undertaken the study to analyze the existing investment policy of commercial banks and point out the defects inherent in it and provide package of suggestions for its improvement.

1.7 Limitation of the Study

In the context of Nepal, data problem is major problem for study. Every works have restriction and limitation work is not done sweet and taste. This study has been made by using certain methodology and based available data which is related with the study.

This study is simply a partial requirement of M.B.S program so this study is limited by the following factors:

i) The study concentrates only on those factors that are related with investment.

ii) Only secondary data will be analyzed to interpret result emerging from decision consequently the result depend on the reliability of secondary data.

iii) The study is meant for the fulfillment of requirement of the master's degree in business studies.

iv) NCC bank is considered taken for the study.

v) The truth of research is based upon the available data from the banks.

vi) The whole study is based on the current five years data and conclusion drawn confines only to the above period.

vii) The time factor is major limitation of this study become this study is completed within a short span of time.

1.8 Scheme of the study

This study has been organized over altogether five chapters. Starting from introduction, Review of Literature, Research methodology, Presentation & Analysis of data and summary, to conclusion & Recommendation as get of the entire study. A brief outline of this chapter has been outlined as under.

The first chapter entitled **"Introduction"** introduces the subject; present the research problem, reason for studying, objective of the study, along with limitation.

The second chapter entitled **"Review of Literature"** concerned with the study of portfolio analysis on investment have been reviewed & presented.

The third chapter discussed the **"Research Methodology"** used in the study. It comprises research design, nature & source of data, data gathering method and analytical tools used.

The fourth chapter deals with the **"Presentation & Analysis"** of data & scoring the empirical finding out the study through definite course of research methodology.

The last chapter i.e. "**Summary, Conclusion and Recommendation**" of the study, which is followed by the basic conclusion of the study based in the fourth chapter on the basic of these conclusion and recommendation has also been presented for consideration.

CHAPTER - II

REVIEW OF LITERATURE

Review of literature is the study of past research studies and relevant materials. It is an advancement of existing knowledge and in-depth study of subject matter. It starts with a search of a suitable topic and continues throughout the volumes of similar or related subjects. It is very rare to find out completely new problem. In literature review, researcher takes hints from past dissertation but he or she should take heed of replication. Literature review means reviewing research studies and other pertinent prepositions in the related area of the study so that all the past studies their conclusions and deficiencies and further research take place. It is a vital and mandatory process in research works. During the review of this research, in depth study and theoretical investigations regarding Investment Policy aspects and their present application and potentialities made. Investment "Range of investment held by an investor, company etc." (Oxford Dictionary: 1994) Hence, in this chapter, the focus has been made on the review of literature relevant to the investment policy of commercial banks in Nepal. For this study, different Journals, Article, Books, Annual reports and some research paper related with this topic has been reviewed.

2.1 Review of Theoretical Concepts

Review of supportive text provides the fundamental theoretical framework and foundation to the present study. For this various books, research paper, articles etc. dealing with theoretical aspects of investment and portfolio analysis are taken into consideration.

2.1.1 Commercial Banks

Commercial banks are the major financial institutions which occupy the quite an important place in the framework of every economy because they provide capital or the development of industry, trade and business and other resources deficit sectors by investing the saving collected as deposits. Besides these commercial banks renders numerous services to their customer in view of facilitating their economic and social life.

Commercial banks, play active roles, have changed the economic structure of the world. Thus the commercial banks become the heart of financial system.

"Bank is a financial intermediary accepting deposits and granting loans, offer the widest menu of services any financial institutions" (Rose ; 2002:4)

"Financial institutions are currently viewed as catalyst in the process of economic growth of a country. A key factor in the development of an economy is the mobilization of domestic resources. As intermediaries the financial institutions helps the process of resources mobilizations". (Shrestha; 195:1)

A commercial bank is a corporation, which accepts demand deposits subject to check and makes short-term loans to business enterprises, regarding of the scope of its other services. (American Institute of Banking; 1972: 345)

Commercial bank is engaged in performing the routine banking business of accepting the deposits of public and granting loans. A commercial bank receives money from the depositors and lends it to trade, commerce and industry. Commercial bank allows its customers to draw cheque against their deposits. In addition to the primary function of receiving deposits and lending to others it undertakes a wide variety of function like collection if cheques, bills, dividends etc. on behalf if customers, payments if insurance premium, subscription, rent, and salary on behalf of customer, transfer of funds, purchase and sale of securities etc. A part from the agency functions, the banks also provides certain general utility services like safe custody deposits and safe deposit locker facilities, issuing of traveler's cheques, credit, cards, debit cards, ATM, LC, gift cheques or vouchers. It can also act as a referee and guarantor of its customers.

"The commercial bank pool together the saving if the community and arrange for their productive use. They supply the financial need of the modern business. They accept the deposits from the public which are repayable on demand of on short notice. They can not afford to invest their funds in long term securities or loans. Their business is restricted to financing the short term needs of trade and industry. They provide the working capital required by the industries in their day to day transactions. They grant the loan in the form of cash credit and over draft. They also render a number of subsidiary services such as collection of bills and cheques, safe keeping of the valuables of their customers etc. Commercial Banks deals with other people's money. They have to find out the ways of keeping their assets liquid so that they could meet the demands of their customers. In their anxiety to make profits, the bank can not afford to lock up their funds in assets which are not easily realized. The depositor's confidence could be secured only if the bank is able to meet the demand for cash promptly and fully. The banker has to keep adequate cash for this purpose." (Radhaswamy; 1979:49)

"The role of banks is more significant in financing the private sector. It is true that the growth of private sectors solely depend upon banking. Banking is the mother industry that caters to the development of industry, trade and commerce. In a rapid developing economy the banker has to play a more effective role in national reconstruction. After all banking can be said to be the basic activity in planning. Bank advances and investments are indicatives of the role played by them in the economic development of the country." (Desai; 1967: 7)

2.1.2 Investments

The word investment sounds very good & attractive that is why every individual in the world is interested in it. In Layman's sense, there is always a return if there is investment. This may be favorable as well as unfavorable to the investor's stand point. Investment brings forth vision of profit, risk, speculation & wealth. For the uninformed, investing may result in disaster. In general sense; investment means to pay put money to get more. But in the broadest sense, investment means the sacrifice of current money for future money. Two different attributes are generally involved time & risk. The sacrifice takes place in the present and is certain. The reward comes later, if at all, and the magnitude is generally uncertain (Sharpe, Alexander & Baily: 2003:1). Shrestha (2002) write investment as utilization of saving for something that is expected to produce profit or benefits. Investment is employment of funds with the aim of achieving addition income of growth in value. It involves the commitment of resources that have been saved or put away from current consumption, in the hope that some benefits will acure in the future. Investment generally involves real assets and financial assets. Real assets investment involves some kinds of tangible assets such as building, land, machinery; factory etc. and financial assts investment are pieces if paper representing an indirect claim to real assets held by someone else. Real assets are generally less liquid than financial assets.

According to Reilly "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)

According to Gitman and Joehnk, "Investment is any vehicle into which funds can be placed with the expectation that will preserve or increase in value and generated positive returns." (Gitman & Joehnk: 1990)

F. Amling "Investment may be defined as the purchase by an individual or institutional investor of a financial or real asset that produces a return proportional to the risk assumed over some future investment period."

Dr. Preeti Singh defined investment as "Investment is the employment of funds with the aim of achieving additional income or growth in value."

A banker does not prefer to invest his funds in company shares and debentures. The shares and debentures may be very easily sold on the stock exchange. But the bank will incur a loss if the market value of the securities falls. Unlike the government securities there is no maturity date for shares. The income from shares depends upon the prosperity of the company issuing the shares. If the company becomes insolvent the banker loses heavily. If a bank has certain amount of funds which can be left undisturbed for a number of years, investment in long term government securities becomes profitable proposition". (Radhaswamy; 1979:549)

2.1.3 Feature of a Sound Lending and Investment Policy

The income and profit of the bank depends upon its lending procedures, lending policy and investment of its funds in different securities. The greater the credit created by the banks, the higher will be the profitability. A sound lending and investment policy is not only prerequisite for banks profitability, but also crucially significant for the promotion of a background country like Nepal.

Many authors have given some necessities or some the main characteristics for sound lending and investment policies, which must be considered by the commercial banks;

i) Safety and Security

The bank should never invest its funds in those securities, which are too volatile i.e. which are subject to too much depreciation and fluctuations because a little difference may cause a great loss. If must not invest its funds into speculative businessman who may adequate collateral having good value. This can be easily sold off if required at any point of time. The bank should accept that type of securities, which are commercial, durable and marketable having fair market value. For this purpose 'MAST' should be applied while reaching an investment decision, where MAST stands for,

M = Marketability

A = Ascertain ability

S = Stability

T = Transferability

ii) Profitability

A commercial bank can maximize its volume of wealth through maximization of return on their investments and lending. So, they must invest their funds where they can gain maximum profit. The profit of commercial banks depends on the interest rate, volume of loan, its time period and nature of investment in different securities.

iii) Liquidity

Liquidity is the ability of the firm to satisfy its short-term obligations as they come due. Generally, people used to deposit their earnings in the different accounts of the banks, having confidence that the bank will repay their money whenever it is needed. In order to maintain the confidence to the depositors, the bank must always be ready to meet current or short-term obligations when they become due for payment.

iv) Purpose of Loan

In the view point of security, a banker should always know that why a customer is in need have been loan. If a borrower misuse the loan granted by the bank, he can never repay therefore in order to avoid this situation each and every bank should demand all the essential detailed information about the scheme of project or activities.

v) Diversification

"A bank should not lay all its eggs on the same basket." This saying is very important to the bank and it should always be careful not to grant loan in only one sector. To minimize risk, a bank must diversify its investment on different sectors. Diversification of loan helps to sustain loss according to the law of average because if securities of a company deprived, there may be appreciation in the securities of other companies. In the way the loss can be minimized or recovered.

VI) Tangibility

A commercial bank should prefer tangible security to an intangible one. Though it may be considered that tangible property doesn't yield an income apart from intangible securities, which have lost their value due to price level inflation.

vii) Legality

Illegal issued securities may cause problems to the investors. Therefore, all commercial banks should follow the directives of NRB, Ministry of Finance and other relevant organization at the time of mobilization funds.

viii) National Interest

In additional to its own profitable the bank should also consider the national interest. Even though the bank cannot get maximum return from such investment, it should carry out its obligation towards the society and the country. The bank is required to invest on such sectors as per the government bonds, priority and deprived sector lending are the examples so such investments.

2.1.4 The Investments Process-Stages in Investments (Singh; 1985: 11)

The investment process is generally described in four stages. These stages are investment policy, investment analysis, valuation of securities and portfolio construction.

i) Investment Policy

The first step determines and involves personal financial affairs and objectives before making investment. It may also be called the preparation of investment policy.

The investor has to see that he should be able to create an emergency fund, an element of liquidity and quick convertibility of securities into cash. This stage may, therefore, be called the proper time for identifying investment assets and considering the various features of investment.

ii) Investment Analysis

When an individual has arranged a logical order of type's investment that he requires, on his portfolio, the next step is to analyze the securities available for investment. He must make a comparative analysis of type of industry, kind of security, fixed v/s variable securities. The primary concern at this stage would be to form beliefs regarding future behavior of stocks, the expected return and associate risk.

iii) Valuation of Securities

The third step is perhaps the most important consideration of valuation of investment. Investment value, in general, is taken to be the present worth to the owners of future benefits from investments. An appropriate set of weight have to be applied with the use of forecasted benefits to estimate the value of the investment assets. Comparison of the value with the current market price of the assets allows a determination of the relative attractiveness of the assets. Each asset must be valued on its individual merit. Finally the portfolio should be constructed.

IV) Portfolio Construction

As discussed earlier under the features of different programme, portfolio construction requires knowledge of the different aspects of securities. These are briefly recapitulated here, consisting of safety and of principal, liquidity of assets after taking into account the stage involving investment timing, selection of investments, allocation of savings to different investments and feed back of portfolio as given in table "The process of Investing"

1. Investment Policy - Determine of investible wealth - Determination of portfolio objectives - Identification of potential investment assets - Consideration of attribute of investment assets - Allocation of wealth to assets categories
2. Investment Valuation - Valuation of stocks - Valuation of debentures and bonds - Valuation of other assets
3.Investment Analysis Equity stock Analysis / Debenture and bond Analysis / Other assets analysis Screening of industries / Analysis of yield structure / Qualitative analysis Analysis of industries / Consideration of debenture / Quantitative Analysis Quantitative Analysis / Quantitative Analysis of debenture of stocks
4. Portfolio Construction - Determination of diversification level - Consideration of investment timing - Selection of investment assets - Allocation of investible wealth to investment assets - Evaluation of portfolio for feed back

"Investment is the sacrifice of certain present value for the uncertain future reward. It entails arriving at numerous decisions such as type, mix, amount, timing, grade etc. of investment and disinvestment. Further such decision making has not only to be continuous but rational also. Broadly speaking an investment decision is a trade off between risk and return". (Bhalla; 1983: 3)

There are basically three concept of investment.

- Economic investment: that is an economist's definition of investment. It includes net additions to the capital stock of society. By capital stock of society is meant those goods which are used in the production of other goods. This is a gross, societal or aggregate point of view. In society there are number of goods (such as building, plant and equipment etc) which are used to produce other goods. And that these means of production are considered part of the capital stock of society.
- Investment in a more general or extended sense, which is used by 'the man on the street'. The everybody usage of the term investment can mean a variety of things but to the man on the street it usually refers to a money commitment of some sort. For example a commitment of money to buy a new car is certainly an investment form an individual point of view. But these are so in are so in very general and in very extended sense of the word since no rate of return is involved nor is a financial return or capital growth expected.
- The sense in which we are going to be very much interested, namely, financial investment. It means an exchange of financial claims stock and bonds (collectively termed securities), real estates, mortgage etc.

2.1.5 Investments Policy of a Bank

The rate of commercial banks in the economy is obviously a prime requisite in the formulation of banks policy. A key factor in the development of the country is the mobilization of the domestic resources and their investment for productive use to the various sectors. To make it more effective, commercial banks formulate sound investment policies, which help eventually, contribute to the economy of the country. The sound policies help commercial bank maximize the quality and quantity of the investment and thereby, achieving the own objectives of profit maximization and social welfare. The banking sector has to play development role to boost the economy by adopting the growth oriented investment policy and building up the financial structure for future economic development. Formulation of sound investment policies and coordinated and efforts forward the forces of economic growth.

Investment policy is an important ingredient of overall national economic development because it ensures efficient allocation of funds to achieve the material and economic well being of the society as a whole. It is one fact of the overall spectrum of policies that guide banks investment policy. A sound and viable investment policy can be effective one for the economy to attain the economic objectives directed towards the acceleration of the lenders, which helps to increase the volume and quality of the deposits, loan and investments.

The loan provided by commercial bank is guided by several principles such as length of time, their purpose, profitability and safety etc. These fundamental principles of commercial bank's investment are fully considered while making investment policy. Investment policy should ensure minimum risk and maximum profit from lending.

"Lending is the essence of commercial banking, and consequently the formulation and implementation of sound policies are among the most important responsibilities of bank directors and management. Well conceived lending policies and careful lending practices are essential if a bank to perform it's credit creating function effectively and minimize the risk inherent in any extension of credit." (Crosse; 1963:191)

“Commercial bank cannot appropriately serve all the credit needs of their communities. Some of them because of their capital or long term nature are not eligible for bank credit. The bank however should at least be aware of such needs. even they can not fill them directly , bank can do a great deal to facilitate the flow of longer term or capital funds into their communities or to meet any excess need for short term funds through their relationship with the market; other institutional investors and their correspondent bank in the money centre. A bank first step, therefore, in formulating lending policies is to assess the needs of the credit market of community its services". (Cross; 1963: 192)

"The investment policy of the bank depends on the nature of its funds. If it can acquire funds of a more of less permanent nature, it can acquire more profitable assets. If the funds are subject to wide fluctuations, it has to keep a large part of the funds in liquid from. It is said that the soundness of a bank is reflected in the distribution of its funds on different types of assets. A good banker is one who follows a wise investment policy which brings maximum profit to shareholders and provides maximum security to the depositors. No uniform rules can be laid down to determine the portfolio a bank. The local conditions in which the bank operates will necessarily have a bearing on its investment policy. The nature and availability of funds as also assets differ widely from country. Within our country, the banks in rural areas face certain problems which are materially different from those of the banks in the urban areas. In rural areas the demand for loans is usually less liquid and less diversified as the main occupation of the people is agricultural. These differences naturally have their impact on the investment policy of the bank.

A part from the local conditions, it may be stated that a ban is fundamentally governed by three important principles of the in formulating its investment policy. The guiding principles of the investment policy of a commercial bank are liquidity, profitability and security. These three attributes are inter-related. The bank cannot afford to sacrifice one in favor of the other". (Radhaswamy; 1979: 542)

i) Liquidity

The first and the most important principle that a bank should bear in its mind while considering the application of the funds is liquidity. Liquidity is the term used to refer to the capacity of the bank to pay cash in exchange of the deposits. A large part of the bank deposits is withdrawal on demand and hence the bank must maintain a sufficient degree of liquidity in its assets. Such assets may be cash or other readily realizes assets. The foundation of the entire banking system rests on the confidence that the bank is able to create in the minds of the people. If the confidence is lost and all the depositors decide to withdraw all their deposits from the bank on the same day, even the best institution cannot survive. The investors feel confident about a bank, only if it is able to produce cash on demand. The bank must, therefore, maintain sufficient cash reserves in its vaults to honor every cheque that is presented across the counter. The concept of liquidity must be distinguished from solvency. A bank is said to be solvent if the value of its assets exceeds the value of its liabilities. It is said to be liquidity only if it is in a position to readily convert its assets into cash, with a view to meet the demand of the customers, a bank may be solvent but may not be liquid. The bank may be having assets far exceeding its liabilities in value. If the assets are in such forms that they cannot be readily sold, the bank is not liquid.

ii) Profitability

The most important objectives of a commercial bank is to make as much profit as possible. It is a business institution. Hence it aims at securing maximum profits. In this, it differs from a central bank which seeks to serve broad national interests. In the matter of acquisition of assets, a commercial bank is very much influenced by the consideration of profit. The bank must earn sufficient income from its assets so as to meet all its expenses and pay a fair percentage of dividends to the shareholders. The income will be greater if the yield from the assets is greater. Therefore the bank will try to arrange its assets in such a way that it is able to derive maximum income in order to make profits, the bank must invest the funds left with it by the depositors, in different forms of earning asset. Generally the securities which yield a higher rate of return will be long-term securities and they cannot be readily converted into cash. We have already seen that the bank must keep sufficient cash reserves to meet the demand of depositors. Cash is a nonprofit-credit assets and hence a bank cannot afford to keep a large part of funds in the form of cash. The bank must enjoy the fullest confidence of its depositors, if it were to invest a large portion of the deposits in assets that earn a profit. But this confidence is dependent upon the ability of the bank to meet readily the demands for cash made upon it by is customers. Thus liquidity and profitability are two conflicting considerations. Cash is a barren asset and it brings no income to the bank. The bank cannot invest all the funds in loans and advances because they bring higher returns since in that case it will not be able to meet the demands of the customers to pay cash. The bank always tries to reconcile these two considerations; liquidity and profitable and distributes the funds at its disposal. In other words a successful banker is one who keeps adequate cash reserves to meet the day-to-day requirements of the depositors and invest the balance in profit-earning assets. Usually a bank keeps a certain portion of the funds is kept in assets which are imperfectly liquid. They can be converted into cash easily in times of emergency and in the meanwhile they bring some income to the bank. The entire balance of the funds is used for granting loans and advances and purchasing investments which promise good earnings. The imperfectly liquid assets should have two qualities. They must be convertible into cash quickly if an emergency arises. They must be readily convertible without much loss of value. Then only the bank can fully meet the need of the depositors and it can be liquid. So the concept of liquidity includes two attributes, convertibility into cash without much loss of time and convertibility into cash without loss of value.

In the course of another attributes has been added to the concept of liquidity. It is the attributes of shift ability. It implies that the type of assets acquired by a bank should be easily shifted able to other banks or to the central bank of the country. This attributes has made the concept of the liquidity more elastic. In times of emergency and crisis which a particular bank faces or when there is a general run on the banks, this attribute of liquidity assumes great importance. The banks look to the central bank, the lender of last resort, for assistance. The central bank is willing to pay cash in exchange for the assets of commercial banks provided the assets satisfy the eligibility rules laid down by the central bank. This facility has in recent times enhanced the liquidity position and the prestige of the banking system. There is no banking asset which is liquid in the sense that the aggregate amount of the asset can be greatly contracted without deleterious effect on the volume of output. Only the existence of a central monetary agency willing and able to increase its holdings of a given asset by large amounts will make that asset liquid for the banking system.

iii) Security

The third principle is and security. The bank deals in other people's money. It can survive only so long as it is able to enjoy the confidence of the people. In its anxiety to make profits to satisfy the shareholders, it cannot afford to sacrifice the principle of safety and security of its investments. It is in the nature of the trustee of the money belonging to the public and it must exercise the greatest care and vigilance in the matter of investing the funds received from the public in the form of deposits. It does not choose risky investments though they may yield a higher return. It does not generally prefer irredeemable securities like shares. It invests mostly in government securities.

Finally, it may be said that a bank must strike a balance between liquidity, profitability and safety. The secret of successful banking is to distribute resources between the various forms of assets in such a way as to get a sound balance between liquidity and profitability so that there is cash (on hand quickly realized) to meet every claim and at the same time enough income for the bank to pay its way and earn profits for its shareholders. The formulation of a good investment policy is an art. The various types of assets must be balanced in such a way as to maximize income without incurring the danger of insolvency.

2.1.6 Principles of a Good Investments Policy (Bhalla; 1983: 9)

In choosing specific investment, investors' will need define ideas regarding a number of features that their portfolio should possess. These features should be consistent with the investors' general objectives and, in addition, should afford them all the incidental conveniences and advantages which are possible in their circumstances. The following are the suggested features as the ingredients from which many successful investors compound their selection policies.

i) Principle of Safety

The safety sought in investment is not absolute or completes the word means, rather protection against loss under reasonable likely. It calls for careful review of economic and industrial trends before choosing any type of investments or the time to invest. Thus, this principle recognizes that errors are unavoidable and requires extensive diversification.

ii) Adequate liquidity and Collateral Value

An investment is a liquid asset if it can be converted in to cash without delay at full market value in any quantity.

For an investment to be liquid it must be either reversible or marketable. The difference between reversible and marketability is that reversibility is the process whereby the transaction is reversed or terminated where marketability involves the sale of the investment in the market for cash. To meet emergencies, every investor must have a sound portfolio to be sure for the additional funds, which may be needed for the business opportunities. Whether money is rising is to be done by sale or by borrowing it will be easier if the portfolio contains a planned proportion or higher – grade and readily saleable investment.

iii) Stability of Income

Stability of income must be looked a different ways just as was security of principle. An investor must consider stability of monetary income and stability of the purchasing power of income. However, emphasis on income stability may not always be consistent with other investment principles. If the income stability is stressed, capital growth and diversification will be limited.

IV) Capital Growth

Capital appreciation has today an important principle. Recognizing the connection between corporation and industry growth and very large capital appreciation, investors and their advisors constantly are seeking "growth stock". It is exceedingly difficult to make successful choice. The ideal "growth stock" is the right issue in the right industry, bought at the right time.

v) Tax Status

To plan an investment program without regarding to one's tax status may be costly to the investor. There are really two problems involved here that, one concerned with the burden of income taxes upon that income. When investor's incomes are small, they are anxious to have maximum cash returns on their hand, investors who are not presses for cash income often find that income taxes deplete certain types of investment incomes less than others, thus affecting their choices.

VI) Purchasing Power Stability

Since an investment nearly always involves the commitment of current funds with the objectives of the investor should consider receiving greater amounts of future funds, the purchasing power of the future fund. For maintaining purchasing power stability, investors should carefully study I) the degree of price level inflation they accept, II) the possibility of gain in the investment available to them and III) the limitations imposed by personal and family considerations.

vii) Conceivability

To be safe from social disorders, government confiscation or unacceptable levels of taxation, property must be conceivable and level no record of income received from its use of sale. Gold and precious stones have long been estimated for purposes because they combine high value with bulk and are readily transferable.

2.1.7 Some Important Terms

The study in this section comprises of some important banking terms for which efforts have been made to clarity the meaning, which are frequently used in this study, which are given below.

i) Loan and Advance

Loan, advances and overdraft are the main source of income for a bank. Bank deposits can cross beyond a desired level but the level of loans, advances and overdrafts are the main service in which customers of the bank can enjoy.

Funds borrowed from banks are much cheaper than those borrowed from unorganized moneylenders. The demand for loan has excessively increased due to cheaper interest rate. Furthermore, an increase in economic and business activities always increase the demand for funds. Due to limited resources and increasing loan, 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 loan from these 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.

In addition to this, some portion of loan, advances and overdraft includes that amount which is given to staff of the bank for house loan, vehicles loan, personal loan and others, in mobilization of commercial banks fund, loan, advances and overdrafts have occupied a large portion.

ii) Investment on Government Securities, Shares and Debentures

Though a commercial bank can earn some interest and dividend from the investment on government securities, shares and debentures, it is not the major portion of income, but it is treated as a second source of banking business. A commercial bank may extend credit by purchasing government securities bond and shares for several reasons. Some of them are given as;

- It may want to space its maturates so that the inflow of cash coincide with expected withdraws by depositors or large loan demands of its customers.
- It may wish to have high-grade marketable securities to liquidity if its primary reserve becomes inadequate.
- It may also be forced to invest because the demand for loans has decreased or is not sufficient to absorb its excess reserves.

However, investment portfolio of commercial bank is established and maintained primarily with a view of nature of banks liabilities that is since depositors may demand funds in great volume without previous notice to banks. The investment must be of a type that can be marketed quickly with little or no shrinkage in value.

iii) Investment on Other Company's Shares and Debentures

Due to excess funds and least opportunity to invest these funds in much more profitable sector and to meet the requirement of NRB directives many commercial banks have to utilize their funds to purchased shares and debentures of many other financial and non-financial companies. Nowadays most of the commercial banks have purchased regional development banks NIDC and other development banks shares.

iv) Other use of Fund

A commercial bank must maintain the maximum bank balance with REB i.e. 6% for fixed deposits and 8% for each of current and saving deposit account in local currency. Similarly 3% cash balance of local balance, in local currency, accounts must be maintained in vault of the bank. Again a part of the fund should be used for bank balance in foreign bank and to purchase fixed assets like lands, building, furniture, computers, stationery etc.

v) Off-balance Sheet activities

Off-balance sheet activities involve contracts for future purchase and sale of assets and all these activities are contingent obligation. These are not recognized as assets or liabilities on balance sheet. Some good example these items are letter of credit, letter of guarantee, bill of collection etc. Nowadays, such activities are stressfully highlighted by some economist and finance specialists to expend the modern transaction of a bank.

vi) Deposits

For a commercial bank, deposit is the most important source of the liquidity. For bank's financial strength, it is treated as a barometer. In the word of Eugene, "a bank's deposits are the amount that it owes to its customers." Deposit is the lifeblood of the commercial bank. Though, they constitute the great bulk of bank liabilities, the success of a bank greatly depends upon the extent to which it may attract more and more deposits, for accounting and analyzing purpose, deposits are categorized in three headings. They are; current deposits, saving deposits, fixed deposits.

2.2 Review of Literature Related to the Study

This section is developed to the review of major related literature concerning investment policy in different country. For this study, various books, journals, articles and past thesis are reviewed. It is review form international context and form Nepalese context.

It may be said that a bank must strike a balance between liquidity, profitability and safety. "The secret of successful banking is to distribute resources between the various forms of assets in such a way as to get a sound balance between liquidity and profitability so that there is cash to meet every claim and at the same time, enough income for the bank to pay its way and earn profits for its shareholders." (M.Radhaswami/ S.V. Vasudevan: 1979)

According to Reed, Cotter, Gill and Smith, "Commercial banks still remain the heart of our financial system holding the deposits of millions of persons, governments and business units. They make funds available through their lending and investing activities to borrowers, individuals, business firms and governments. Commercial banks are the most important type of financial institutions in the nation in terms of aggregate assets". (Edward W. Reed, Edward K. Gill, Richard V. Cotter, Richard K. Smith: 1980:P. 1-5) The primary function of commercial banks is the extension of credit to worthy borrowers. In making credit available, commercial banks are rendering a great social service. Though their action, production is increased, capital investments are expanded, and a higher standard of living is realized. Although the investment activities of commercial banks are usually considered separately from lending, the economic effects and social results are the same.

The rate of return on assets is a valuable measure when comparing the profitability of one bank with another or with the commercial banking system. A low rate might be the result of conservative lending and investment policies or excessive operating expenses. Banks could, of course, attempt to offset this by adopting more aggressive lending and investment policies to generate more income.

Emphasizing the importance of policy, **H.D. Crosse** puts his view in this way, "Lending is the essence of commercial banking, and consequently the formulation and implementation of sound policies are among the most important responsibilities of bank directors and management. Well conceived lending policies and careful lending practices are essential if a bank is to perform its crediting function effectively and minimize the risk inherent in any extension of credit." (H.K. Course: 2nd Edition: 1963)

An article published on The Kathmandu Post daily of 9th March 2003 entitled "Managing a banking risk" by Chandra Thapa, in his article ha has accomplished the subsequent issues.

Banking and financial service are among the fastest growing industrial in developed world and are also emerging as cornerstones for other developing and undeveloped nations as well. Bank primary function is to trade risk. Risk cannot be avoided by the bank but can only be managed. There exist to type of risk. The first is the diversifiable risk or the firm specific risk which can be mitigated by maintaining an optimum and diversified portfolio. This due to the fact that when one sector does not do well the growth in another might offset the risk. Thus, depositor must have the knowledge of the sector in which there banks have make the leading. The second is undiversifiable risk and it is correlated across borrower, countries, and industries. Such risk is not under control of the firm and bank.

According to Mr. Thapa risk management of the banks is not only crucial for optimum trade off between risk and profitability but is also one of the deciding factors for overall business investment leading to growth of economy. Managing risk not only needs sheer professionalism at the organizational level but appropriate environments also need to develop. Some of the major environmental problems of Nepalese banking sector are under government intervention, relatively weak regularly fame, if we consider the international standard, meager corporate governance and the biggest of all is lack of professionalism. The only solution to mitigate the banking risk is to develop the badly needed commitment eradication of corrupt environment especially in the disbursement of lending, and formulate prudent and conducive regularly frame work.

Prabhakar Ghimire (1999) has published an article in which he has mentioned that most on the commercial banks of Nepal are ready to pay the penalty in spite of investing on rural, priority sector, poverty stricken and deprived areas. In the directives of Nepal Rastra Bank it is clearly mentioned and directed that all the commercial banks (under NRB) should invest 12%, of its total investments to the priority sectors. Out of this 12%, they should invest 3% to the lower class of countrymen. However these commercial banks are unable to meet the requirements of NRB. In the light of above, foreign joint venture banks use to justify that they don't have any network among these priority areas. So, if investment is made to these areas, operation cost will be very high, that exceeds the penalty if investment won't be made. That is why are interested in paying penalty rather than investing in priority sectors.

Another article published on The Kathmandu Post daily of 28th April 2005 entitled "Efficient Banking" by **L.D. Mahat,** in his article he has accomplished, the efficiency of banks can be measured using different parameters. The concept of productivity and profitability can be applied while evaluating efficiency of banks. The term productivity refers to the relationship between the quantity of inputs employed and the quantity of outputs produced. An increase in productivity means that more output can be produced from the same inputs or the same outputs can be produced from fewer inputs. Interest expense to interest income ratio shows the efficiency of banks in mobilization resource at lower cost and investing in high yielding asset. In other words, it reflects the efficiency in use of funds.

According to Mr. Mahat, the analysis of operational efficiency of banks will help one in understanding the extant of vulnerability of banks under the changed scenario and deciding whom to bank upon. This may also help the inefficient banks to upgrade their efficiency and be winner in the situations developing due to slowdown in the economy. The regulators should also be concerned on the fact that the banks with unfavorable ratio may bring catastrophe in the banking industry.

Murari R. Sharma (1996), in his article "A study of joint venture banks in Nepal; co-existing and crowding out" pointed out that it is very much beneficial for Nepalese to let joint venture banks to enhance the development of local commercial banks. But the government should charge more cost to joint venture banks than the local commercial banks. He suggested HMG to treat equally to joint venture banks and local banks, both types of banks will co-exist complementing each other and contributing the nations accelerated development.

Chopra, Sunil (1989) in his article, "Role of foreign banks in Nepal" had conducted that the joint venture banks playing an increasingly dynamic and vital role in the economic development of the county that will undoubtedly increase with time.

K.Pradhan (1991), has pointed out some major issue in local commercial banks in comparison of recently established joint venture banks through his article "Nepal ma Banijya Bank: Uplabdhi tatha Chunautui". The study deals with the whole commercial banking system of Nepal in respect of their performance and profitability. Some of his finding relevant to this study is summarized as:

- To deposit collection rate of local banks is very poor in comparison to joint venture banks.
- The patterns of deposit are also different between these banks. The ratio of current deposit in local banks is 9.34% only where the same as the joint venture banks is 52.5%. But the fixed deposit ratio is very high in local banks.

Shekahar Bahadur Pradhan (1996), has presented a short glimpses on investment in different sectors its problem and prospects through his articles, "Deposit mobilization, its problem and prospects".

He quoted that deposit is the life-blood of any financial institutions, be it commercial bank, financial company, co-operative or mom-government organization. According to him, "In consideration of twentytwo commercial banks. Nearly three dozen finance companies, the latest figure does produce a strong feeling that a serious review must be made of probes and prospects of deposit sectors. Leaving few joint venture banks, other organizations rely heavily on the business deposit receiving and credit disbursement. Mr. Pradhan has pointed out following problems of deposit mobilization in Nepalese context.

- Due to the lack of education most of the Nepalese people do not go for saving in institutional manner. However, they are very much used of saving be it in the form of the cash or ornaments. Their reluctance to deal with institutional system is governed by the lower level of understanding about financial organization process, withdrawal system, and availability of depositing facilities and so on.
- Due to lesser office hours of banking system people prefer holding cash in the personal possession.
- Unavailability of the institutional services in rural areas.
- No more mobilization and improvement of the employment of deposits in the loan sectors.

Mr. Pradhan has also suggested for the prosperity of deposit mobilization. They are as follows:-

- By cultivating the habit of using rural banking unit.
- By adding service hour system to bank.
- By providing sufficient institutional services in the rural areas.
- Nepal Rastra bank could also organize training program to develop skilled manpower.
- By spreading co-operatives to the rural areas to develop mini banking services.

Several researches have been performed on investment policy of commercial banks. Previous research studies on the various aspects of commercial banks such as investment policy, lending policy capital structure are reviewed some of them are supposed to be relevant for this study. So findings of such research are presented below.

Prabhakar Dhungana (2006), in his thesis, "A Study on Investment Policy of Nepal Bangladesh Bank" he has set the following objectives in his study:

- To study the fund mobilization and investment policy with respect to fee based off balance sheet transaction and fund based on balance sheet transaction.
- To evaluate the liquidity, efficiency of assets management and profitability position, the trends of deposit utilization towards total investment and loan and advances, growth ratios of loan and advances and total investment with respective a growth rate of total deposit and net profit.
- To study the various risks in investment finding and conclusions of the study were as follows:
  - NBBL has not good deposit collections it doesn't have made enough cash and bank balance and it has made negligible amount of investments in government securities.
  - The assets management ratios were highly variable which reveals NBBL has not followed stable policy.
  - NBBL's ratios of OBS operation to loan and advances are low.
  - The credit risk ratios and interest risk ratios of NBBL is high Banks profitability solely depends on interest charged by a bank but the high interest rate risk of NBBL shows that bank is failure to maintain this.
  - Trends of deposit collection lending, investment and Net Profit were not good.

Ram Khadka (2007), has conducted thesis research on "A Study on the Investment Policy of NABITL Bank" The objectives of the research were as follows:

- To evaluate the liquidity, as management efficiency and profitability position in related fund mobilization of NABIL bank.
- To find out the relationship between deposit and total investment, deposit and loan and advances, and Net Profit and outside assets of NABIL.

- To evaluate growth ratios of loan and advances and total investment with respective growth rate of total deposits and net profit of NABIL.
- To discuss fund mobilization and investment policy of NABIL in respect to its fee based off balance sheet transaction and fund based on balance sheet transactions.
- To evaluate the trend of deposit utilization and its projection for next five years of NABIL bank.
- To suggest and recommendation some measure on fund mobilization and investment policy of NABIL for the improvement of financial performance of NABIL in future.

The findings of the research were as follows:

- The liquidity position of NABIL is not so good. NABIL has utilized more portions of current asset as loan and advances and less portion as investment on govt. securities.
- The profitability position of NABIL is better.
- NABIL seems to be more successful to increase sources of fund and its mobilization i.e. deposit loan and advances an total investment but it seems to be failure to maintain its high growth rate of profit.
- There is significant relationship between deposit and loan and advances as well as out side assts and net profit where as there is no significant relationship between deposit and total investment of NABIL.
- NABIL is less successful in on balance sheet utilization as well as off balance sheet operation which predicted that NABIL could not mobilize as efficiency.
- There is no significant different between mean ration of loan and advances to total deposit, total investment to total deposit government securities to current assets, loan and advances to current assets return on loan and advances, total interest earned to total outside assets o NABIL bank.
- Trend values of loan and advances to total deposit of NABIL is in increasing trend where as the total investment to total deposit of nabil is also increasing trend.

Prem Bahadur Sahi (2008), has conducted research on "Investment Policy of Nepal Bank limited" The major objectives of this research are as follows:

- To evaluate the liquidity position of Nepal bank Ltd.
- To find out the on balance sheet as well as off balance sheet operations of NBL.
- To evaluate profitability position of NBL
- To find out growth ratios of NBL

The major findings of his study were as follows:

- The liquidity position of NBL is better.
- NBL is less successful on balance sheet as well as off balance sheet operation. It has followed any definite policy with regard to the management of its assets.
- The profitability position of NBL is not so good.
- A growth ration of NBL is low.

Mr. Shahi recommended that to get success itself and to encourage financial and economic development of the country through industrialization and commercialization commercial banks must mobilize its funds in different sectors such as purchasing of shares and debentures of other financial and non financial companies. He has recommended that banks should make continuous efforts to explore new competitive out loan default in commercial boans it a result of various factors i.e. political influence, lack of the necessary skills of project appraisal, improper collateral evaluation, reregulation supervision and lack of entrepreneurship attitude. He also suggested enacting loan recovery act to enhance the recovery of loan.

2.3 Research Gap

This study will try to show the current issue, latest information on financial indicators, data and real picture of investment policy of NCC Bank. This study covers the recent financial data. NRB circular and guidelines that of studies previously conducted. To show latest pictures of financial indicators researcher covered the recent financial and collect the latest information of changes that occur in this periods. This study puts its effort to find out.

The proportion of total loan and advances of the bank disbursed to different sectors of economy and analyze the diversification of its investment. Hence this study fulfills prevailing research gap about in depth analysis of the investment policy of NCC Bank.

CHAPTER - III
RESEARCH METHODOLOGY

Research methodology is the progress of arriving at the solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of facts and figures. Research is a systematic method of finding right solution for the problem where as research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objectives in view. In other words research methodology refers to the various methods of practices applied by the researcher in the entire aspect of the study. It is the plan, structure and strategy of investigations conceived to answer the research question or test the research hypothesis. Research design is used to control variance (Wolff & Pant: 2002:51). It includes different dependent & independent variables, types of research design, research design, research questions and hypothesis sample, data collection activities, technique of analysis etc.

3.1 Research Design

The present study is mainly based on two type of research design i.e. descriptive and analytical. Descriptive research design describes the general pattern of the Nepalese inventors, business structure, problem of investment policy etc. The analytical research design makes analysis of the gathered facts and information and makes a critical evaluation of it.

Finally research design is the plan, structured and strategy of investigations conceived so as to obtain answers to research questions and to control variances. To achieve this study descriptive and analytical research designs have been used.

3.2 Population and Sample

Under the study of investment policy of Nepalese commercial banks, the total number of commercial banks including domestics and joint venture banks operating in the Nepal is the population. At present there are seventeen licensed commercial banks are running in Nepal. All 17 licensed Nepalese CBs will consider as the total population out of them this study will be concern with two CBs as a sample. In the sample, banks are taken according to their rapid growth rate & gradually growth rate which head office is in Kathmandu. For this population NCC Bank Ltd. has been selected as sample and its data related to investment policy are comparatively studied.

3.3 Nature and Sources of Data

This study mainly based on secondary data. Concerned banks, Nepal Rastra Bank, SEBO and different library are the providers of the data. The review of literature of the proposed study was based on the text books, official publications, journals, unpublished thesis, web site etc. The necessary data and information at macro level have been collected from relevant institutions and authorities such as NRB Ministry of Finance, NEPSE, SEBO and their respective publications similarly the required micro level data derived from annual reports of selected banks, SEBO and NEPSE. In addition to above, supplementary data and information were collected from different library such as library of Shankar Dev Campus, T.U. Central library, SEBO etc. The major sources of data and information are as follows;

- NRB Economic Report, NRB
- Non-Banking Financial Statistics, NRB
- Banking and Financial Statistics, NRB
- Economic Survey, Ministry of Finance
- Annual Reports of Concern Commercial Banks
- Annual Report of SEBO Nepal
- Trending Report of NEPSE
- Journal of Finance
- Journal of Business
- Previous Research Studies, Dissertation and Articles on the Subject
- Various Text Books
- Different Library
- Different Website Related to study

3.4 Methods of Analysis

To achieve the objectives of the study, various financial and statistical tools have been used. The analysis of data will be done according to the pattern of data available.

Due to limited time and resources, simple analytical statistical tools such as percentage, graph, Karl Person's coefficient of correlation are used in this study. Likewise, some financial tools such as radio analysis and trend analysis have also been used for financial analysis.

The various calculated results obtained through financial and statistical tools are tabulated under the different headings. Then they are compared with each other to interpret the results.

3.4.1. Financial Tools

Financial tool are used to examine the strength and weakness of banks. In this study financial tools like ratio analysis and financial statement analysis have been used.

Ratio Analysis

Financial ratio is the mathematical relationship between two accounting figures. Ratio analysis is a part of the whole process of analysis of financial statements of any business or industrial concern especially to take output and credit decisions. Thus ratio analysis is used to compare a firm's financial performance and status to that of other firm's to it overtime. The qualitative judgment regarding financial performance of a firm can be done with the help of ratio analysis.

a) Liquidity Ratios

The ability of the firm is to met its short term obligation is known as liquidity. It reflects the short term financial strength of the business. These ratios are used to know the capacity of the concern to repay its short term liability. Usually the following two ratios are calculated for this purpose.

i) Current Ratio

This ratio shows the relation between current assets and current liabilities. The current ratio is calculated by dividing current assets by current liabilities. The objective of this ratio is to measure the ability of the firm to meet its short term obligation.

Current assets involve cash and Bank balance, money at call or short notice, loans and advance, overdrafts, bills purchased and discounted investment on government securities and others interest receivable and miscellaneous current assets. Similarly, current liabilities involve deposit and other short term loans, tax provision, dividend payable, bills payable, staffs bonus and sundry liabilities. The standard ratio is 2:1 but accurate standard depends upon circumstances and nature of business. Current ratio can be measured as,

$$\text{Current Ratio} = \frac{CurrentAssets}{CurrentLiabilities}$$

ii) Cash and Bank balance to total deposit ratio.

Cash and bank balance are the most liquid current assets of a firm, cash and bank balance to total deposit ratio measure the percentage of most liquid assets to play depositors immediately. This ratio is computed dividing the amount of cash and bank balance by the total deposits. It can be presented. As,

$$\text{Cash and bank balance to total deposit ratio.} = \frac{Cah \,\&\, bankbalance}{Totaldeposit}$$

Where total deposits consist of deposits on current account, saving account, fixed account money at call and other deposits.

iii) Cash and bank balance to current assets ratio

This ratio measure the percentages of liquid assets i.e. cash and bank balance among the current assets of a firm. Higher ratio shows the higher capacity of firms to meet the cash demand.

$$\text{Cash \& Bank balance to current assets ratio} = \frac{Cash \,\&\, bankbalance}{currentassets}$$

Hence, cash and banks balance includes cash in hand, foreign cash and foreign banks.

b) Asset management ratios

Assets management ratio is here used to indicate how efficiently the selected banks have arranged and invested their limited resources. The following financial ratio related to investment policy is calculated under asset management ratio and interpretations are made by these calculations.

i) Loan and advance to total deposit ratio

This ratio is calculated to find out how successfully the selected banks and finance companies are utilizing their total collections/ deposits on loan advance for the purpose of earning profit.

Loan & Advance to total deposit ratio = $\frac{TotalLoanAndAdvance}{TotalDeposit}$

ii) Total investment to total deposit ratio.

Investment is one of the major sources of earning money. This ratio includes how properly firm's deposits have been invested on government securities and shares and debenture of other companies. This ratio can be computed diving total amount of investment by total amount deposit collection which can be show as:

Total investment of total deposit ratio = $\frac{TotalInvestment}{TotalDeposit}$

iii) Loan and advance to total working fund ratio.

The main element of total working fund is loan and advance. This ratio indicates the ability of selected banks and financial companies in terms of earning high profit from loan and advance. Loan and advance amount by total working fund. That is formulizing as:

Loan & advance to total working fund ratio = $\frac{TotalLoan \,\&\, Advance}{TotalWorkingFund}$

Where, total working fund include total amount of assets given balance sheet which refers to current assets, net fixed assets, total loans for development banks and other sundry assets except of balance sheet items. i.e. letter of credit, letter of guarantee etc.

iv) Loan Loss ratio

This ratio shows the possibility of loan default of a bank. It indicate how efficiently it manages its loan and advances and makes effort for loan recovery Higher ratio implies higher portion of nonperforming loan portfolio. Dividing loan loss provision from total and advances derives this ratio. This can be calculates as;

Loan Loss Ratio = $\frac{TotalLoss\,\mathrm{Pr}\,ovision}{TotalLoanandAdvance}$

Here, the numerators indicate the amount of provision for possible loss.

c) Profitability ratios

Maximization of profit is the main objective of each every business concern. It is very necessary to earn maximum profit for the successful running of business concern. According to Keynes, "Profit is the engine that drives the business enterprises." The profit is also important to preserve the existence of business as well as strengthen and expand it.

The profitability ratio is related to profit. It shows the overall efficiency of the business concern. The earning capacity of a business is measured by profitability ratio.

i) Return on total assets

This ratio establishes the relationship between net profit and total assets. This ratio is also called 'profit to assets ratio'. It is calculated dividing return on net profit/ loss by total working fund and can be expressed as:

Return on Assets. = $\frac{Net\,\mathrm{Pr}\,ofitAfterTax}{TotalAssets}$

ii) Total Interest Earned to Total outside Assets

This ratio shows the relationship between interest earned amount and total outside assets borrowed by the bank. Total interest earned is that amount which is earned investing in different sectors by the bank in an accounting year. Whereas total outside assets include loans (short term as well as long term), borrowings and bond amount. This ratio is calculated follows;

$$\text{Total Interest Earned to Total outside Assets} = \frac{\text{Total Interest Earned}}{\text{Total Outside assets}}$$

iii) Return on loan and Advance Ratio

Return on loan and advances ratio shows how efficiency of the Banks and finance companies have utilized their resources to earn good return provided loan and advances. This ratio is computed to divide net profit/ loss by the total amount of loan and advances. It can be mentioned as;

$$\text{Return on Loan \& Advances Ratio} = \frac{\text{Net Profit or Loss}}{\text{Total Loan \& Advances}}$$

iv) Total Interest Earned to Total Working Fund

Total interest earned to total working fund is calculated to find out the percentage of interest earned to total assets. Higher the ratio indicates the better performance of financial institutions in the form of interest earning on the better working fund. This ratio is calculated diving total interest earned from investment by total working fund and is mentioned as below;

$$\text{Total Interest Earned to Total Working Fund Ratio} = \frac{\text{Total Interest Earned}}{\text{Total Working Fund}}$$

V) Return on Equity Ratio (ROE)

Net worth refers to the owner's claim of a bank. The excess amount of total assets over total liabilities is known as net worth. This ratio measures how efficiently the banks have used the funds of owners. This ratio is calculated by dividing net profit by total equity capital (net worth). This can be stated as:

$$\text{Return on Equity Ratio (ROE)} = \frac{\text{Net Profit}}{\text{Total Equity Capital}}$$

Here, Total equity capital includes shareholder's reserve including P/L a/c, GLLP and share capital i.e. ordinary share and preference share capital.

vi) Interest Earned to Total Operating Ratio

This ratio is calculated to find out the proportion of interest in total operating income of the bank. It indicates how efficient the bank in mobilization of its resources (funds) in interest bearing assets i.e. loan and advances investment etc. This ratio is calculated by dividing total interest earned by total operating income. This ratio can be stated as:

$$\text{Interest Earned to Total Operating Income Ratio} = \frac{\text{Total Interest Earned}}{\text{Total Operating Income}}$$

d) Risk Ratio

Risk means uncertainty, which lies in the business transaction of investment management. When a firm wants to bear risk and uncertainty, profitability and effectiveness of the firm increases. This ratio checks the degree of risk involved in the various financial operations. For this study, following risk ratios are used to analyze and interpret the financial data and investment policy.

i) Credit Risk Ratio

Credit risk helps to check the profitability of loan non repayment or the possibility of loan to go into default. Credit risk ratio is calculated in percentage dividing total loan advances by total assets and is expressed as;

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

ii) Capital Risk Ratio

Capital risk ratio measures Bank's ability to attract deposits and inter – bank funds. It also determines the level of profit; high ratio indicates high return and high risk and vice – versa. It is calculated by dividing share capital to risk weight assets. The risk is low if funds are kept idle as cash and Bank balance but reduces profitability. The following formula can help to calculate the capital risk ratio.

$$\text{Capital Risk Ratio} = \frac{\text{Share Capital}}{\text{Risk Weight Assets}}$$

iii) Interest Rate Risk Ratio

Interest rate risk shows the decline in the net interest income (NII) due to the change in the interest rates charged by the bank on its deposits and loan and advances. Higher interest rate risk ratios suggest the banks to increase the interest net interest income (NII) and vice – versa. This ratio is calculated by dividing interest sensitive assets by interest sensitive liabilities (i.e. borrowing total deposits) excluding current deposits. This can be mentioned as:

$$\text{Interest Rate Risk Ratio} = \frac{\text{Interest Sensitive Assets}}{\text{Interest Sensitive Liabilities}}$$

Here, the numerator includes Treasury bill, development bonds, investment in debenture, mutual fund and other investment and denominator includes borrowing from NRB and other banks, total deposits excluding current deposits.

iv) Growth Ratios

To examine and analyze the expansion and growth of the banks business, following growth ratios are calculated in this study.

- Growth ratio of total deposits
- Growth ratio loan and advances
- Growth ratio of total investments
- Growth ratio of net profit

3.4.2 Statistical Tools

Statistical tools help to find out the trends of financial position of the bank. it also analyzes the relationship between variables and helps banks to make appropriate investment policy regarding to profit maximization and deposit collection, fund utilization through providing loan & advances or investment on other companies. Ranges of statistical tools are also used to analyze the collected data and to achieve the objectives of the study. Simple analytical tools such as standard deviation, Karl Person's coefficient of correlation, trend analysis adopted which are as follows:

A. Arithmetical Mean

It re[resents the entire data by a single value. It provides the gist and gives the bird's eye view of the huge mass of unwieldy numerical data. It is calculated as:

$$\bar{x} = \frac{x}{N}$$

Where:

$\bar{x}$ = Arithmetic mean

N = Number of observations

X = Sum of observations

B. Standard Deviation

Standard deviation is an important and widely used to measure dispersions. A standard deviation is the positive square root of the arithmetic mean of the squares of the deviations of the given observations from their arithmetic mean. It is denoted by the letter ± (sigma). In this study standard deviation of different ratios are calculated.

$$\pm = \sqrt{\frac{X2}{N} Z(\frac{X}{N})^2}$$

Where,

± = Standard Deviation

$\frac{X2}{N}$ = Sum of Squares of Observation

$(\frac{X}{N})^2$ = Sum of Squares of Mean

C. Coefficient of Variation

The Coefficient of variation is the most commonly used measure of relative variation. It is relative measures of dispersion, comparable across distribution, which is defined as the ratio if the standard deviation to the mean expressed in percent. It is used in such problems where the researcher wants to compare the variability of data more than two years. A series with smaller C.V. is said to be less variable or more consistent or more homogeneous or more uniform or more stable than the others and vice versa. It is calculated as;

$$\text{Coefficient of variation} = \frac{SandardDeviation}{Mean} \text{ x } 100\%$$

$$\text{C.V.} = \frac{\pm}{\bar{x}}$$

Where,

$\bar{X}$	=	Mean
±	=	Standard Deviation
C.V.	=	Coefficient of Variation

D. Coefficient of Correlation

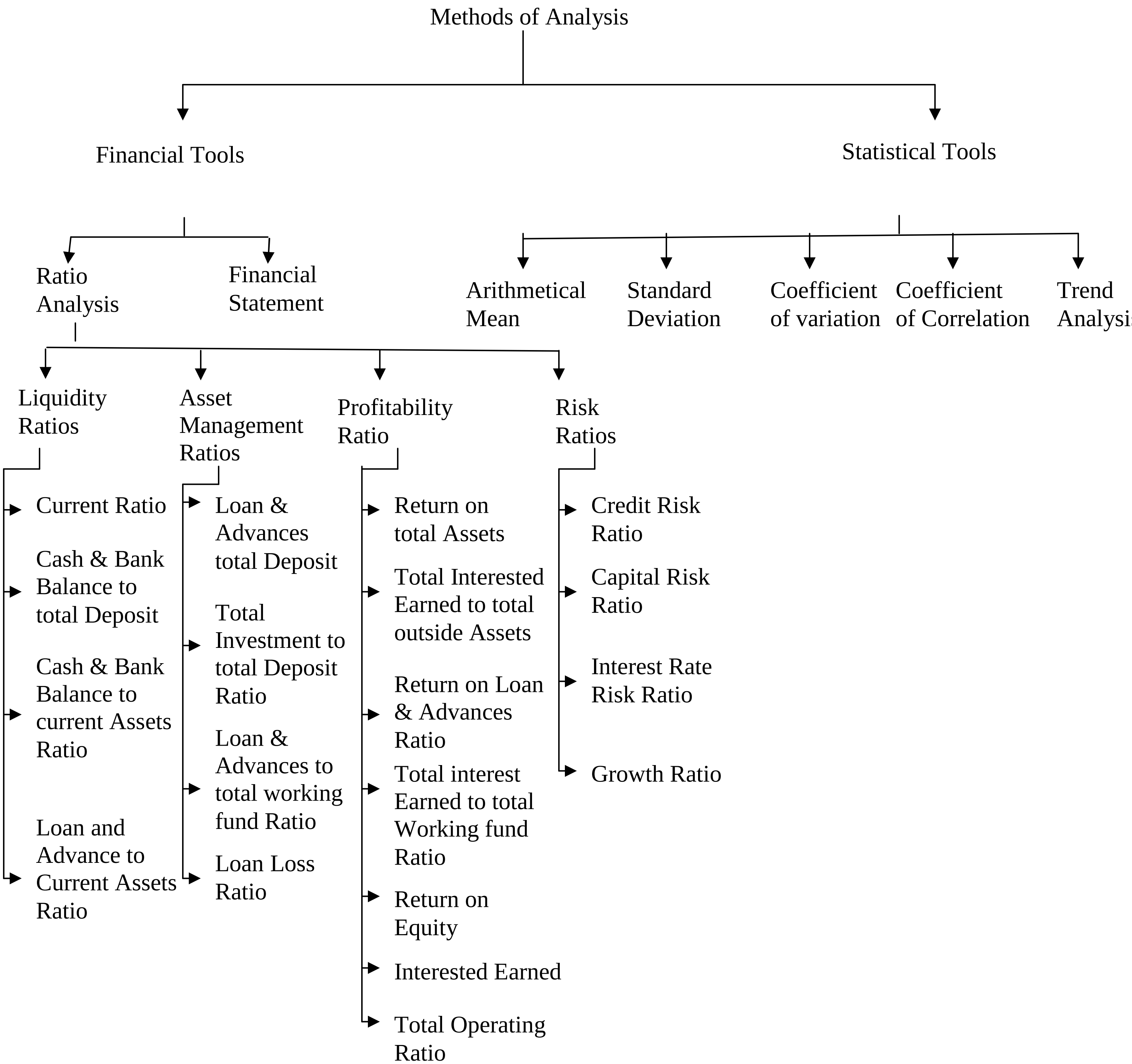
Coefficient of correlation is the mathematical method of measuring the degree of association between the two variables i.e. one dependent and one independent. This analysis interprets and identifies the relationship between two or more variables. In the case of highly correlated variables, the effect of none variable may have effect on other correlated variable. Under this topic, this study tries to find out relationship between the following variables:

- Co-efficient of correlation between deposit and loan and advances.
- Co-efficient of correlation between deposit and total investment.
- Co-efficient of correlation between total outside assets and net profit.

This tool analysis the relationship between these variables and helps the banks to make appropriate policy regarding deposit collection, fund utilization (loan and advances investments) and maximization of profit.

E. Trend Analysis

Under this topic we analyze and interpret the trend of deposits, loan and advances, investment and net profit of NCC Bank that helps to make forecasting for next five years. The following trend value analyses have been used in this study. Trend analysis of total deposit, loan and advances, total investment and net profit. The trends of related variables can be calculated as, Y=a + bx


Methods of Analysis
Financial Tools
Statistical Tools
Ratio Analysis
Financial Statement
Arithmetical Mean
Standard Deviation
Coefficient of variation
Coefficient of Correlation
Trend Analysi
Liquidity Ratios
Asset Management Ratios
Profitability Ratio
Risk Ratios
Current Ratio
Cash & Bank Balance to total Deposit
Cash & Bank Balance to current Assets Ratio
Loan and Advance to Current Assets Ratio
Loan & Advances total Deposit
Total Investment to total Deposit Ratio
Loan & Advances to total working fund Ratio
Loan Loss Ratio
Return on total Assets
Total Interested Earned to total outside Assets
Return on Loan & Advances Ratio
Total interest Earned to total Working fund Ratio
Return on Equity
Interested Earned
Total Operating Ratio
Credit Risk Ratio
Capital Risk Ratio
Interest Rate Risk Ratio
Growth Ratio

CHAPTER - IV
DATA PRESENTATION & ANALYSIS

4.1 Analysis of Financial Performance

Financial analysis is the process of identifying the financial strength and weakness of the organization presenting the relationship between the items of balance sheet. For the purpose of this study, ratio analysis has been mainly used any with the help of it, data can be analyzed various financial ratios related to the investment management and the fund mobilization are presented and discussed to evaluate and analyze the performance of NCC bank. Financial ratios are calculated and data will be analyze with the help of those ratios. Some important financial ratios are only calculated from the point of view of the fund mobilization and investment policy. The ratios are designed and calculated to highlight the relationship between financial items and figures. It is a kind of mathematical relationship and procedure dividing one item by another. All these calculations are based on financial statements of concerned bank. The important and needed financial ratios, which are to be calculated for the purpose of these studies, are mentioned below.

Liquidity Ratio, Assets Management Ratio, Profitability Ratio, Risk Ratio, Growth Ratio.

4.1.1 Liquidity Ratio

Ratio analysis express quantitative relation of two mathematical variables as it is a financial tool. Ratio is judge an accounting figure in relation to the other accounting balances. There are different types of ratio used to measure a firm's financial position. Liquidity ratio presents liquidity position of a firm. Liquidity position is calculated taking relation to the different portfolios of the firm. It may vary based on nature of business. In this study following ratios are mentioned of the concerned financial institution.

4.1.1.1 Current Ratio

Current Ratio indicates the ability of a bank to meet its current obligation. Standard of current ratio is 2:1 for banking and seasonal business current ratio is 9:1 and so on.

We have,

$$\text{Current Ratio} = \frac{TotalCurrentAssets}{TotalCurrentLiabilities}$$

Calculation of Mean, standard deviation and coefficient of variation of Current Ratios.

Current ratios of Nepal Credit & Commerce bank (NCC) from the fiscal year 2004/2005 to 2008/2009 are given below in Table No.4.1 Standard deviation is calculated by using the formula of STDEV, mean is calculated by using the formula of average and coefficient of variation by S.D./Mean * 100.

Table No.4.1

Current Ratio of NCC Bank

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	0.88	0.76	0.86	1.22	1.18	0.98	0.184	18.77

Source: See Appendix I

Table No.4.1 reveals that the assets of NCC bank exceed the total current liabilities. This indicates that the bank is capable of discharging their current obligation during the study period.

Current ratio of NCC bank is 0.88 in the year 2004/05 than decrease in year 2005/06 i.e. 0.76. It has increased from 0.86 to 1.22 for the year 2006/07 to 2007/08. Average mean of NCC Bank is 0.98. the coefficient of variance of NCC bank is 18.77%

4.1.1.2 Cash and Bank Balance to Total Deposit Ratio(Cash Reserve Ratio)

Cash and bank balance is said to be the first defense of every banks. The ratio between cash and the bank balance and total deposit measure the ability of the bank to meet the unanticipated cash and all types of deposits. Higher the ratio, the greater will be the ability to meet sudden demand of deposit. But every high ratio is not desirable since bank to pay interest on deposits. This will also maximize the cost of fund to the bank.

Cash and Bank Balance to total Deposit Ration = $\dfrac{Cash\,\&\,BankBalance}{TotalDeposit}$

Table No.4.2

Cash and Bank Balance to Total Deposit Ratio

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	9.76	15.46	13.83	18.39	15.85	14.66	2.852	19.45

Source: See Appendix II

The above table reveals that the cash and bank balance to total deposit ratio of NCC bank have followed fluctuating trend. Bank has followed increasing trend from 9.76 to 15.46 in the year 2004/05 to 2005/06 and decrease in the year 2006/07 at the ratio of 13.83 again started increasing at the ratio of 18.39 in the year 2007/08 and again decreased the ratio to 15.85 in the year 2008/09.

The mean ratio of NCC Bank is 14.66 & the coefficient of variance of is 19.45%. The bank has maintained good ratios. It shows that the improvement or executive modification on the better position regarding the meeting of the demand of the customers on their deposits at any time. That means it operates in higher risks.

4.1.1.3 Cash and Bank Balance to Current Assets Ratio

This Ratio shows the banks liquidity capacity on the basis of cash and bank balance that is the most liquid assets. Higher ratio indicates the bank’s ability to meet the daily cash requirement of their customer deposit and vice-versa. But higher ratio is not preferred as the bank has to pay more interest on deposit and will increase the cost of the fund. Lower ratio is also very dangerous as the bank may not be able to make the payment against the cheques presented by the customers. Therefore, bank has to balance the cash and bank to current assets ratio in such a manner that it should have adequate cash for the customers demand against deposit when required and less interest is required to paid against the cash deposit.

Cash & Bank balance to Current Assets Ratio = $\frac{Cash\ \&\ BankBalance}{CurrentAssets}$

Cash and Bank Balance to Current Assets ratio of NCC Bank from Fiscal year 2004/05 to 2008/09 are given in table no.3

Table No.4.3

Cash and Bank balance to Current Assets Ratio (%)

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	31.33	47.53	42.24	50.86	58.49	46.09	9.069	19.68

Source: See Appendix III

Cash and bank balance to current assets ratio shows the cash and bank balance to current assets ratio of bank which show the ability to manage the deposit withdrawal from the customers. NCC Bank has maintained fluctuating trend. NCC Bank has maintained the highest ratio of 58.49 in the year 2008/09 and lowest of 31.33 in the year 2004/05.

Average mean of NCC Bank is 46.09. The coefficient of variance of NCC Bank is 19.68%.

4.1.1.4 Loan and Advance to current Assets Ratio (%)

Loan and Advance are also included in the current assets of commercial banks because generally it provides short-term loan, advance, overdraft cash credit, local and foreign bill purchased and discounted.

To make a high profit mobilizing its fund in the best way, a commercial bank should not keep its all collected funds as cash and bank balance but they should be invested as loan and advance cannot be granted, it should pay interest on those utilized deposit funds and may also harmful to keep the bank in most liquid position because they can only be collected at the time of maturity only. Thus a bank must maintain its loan and advances in appropriate level to find out portion of current assets which as granted as loan and advances

Loan and advances to current assets ratio = $\frac{Loan\ \&\ Advances}{CurrentAssets}$

The table below shown the ratio of loan and advances to current assets ratio of NCC bank.

Table no. 4.4

Loan & Advances to Current assets Ratio (%)

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	3.04	2.49	2.55	2.05	2.90	2.606	0.346	13.29

Source: see Appendix no. IV

The table listed above shown NCC Bank has fluctuating trend on their loan and advances to current assets ratio. In the year 2007/08 NCC Bank has 2.05 which is lowest ratio. The highest ratio of loan and advances in the year 2004/05.

While examine the mean ratio NCC bank has maintained 2.606. And coefficient of variance of NCC Bank is 13.29%. The mean reveals that loan & advances to Current Assets Ratio of NCC Bank is satisfactory.

4.1.2 Assets Management Ratio (Activity Ratio)

Assets Management Ratio measures the efficiency of the bank to manage its assets in profitable and satisfactory manner. A commercial bank must manage its assets to properly to earn high profit. Under this chapter following Ratios are studied.

4.1.2.1 Loan & Advance to total Deposit Ratio

This ratio measures the extent to which the banks are successful to mobilize their total deposit on loan & advances.

Loan & advance to total deposit Ratio = $\frac{Loan\,\&\,Advance}{TotalDeposits}$

The table shown the ratio of loan & advances to total deposit ratio of NCC Bank.

Table no.4.5

Loan & advances to total Deposit Ratio (%)

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	94.96	83.54	83.54	74.47	78.63	83.028	6.862	8.265

Source: see Appendix no. V

The above table exhibits that the bank has fluctuating trend of total deposit on loan and advance. NCC Bank has highest ratio of 94.96 in the year 2004/05 and lowest ratio of 74.47 in the year 2007/08.

In average, NCC bank has 83.028. The coefficient of variance of NCC bank is 8.265%. From the above table it can be concluded that NCC bank has strong position regarding the mobilization of total deposit on loan and advances and acquiring high profit. But the high ratio is not better from the point of view of liquidity as the loan and advances is not as liquid as cash and bank balance.

4.1.2.2 Total Investment to Total Deposit Ratio

A commercial bank mobilizes its deposits by investing its fund in different financial or non financial institutions. This ratio measures the extent to the bank is able to mobilize their deposits on investment in various securities. A high ratio indicates the success in mobilizing in securities and vice-versa.

Total investment to total Deposit Ratio = $\frac{TotalInvestment}{TotalDeposit}$

The table below shows total investment total deposit ratio of NCC Bank.

Table no.4.6

Total Investment to total Deposit Ratio

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	20.91	19.12	21.06	23.37	23.64	21.62	1.685	7.78

Source: see Appendix no. VI

In the table no.4.6, NCC bank has fluctuating trend regarding the ratios. During the study period NCC bank has the highest ratio of 23.64 in the year 2008/09 and west ratio of 19.12 in the 2005/06. Mean of NCC Bank is 21.62. And coefficient of variance of NCC Bank is 7.78%.

It is very clean from the analysis that total investment from total deposits of NCC Bank is normal.

4.1.2.3 Loans and Advances to Total Working Fund Ratio

Loan and advance is an important part of total assets (total working fund). Commercial bank must be careful in mobilizing in total assets. As loan & advances in appropriate level to generate profit. This ratio reflects NCC bank is success or not in mobilizing their assets loan and advances for the purpose of income generation. A high ratio indicates better in mobilization of funds as & vice-versa.

Loan & advance to total deposit Ratio = $\frac{Loan\,\&\,Advance}{TotalWorkingFund}$

The table no.4.7 shows the loan and advances to total working fund ratio of NCC Bank.

Table no.4.7

Loans and advances to Total Working Fund Ratio

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	45.32	42.19	46.83	48.91	61.50	48.95	6.646	13.58

Source: See Appendix VII

Referring to above table the loan and advance to total working fund ratios of NCC Bank has fluctuating trend. It has the highest ratio of 61.50 and lowest of 42.19 in the year 2008/09 and the year 2005/06 respectively.

Average mean of NCC bank is 48.95 it states that the position of NCC Bank is better. The coefficient of variance of NCC bank is 13.58%.

4.1.2.4 Investment on Shares to total working fund Ratio

Total investment has been broken down into two parts i.e. investment on government securities and investments on shares and debentures. Now a day a commercial bank is interested to invest its fund not only government securities but also shares and debentures of other different types of companies. During the study period. NCC bank has investment only in shares not any government securities and debentures.

Investment on shares to total working fund ratio reflects the bank is successful or not to mobilize their total assets on purchase of shares of other companies to generate incomes and utilize their excess fund. A high ratio indicates more portion of investment on shares out of total working fund and vice-versa.

Investment on shares to total working fund Ratio = $\frac{InvestmentofShares}{TotalWorkingFund}$

The table below shows the investment on shares to total working fund ratio of NCC Bank.

Table no.4.8

Investment on Shares to Total Working Fund Ratio

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	0.05	0.057	0.10	0.117	0.136	0.092	0.034	36.41

Source: See Appendix VIII

The above table no. 4.8, reveals that NCC bank has increasing trend of investment on shares to total working fund ratio. NCC bank has highest ratio of 0.136 in the year 2008/09. And has lowest ratio of 0.05 in the year of 2004/05.

NCC Bank has mean of 0.092 and the coefficient of variance of 36.41%.

4.2 Analysis of Profitability Ratio

Profitability ratios are very much helpful to measure the overall efficiency of operation of financial institution. In the context of ban, strictly speaking no bank can survive without profit. Profit is the indicator of efficient operation of a bank. The banks acquire profit by providing different services to its customers by making investment of different kinds. Sufficient profit is must to have good liquidity, grab investment opportunities, expand banking transaction, finance government in need of development fund, overcome the future contingencies and need fixed internal obligation of a bank. Profitability ratios measure the efficiency of a bank. Higher the profit ratio shows that higher the efficiency of a bank. Following profitability ratios, which are related with profit and find mobilization, are studied under this heading.

4.2.1 Return on total working fund ratio

It measures the profit earning capacity by utilizing available resource i.e. total assets. Return will be higher if the banks working fund is well managed and are efficiently utilized, maximizing taxes within the legal options available will also improve return.

$$\text{Return on total working fund ratio} = \frac{Net\,\mathrm{Pr}\,ofit}{TotalWorkingFund}$$

Where, net profit includes the profit that is left to the internal equities after all cost, charges and expenses which is shown in the table of NCC bank.

Table 4.9

Return on total working fund ratio (%)

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	-0.008	0.012	0.0265	0.004	0.0193	0.010	0.012	120

Source: See appendix IX

The above table no. 4.9, shown the bank has increasing trend of profitability ratio. From the analysis bank has negative ratio in the year 2004/05; mean of ratio is 0.010 % and the coefficient of variance is 120%.

The profitability ratio of NCC bank is very inconsistent and unstable.

4.2.2 Total interest earned to total outside assets ratio

It reflects that the extent to which the bank is successful to earn interest as major income on all the outside of a commercial bank.

Total interest earned to total outside assets = $\frac{TotalInterestEarned}{TotalOutsideAssets}$

The total outside assets includes loan and advances, investment on securities. Share and other all types of investment the table below shows total outside assets ratio from the fiscal year 2008/09.

Table No.4.10

Total interest earned to total outside assets ratio

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	0.438	0.66	1.18	0.65	2.11	1.007	0.6029	59.87

Source: see appendix X

The above table no. 4.10 shows that the ratio of total interest earned to total outside assets ratio of NCC bank. The ratio is fluctuating trend. The highest ratio is 2.11 in the fiscal year 2008/09 and the lowest ratio is 0.438 in the fiscal year 2004 /05.

In an average the mean ratio of total interest earned to total outside assets ratio of NCC bank is 1.007. The coefficient of variance of the bank is 59.87%. Total interest earned to total outside assets ratio is not so stable.

4.2.3 Return on Loan and Advance Ratio

It measure the earning capacity of a commercial banks on its deposits mobilized on loan & advances. Mostly loan and advances includes loan cash credit, overdraft bills purchased and discounted.

Return on loan & advances Ratio = $\frac{Net\ \mathrm{Pr}\,ofit}{Loan\ \&\ Advances}$

The table below shows the return on loan and advances of NCC Bank.

Table no.4.11

Return on Loan and advance Ratio (%)

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	-0.19	0.05	0.056	0.101	0.031	0.0096	0.1023	9.38

Source: See Appendix XI

From the above table no 4.11, it shows that NCC bank has fluctuating trend of return on loan and advance ratio. It has highest ratio of 0.101 and lowest ratio -0.19 in the fiscal year 2007/08 and 2004/05 respectively. Negative profit in the year 2004/05 shows very weak profitability position.

If the mean ratio is observed mean of NCC Bank is 0.0096 and the coefficient of variance is 9.38%.

4.2.4 Total Interest Earned to Total Working Fund Ratio

This ratio reflects the extent to which banks are successful in mobilizing their total assets to generate high income as interest. A high ratio is indicator of high earning power of the bank on its total working fund and vice-versa.

Total Interest Earned to Total Working Fund Ratio = $\frac{TotalInterestEarned}{TotalWorkingFund}$

The following table shows the interest earned to total working fund ratio of NCC Bank.

Table no.4.12

Total interest Earned to Total Working Fund Ratio (%)

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	4.86	5.73	1.12	6.81	1.893	4.082	2.21	54.14

Source: See Appendix XII

The above table no. 4.12 shows that the total interest earned to total working fund ratio of NCC Bank. Total interest earned to total working fund ratio is fluctuating trend. NCC Bank has the highest ratio of 6.81 in the fiscal year 2007/08 and lowest ratio of 1.12 in the fiscal year 2006/07. From the above table, it is cleared that the bank has unstable ratio during the study period.

If the mean ratio is observed, it is found that the mean of NCC Bank is 4.082. And the coefficient of variance is 54.14%.

4.2.5 Total Interest Paid to Total Working Fund Ratio

This ratio measures the percentage of total interest paid against the total working fund. A high ratio indicates the higher interest expenses on total working fund and vice-versa.

Total Interest Paid to Total Working Fund Ratio = $\frac{TotalInterestPaid}{TotalWorkingFund}$

Table no. 4.13

Total Interest Paid to Total Working Fund Ratio

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	1.099	5.85	1.218	6.74	1.55	3.291	2.47	75.14

Source: See Appendix XIII

The above table shows that the trend ratio of NCC Bank has fluctuating trend. NCC Bank has the highest ratio of 6.74 and lowest ratio of 1.099 in the fiscal year 2007/08 and 2004/05 respectively.

If the mean ratio is observed the mean of NCC Bank is 3.291 and the coefficient of variance is 75.14%. Total interest paid to total working fund ratio of NCC bank is not consistent and stable.

4.3 Analysis of Risk Ratio

The possibility of risk makes banks investment a challenging task. Bank has to take risk to get return on investment. The risk taken is compensated by the increase in profit. A bank has to take high if it expects high return on its investment. So the banks options for high profit, has to accept the risk and manage it efficiently. The risk measures the level of risk. The following ratios are studied for the purpose of measuring risk.

4.3.1 Credit Risk Ratio

It is very essential to a bank to securities the project i.e., the risk involved in it to avoid default or non-payment of loan before making investment on them banks make investment by utilizing its collected fund. The risk behind making investment or granting loan or providing is measured by credit risk ratio. Actually credit risk ratio is shown by the proportion of non-performing assets in total loan and advances of a bank. But, unavailability of related data the ratio is calculated with the help of loan and advances and total assets.

Credit Risk Ratio = $\frac{TotalLoan \ \& \ Advances}{TotalAssets}$

The following table shows the risk ratio of NCC Bank.

Table no.4.14

Credit Risk Ratio

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	2.75	2.26	2.30	1.88	2.58	2.354	0.298	12.66

Source: See Appendix XIV

The above table shows that loan and advances to total assets ratio or credit risk ratio of NCC Bank. The Bank has followed fluctuating trend. Bank has highest ratio s of 2.75 and the lowest ratio of 1.88 in the fiscal year 2004/05 and 2007/08 respectively.

In average bank has mean ratio of 2.354 and coefficient of variation of 12.66%. The bank's credit risk ratio is not stable and consistent.

4.3.2 Capital Risk Ratio

The capital risk of a bank indicates how much assets value may decline before the position of deposition and other creditors is jeopardized. Therefore, a bank must maintain adequate capital in relation to the nature and condition of its assets, its deposits liabilities and other corporate responsibilities. Capital risk ratio measures banks ability to attract deposits and inter-bank funds. It also determines the level of profit, a bank can earn if a bank chooses to take high capital risk and it's ROE will be higher and vice-versa.

$$\text{Capital Risk Ratio} = \frac{Capital}{RistWeightedAssets}$$

The following table shows the capital risk ratio of NCC Bank.

Table no.4.15

Capital Risk Ratio

Bank	Fiscal Year					Mean	S.D.	C.V.
	2004/05	2005/06	2006/07	2007/08	2008/09			
NCC	4.30	1.94	5.26	10.95	12.11	6.912	3.94	56.995

Source: See Appendix XV

The above table shows that capital risk ratio of NCC Bank has fluctuating trend. The highest ratio of 12.11 is in the fiscal year 2008/09 and the lowest ratio of 1.94 is in the fiscal year 2005/06.

In average, NCC Bank has mean of 6.912 and the coefficient of variance of 56.995. The above table shows capital risk ratio of NCC Bank is not stable & consistent.

4.3.3 Growth Ratio

Growth ratios are directly related to the fund mobilization and investment management of a commercial bank. It represents how well the commercial bank maintaining the economic and financial position. Under this topic, four types of growth ratios are studied, that are directly related to the fund mobilization and investment of a commercial bank. These ratios are as follows:

- ❖ Growth ratios of total deposit
- ❖ Growth ratios of loan & advances
- ❖ Growth ratio of total investment
- ❖ Growth ratio of net profit

The ratio can be calculated by dividing the last period figure by the first period figure then by referring to the compound interest tables.

Table no.4.16

Growth Ratio of Total Deposit

Bank	Fiscal Year					Growth Ratio
	2004/05	2005/06	2006/07	2007/08	2008/09	(%)
NCC	6146579	6303661	6313295	7814822	8027286	6.89

Source: See Appendix XVI

The above table shows the growth rate of NCC Bank. The growth ratio of total deposit is good.

Table no.4.17

Growth Ratio of Loan & Advance

Bank	Fiscal Year					Growth Ratio (%)
	2004/05	2005/06	2006/07	2007/08	2008/09	
NCC	5836863	5124009	5274223	5820182	6312583	1.978

Source: See Appendix XVI

The above table shows Growth rate of loan and advance of 1.978. Growth ratio of NCC Bank is not good.

Table no.4.18

Growth ratio of total investment

Bank	Fiscal Year					Growth Ratio (%)
	2004/05	2005/06	2006/07	2007/08	2008/09	
NCC	1285342	1205572	1330113	1826623	1898413	10.24

Source: See Appendix XVI

The above table shows the growth ratio of NCC Bank. Bank has maintained 10.24% Growth ratio.

Table no.4.19

Growth ratio of Net Profit

Bank	Fiscal Year					Growth Ratio (%)
	2004/05	2005/06	2006/07	2007/08	2008/09	
NCC	-114482	257668	299255	59152	198703	-214.77

Source: See Appendix XVI

The above table shows the growth ratio of Net Profit of NCC Bank. Growth ratio of net profit is -214.77 because of negative profit in the year 2004/05 which shows unstable in performance of NCC.

4.4 Statistical Analysis

In this chapter some important statistical tools such as coefficient of correlation analysis between different variables, trend analysis of deposit, loan & advances, investment and net profit are used to achieve the objective of the study.

4.4.1 Coefficient of correlation Between Deposit and Loan & Advances

Deposits have played a very important role in performance of commercial bank and similarly loan & advances are important to mobilize the collected deposits. Coefficient of correlation between deposit and loan and advances measures the degree of relationship between these two variables. In this analysis, deposit is independent variable (X) and loan and advances are dependent variable (Y). The main objective of computing 'r' between these two variables is to justify whether deposits are significantly used as loan and advances in a proper way or not. The table No.20 shows the value 'r', 'r^2', probable error (P.Er.) and 6P.Er. Between deposit and loan and advances.

Table 4.20

Coefficient of correlation between Deposit and loan and advances.

Bank	Evaluation criterions			
	r	r^2	P.Er	6P.Er.
NCC	0.8045	0.6472	0.1064	0.6384

Source: see appendix XVII

From the above table no.4.20 it is found that coefficient of correlation between deposit and loan and advances is 0.8045. It shows positive relationship between these two variables. Moreover, when we have consider the value of coefficient of determination (r^2) it is 0.6472 and it means 64.72 % of the variation (loan and advance) has been explained by independent variable (deposit).

Similarly, considering the value of (r) i.e. 0.8045 and comparing it with 6P.Er i.e. 0.6384, we can find that (r) is highly than the value of 6P.Er. This reveals that the value of (r) is significant. In other words there is significance relationship between deposits and load and advances.

Lastly, there is positive relationship between deposits and load and advances. The relationship is significant and the value (r^2) shows high percentage in the dependent variable which has been explained by the independent variable. This indicates that NCC bank is successful to mobilize their deposit in proper way as loan and advances.

4.4.2 Coefficient of correlation between deposit and total investment.

Coefficient of correlation (r) between deposit and investment measures the degree of relationship between the two variables here deposit is independent variable (x) and total investment is dependent variable(y). The purpose of computing coefficient of correlation between deposit and total investment is to find out whether deposit is significantly used as investment or not . The table no 21 shows the value of r, (r^2), P.Er, and 6P.Er between deposit and total investment of NCC Bank.

Table 4.21

Correlation Between deposit and total investment

Bank	Evaluation criterions			
	r	r^2	P.Er	6p.Er.
NCC	0.6164	0.3799	0.1870	1.122

Source: See Appendix XVIII

From the above table no.4.21 we find that coefficient of correlation between deposits (independent) and total investment (dependent) value of 'r' is 0.6164. It shows positive relationship between two variables. However, by application of coefficient of determination (r^2) is 0.3799 which indicates 37.99% of the variation of the dependent variable (total investment) has been explained by the dependent variable (deposits). Moreover, by considering the probable error, since the value of r i.e. 0.6164 is less than 6 times P.Er. This shows in significant relationship between deposit and total investment.
From the above analysis, there is insignificant relationship between deposit and total investment since 'r' is less than 6P.Er.

4.4.3 Coefficient of Correlation between Outside Assets and Net Profit

Coefficient of correlation 'r' between outside assets and net profit measure the degree of relationship between these two variables. Here, outside assets is independent variable (x) and net profit is dependent variable (y). The purpose of computing coefficient of correlation between outside assets and net profit is to find out whether the net profit is significantly correlated with respective assets or not.

The table no.4.22 shows the value of r,r^2, P.Er., 6P.Er. Between outside assets and net profit of NCC Bank.

Table no. 4.22

Coefficient of correlation between outside assets and net profit

Bank	Evaluation criterions			
	r	r^2	P.Er	6P.Er.
NCC	-1.195	1.428	-0.129	-0.774

Source: See Appendix XIX

From above listed table, it has been found that the coefficient of correlation between total outside assets (independent) and net profit (dependent) is -1.195. Which indicates negative correlation between these two variables, which shows in consistency between these two variables. On the other hand considering the value of coefficient of determination r^2 i.e. 1.428 indicates 14.28 % of the variation in the dependent variables (net profit) has been explained by the dependent variable (total outside assets) . More ever by considering the probably error we can further say that there is insignificant relationship between total outside assets and net profit because the value of or is -1.195 which is less than 6 times p. Er. i.e. -0.774. It indicates that NCC Bank is not capable to earn net profit by mobilizing its total outside assets.

4.5 Trend Analysis and Projection for next five years

Under this topic, analysis trend of deposit collection, its utilization and net profit of NCC Bank is studied. To utilize deposit a commercial bank may grant loan and advances and investment in government securities and share and debenture of other companies. The objective of this topic is to analyze the trend of deposit; loan and advance total investment and net profit are forecasted for the next five years. The projection is based on the following assumptions.

- The main assumption is that other things will remain unchanged.
- The forecast will be true only when the limitation of least square method is carried out.
- The bank will run in the present position.
- The economy will remain in the present stage.
- Nepal Rastra Bank will not change its guidelines to commercial Banks.

4.5.1 Trend Analysis of total Deposit.

Under this topic, an effort has been made to calculate the trend values of deposit of NCC Bank which is forecasted for next five years form 2009/10 to 2013/14. The following table no.4.23 shows the trend value of deposit for 5 years form 2009/10 to 2013/14 of NCC Bank.

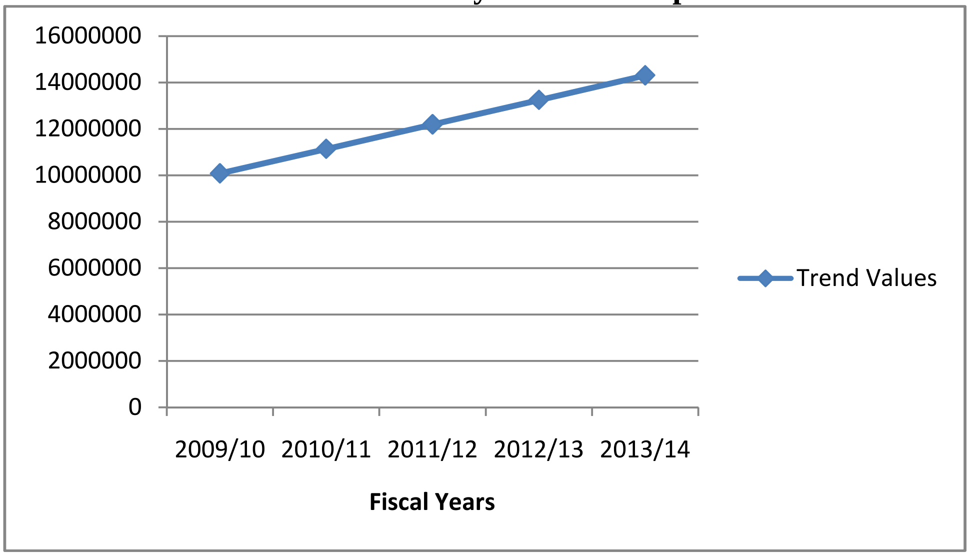
Table 4.23

Trend value of total deposit of NCC Bank (Rs.in 000)

Years	Trend Values
2009/10	10084673.6
2010/11	11139188.6
2011/12	12193703.6
2012/13	13248218.6
2013/14	14302733.6

Source: See Appendix XX

Figure- 1
Trend analysis of total Deposit



The above table shows that the deposit of NCC Bank has increasing trend. If other things remaining the same it increase from 10084673.6 to 14302733.6 from the fiscal year 2009/10 to 2013/14.

From the above trend analysis, it is found that the deposit position collection of NCC Bank is good.

4.5.2 Trend Analysis of Loan and Advances

The trend values of loan & advances of NCC Bank are shown the forecasted value for the next five year 2009/10 to 2013/14.

The following table no. 4.24 shows the trend values of 5 years 2009.10 to 2013/14 of the NCC Bank.

Table no. 4.24

Trend Analysis of Loan & Advances (Rs. In 000)

Years	Trend Values
2009/10	6662139.8
2010/11	6991662.4
2011/12	7321185
2012/13	7650707.6
2013/14	7980230.2

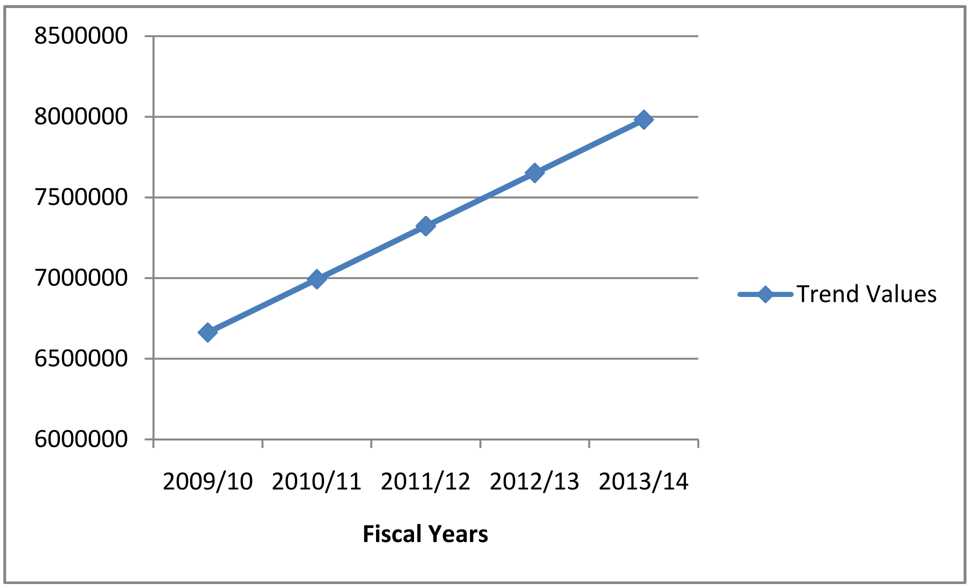
Source: See Appendix XXI

The above table shows that the loan and advances of NCC Bank have an increasing trend. If other things remaining the same, the total loan and advances of NCC Bank will be 6662139.8 thousand in the fiscal year 2013/14. From the above trend analysis it is found that the loan and advance position of NCC is medium.

The calculated trend values of loan and advances are fitted below.

Figure- 2

Trend Analysis of Loan and Advances



4.5.3 Trend Analysis of total investment

Under this topic, the trend analysis of total investment forecasted for next five year from 2009/10 to 2013/14. The following table no.4.25 shows the trend values of 5 years from 2009/10 to 2013/14 of NCC Bank

Table No 4.25.

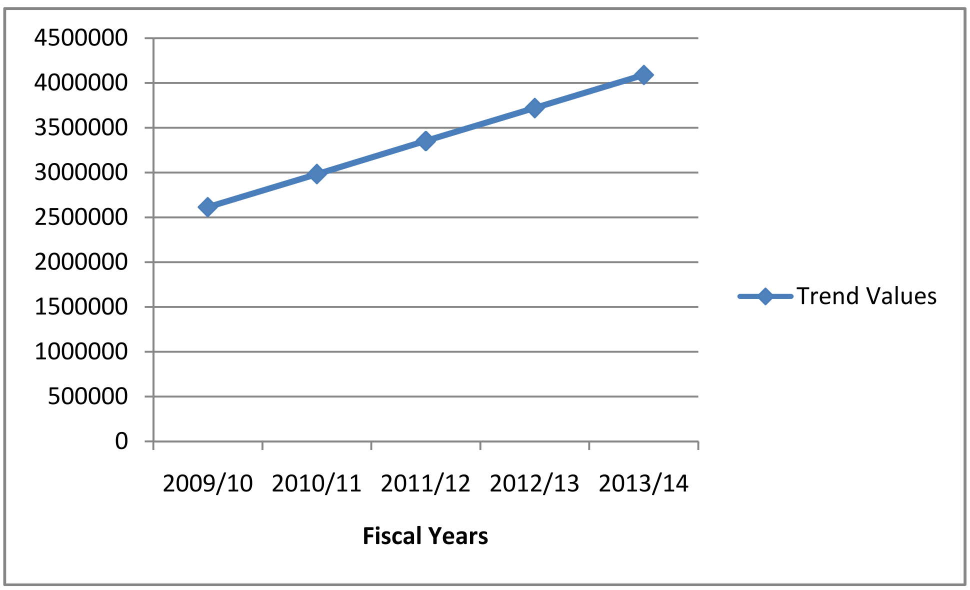
Trend Analysis of Total Investment (Rs. In 000)

Years	Trend Values
2009/10	2613328.4
2010/11	2981567
2011/12	3349805.6
2012/13	3718044.2
2013/14	4086282.8

Source: See Appendix XXII

Figure- 3

Trend Analysis of total Investment



The above table shows that the investment of NCC Bank has an increasing trend. If other things remain the same, the highest value of investment position will be 4086282.8 thousand in the FY 2013/14.

From the above trend analysis it is found that the investment position of NCC Bank is increasing trend, which shows consistency in investment policy.

4.5.4 Trend Analysis of Net Profit

Under this topic, the trend values of net profit forecasted for next five years from 2009/10 to 2013/14, the following table no.4.26 shows the trend values of 5 years from 2009/10 to 2013/14 of NCC Bank.

Table no. 4.26

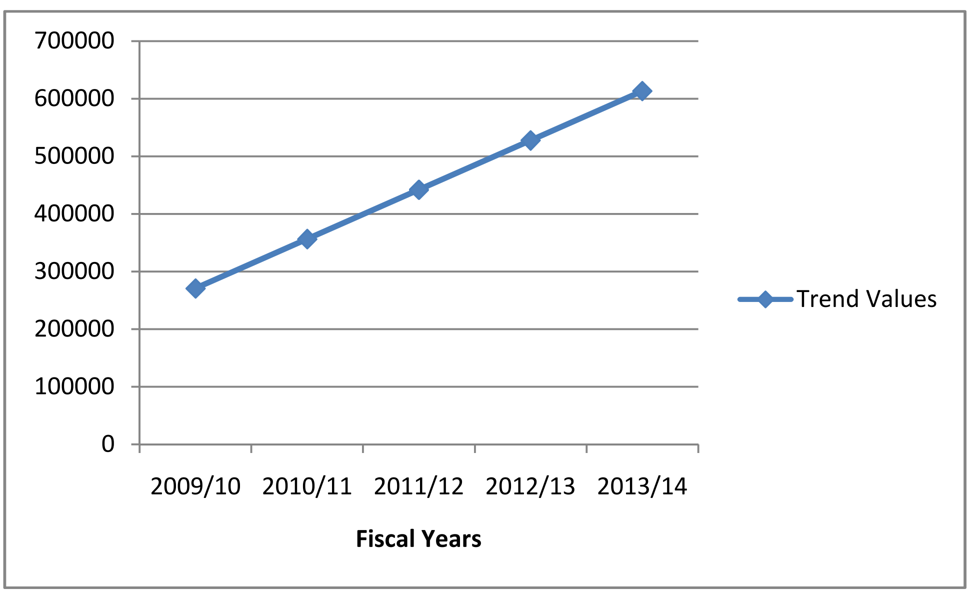
Trend analysis of Net Profit (Rs. in 000)

Years	Trend Values
2009/10	270771.6
2010/11	356342.4
2011/12	441913.2
2012/13	527484
2013/14	613054.8

Source: See Appendix XXIII

Figure 4

Trend Analysis of Net profit



The above table shows the net profit has an increasing trend. This trend is going on into the increasing order in each forested years. If other things remaining same, the net profit of NCC Bank will be 613054.8 thousand in fiscal year 2013/14.

From the above trend analysis it is found that the loan and advances position of NCC Bank is good.

4.6 Major Findings of the Study

The main findings of the study are derived on the analysis of financial data of NCC Bank, which are as follows:

(I) Liquidity Position

- ❖ The current ratio must be 2:1 but in average NCC Bank has maintained lower current ratio, which states that the liquidity position of NCC Bank not so better. The coefficient of variation of NCC Bank is 18.77% it shows that the current ration of NCC Bank is less homogeneous.
- ❖ In average, NCC Bank has maintained higher cash & bank balance to total deposit ratio. It states that the liquidity position of NCC Bank is better. The coefficient of variance of NCC Bank is 19.45 % which shows the liquidity position of NCC Bank is consistent.
- ❖ In Average NCC Bank has maintained higher cash and Bank balance to current asset ratio which states that the liquidity position of NCC Bank is better in this regard. The coefficient of variance of NCC Bank is 19.68% which shows that the current ratio of NCC more stable.
- ❖ While examining the mean ratio of loan and advances to current assets ratio NCC Bank has maintained lower mean ratio. It states that liquidity position of NCC Bank is better in this regard. On the other side, coefficient of variance of NCC Bank is 13.29 % which shows NCC Bank is stable and consistent.

The above result depicts that the liquidity position of NCC Bank is better. This because of more investment to other productive sector and more deposit collection and in availability of profitable sectors be the reason behind higher ration of NCC Bank.

(II) Assets Management Ratio (Activity Ration)

The assets Management ratios of NCC Bank are as follows:

- ❖ In average, NCC Bank has maintained 83.028 loan and advance to total deposit ratio. It states that NCC Bank position is better. The coefficient of variation is 80265%.Which states that loan and advance of NCC Bank is stable and consistent.
- ❖ In average NCC Bank has 21.62 mean which maintained normal investment from total deposit ratio. The coefficient of variance of NCC Bank is 7.78%. It states total investment to total deposit ratio is more stable and consistent.
- ❖ Average mean of NCC Bank is 0.092 which maintained investment on shares to total working fund ratio is not so better. And the coefficient of variation of NCC Bank is 36.41%. It states that the position of NCC Bank is stable and consistent.
- ❖ Average mean of NCC Bank is 48.95, which maintained loan and advance to total working fund ratio is better. And the coefficient of variance of NCC Bank is 13.58 % which states that the position of NCC Bank is stable and consistent.

From the above findings of assets management ratio it can be concluded that NCC Bank is successful in it's operation.

(III) Profitability Ratio

The Profitability ratio of NCC Bank reveals that:

- ❖ In an average mean ratio of return on total working fund ratio is 0.010. Which is good. The coefficient of variance is 120%. This is very high, so the NCC Bank is inconsistent and unstable.
- ❖ In an average the mean ratio of total interest earned to total outside assets ratio of NCC Bank is 1.007. And coefficient of variance is 59.87%. It can be concluded that NCC Bank has ineffectively failed to use its fund and is inconsistent & unstable.
- ❖ In an average mean ratio of return on loan & advance of NCC Bank is 0.0096. This shows NCC Bank has maintaining high profitability ratio and earned

high return from loan and advances. The coefficient of variance is 9.38%, which is stable and consistent.

- ❖ In an average mean ratio of total interest earned to total working fund ratio is 4.082. Which shows NCC Bank has good profitability ratio. And coefficient of variance is 54.14%. Which shows NCC Bank is unstable and inconsistent.
- ❖ If the mean ratio is observed the mean of total interest paid to total working fund ratio is 3.291. This shows that NCC Bank has paid lower interest. And the coefficient of variance of NCC Bank is 75.14% which shows total interest paid to total working fund ratio of NCC Bank is not consistent and stable.

From the above findings of profitability ratios, it can be concluded that the NCC Bank is profitable.

(IV) Risk Ratios

From the analysis of risk ratios of NCC Bank show that:

- ❖ If the mean ratio of credit risk are observed it is found that NCC Bank has mean of 2.354. It means NCC Bank has lower credit. The coefficient of variance is 12.66% which shows that credit policy of NCC Bank is consistent and stable.
- ❖ If the mean ratio of capital risk is observed, NCC Bank has mean of 6.912. It means NCC Bank has lower capital risk. And the C.V. of NCC Bank is 56.995. Which shows NCC Bank has inconsistent & unstable.

From the above findings, it can be concluded that credit risk of NCC is stable and capital risk is inconsistent.

(V) Growth Ratio

From the analysis of growth ratios of NCC, it reveals that:

- ❖ The growth ratio of the deposit policy of NCC Bank is 6.89%. It means the performance of NCC Bank to collect deposit is better.
- ❖ The growth ratio of loan and advance of NCC Bank is 1.978%. It means NCC Bank has maintained good growth rate to grant loan & advances.

- ❖ The growth ratio of total investment is 10.24%. It means NCC Bank has maintained higher growth rate of investment which shows the better performance of investment in different sectors.
- ❖ The growth ratio of net profit is -214.77% because of negative profit which shows unstable in the performance of NCC Bank.

From the above analysis NCC Bank has failed to earn profit which tends to growth ratio of net profit negative.

(VI) Coefficient of Correlation Analysis

Coefficient of correlation analysis between different variables of NCC bank reveals that:

- ❖ From the analysis of coefficient of correlation between deposit and loan and advances NCC Bank has positive relationship between deposit & loan & advances. This indicates the better position of mobilization of deposit as loan and advances of NCC bank.
- ❖ Correlation coefficient between deposit and total investment NCC bank has positive relationship between two variables. While considering the probable error the value of r is less than P.Er this shows insignificant relationship between deposit and total investment.
- ❖ The coefficient of correlation between total outside assets and net profit is negative correlation between these two variables, which indicates negatives, which shows inconsistency between these two variables.

From the above analysis, it can be conclude that NCC bank has significant relationship between deposit and loan and advances; NCC Bank has in significance relationship between total outside assets and net profit and deposit and total investment.

(VII) Trend Analysis

The trend analysis of deposit, loan and advances, total investment and net profit and projection for next five years of NCC Bank.

- ❖ The deposit of NCC Bank has increasing trend. If other things remain the same, it increases from 10084673.6 to 14302733.6 from the fiscal year

2009/10 to 2013/2014. From the trend analysis it is found that the deposit position collection of NCC Bank is good.

- ❖ The loan and advance of NCC Bank has increasing trend. If other things remaining the same it increases from 6662139.8 to 7980230.2 from the fiscal year 2009/10 to 2013/14 from the trend analysis it is found that the loan & advances position of NCC Bank is medium.
- ❖ The total investment of NCC Bank has increasing trend. If other things remaining the same, it increases from 2613328.4 to 4086262.8 from the fiscal year 2009/10 to 2013/2014 from the trend analysis it is found that the investment position of NCC Bank is good.
- ❖ The profit of NCC Bank has an increasing trend if other things remaining the same, it increases from 270771.6 to 613054.8 from the from the fiscal year 2009/10 to 2013/2014 from the trend analysis it is found that the loan and advances position of NCC Bank is good. The trend value shows the position of NCC Bank in regard of utilization of the fund to earn profit is good. That means NCC Bank has very good performance in profit earning.

CHAPTER – V
SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter is an accomplished specific and indicative enclose which contains summary and conclusion of finding and recommendations. Brief introduction to all chapters of the study and genuine information of the present situation under the topic of the study is defined on summary. Conclusions are analysis of applicable data by using various financial and statistical tools. Which presents strength, weakness, opportunities and threats of the CBS. And suggestions are obtainable in recommendation, which is arranged on the based from finding and conclusions.

5.1 Summary

The development of any country depends upon its economic development demands transformation of savings or invertible resources into the actual investment formation is the prerequisite in setting the overall place of the development of a country. It is the financial institution that transfer funds from surplus spending units to deficit units.

The evolution of the organized financial system in Nepal has a more recent history that in other countries of the world. In Nepalese content, the history of development of modern banks started form the establishment of Nepal Bank limited in 1937 A.D. Nowadays there are 22 CBS operating in Nepal financial market, which is in increasing due to the country moved towards economic linearization, financial scenario has changed, and foreign banks were invited to operate in Nepal. For the better performance of commercial banks successful formulation & effective implementation of investment policy is the prime requisite, Nowadays there is a very high competition in the banking industries but very less opportunity to make investment. The opportunities are hidden. Thus these CBS should take initiative action in search of the new opportunities, so that, they can easily survive in this competitive banking business world and earn profit. A bank manager its investment has a lot to do with the economic health of the country because the bank loans support the growth of new business and trade empowering the economic activities of the 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 in the process of channeling the available resources in the needed sector. It plays the role of agent between the deficit and surplus of financial resources. Financial institutions like banks are a necessity to collect scattered saving and put them into productive channels. In the absence of such institution it is possible that the saving will not be safely and profitable utilized within the economy. It will be diverted a board into unproductive sectors.

Development of trade, industry and business is the main ground of banks to conduct its activities and fulfill its profit making objectives. The sound investment policy helps all the banks to make profitable investment and which in turns also helps to develop the economic condition of the nation. Investment policy of commercial banks is very risky one. It is the most important factor from the view point of shareholders and bank management for this, commercial banks have to pay due consideration while formulating investment policy. A good investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loans and investment.

Commercial banks are not able to utilize its deposits properly i.e. providing loan and advances or lending for a profitable project, the reason behind it is lack of sound investment policy, increasing trend of this type of situation certainly lead closure of the banking institutions.

Hence, the sufficient return is not earned due to the lack of stable strong and appropriate investment policy. They have not been able to utilize their funds more efficiently and productivity. Though the directions and guidance are being provided by the Nepal Rastra Bank but the long term and published policy about their operation does not sound good on the joint venture banks. Therefore, the bank's investment policy must be such that it is sound and prudent in order to protect public funds.

The main focus of the study is to evaluate the investment policy of NCC Nepal Credit Commerce bank Ltd. and to suggest for it's improvement in the investment policy. The study has been constrained by various common limitations.

The study is based on secondary data from the fiscal year 2004/05 to 2008/09. The data are collected from annual reports, financial statement, official records, periodicals, journals and bulletins, carious published reports and relevant unpublished master's thesis. Besides this, personal contacts, with the bank have also been made.

For the fulfillment of the objectives of the study many analyses have been done. Both financial as well as statistical tools have been used to analyze and interpret the facts and information. Under financial tools, various financial ratios related to the investment function of commercial bank i.e. liquidity ratio, assets management ratio, and growth ration have been studied and interpreted. Under statistical analysis, some relevant statistical tools, i.e. correlation coefficient trend analysis have been studied. This analysis gives clear picture of the performance of the bank with regard to its investment policy financial & statistical tools are used to reckoning and secondary data were compiled, processed, tabulated and graphed for better presentation. From which various finding have shown in above chapter from that finding conclusion have been drawn which are presented as below:

5.2 Conclusion

Economic liberalization policy of the government has encouraged the establishment and growth of commercial bank in the country with in short span of time. In a situation when the existing financial institutions, especially government's commercial banks were unable to supply credit timely and carry capital market activities, private joint-venture banks have contributed a lot. Nepal Rastra Bank play more active role to enhance the operation of joint venture banks. From the analysis of investment policy of NCC Bank the following conclusion can be drawn.

The liquidity position of NCC Bank is better. It shows that the liquidity position of NCC Bank is more stable and consistent. NCC Bank has more investment to other productive sectors and more deposit collection and unavailability of profitable sectors.

From the analysis of assets management ratio, it can be concluded that NCC Bank is successful in its operation. NCC Bank is more successful in utilizing its fund.

From the analysis of profitability ratios, it can be concluded that the NCC Bank is more profitable. From the analysis of credit risk ratios it can be concluded that in credit risk ratio NCC Bank is more consistent than capital risk ratio.

From the growth ration, it can be concluded that NCC Bank has maintained higher growth ratios in total deposits and loan and advances. But has failed to earn a profit which tends to growth ratio of net profit negative. NCC Bank maintained has higher growth ratio of investment as well as net profit. Form this we can conclude that NCC Bank has invested in different sectors.

From the analysis of correlation coefficient, it can be concluded that NCC Bank has significant relationship between deposit and loan and advances. But insignificant relationship between deposit and total investment, total outside assets and net profit.

From the trend analysis, it can be concluded that, deposit collection, investment position, performance in profit earning is good but loan & advances position of NCC Bank is medium.

The commercial banks have to prove that they can really contributed to the national economy are efficient and viable agencies for mobilization of saving and it's channelization into productive sectors are professionally managed and competitive with other agencies and are trust worthy.

5.3 Recommendations

On the basis of analysis and findings of the study, following recommendations can be advanced to overcome weakness inefficiency and to improve present fund mobilization and investment of NCC Bank.

The liquidity position of a bank may be affected by external as well as internal factors. NCC bank has high idle cash and bank balance. It may decrease profit of a bank. NCC bank is recommended to mobilize its idle cash and bank balance in profitable sector as loan and advances. NCC bank is not invested on government securities. Which shows that NCC bank has invested its more portions of current assets on shares. NCC bank is recommended to invest some percentage of current assets on government securities.

To get success in competitive banking environment, depositor's money must be utilized as loan and advances. The largest amount of the bank in the assets side is loan and advances. If it is neglected, then it could be the main cause of liquidity crisis in the bank and one of the reasons for bank's failure. So NCC Bank is strongly recommended to follow liberal lending policy and invest more and more percentage of total deposit in loan and advance.

It is good to invest more on shares and debentures as it encourages financial and economic development of the country. A commercial bank must mobilize its fund in different sectors such as purchase share and debentures of other financial companies out of total working fund. NCC Bank has maintained higher investment on shares to working fund ratio. It states that the position of NCC Bank is better in this regard; But NCC Bank has not invested on debentures so NCC is recommended to invest more of its fund on debentures of different companies.

Portfolio condition of a bank should be regularly revised from 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 efforts to explore new, competitive and high yielding investment opportunities to optimize their investment portfolio.

Before mobilization funds, NCC Bank is recommended to collect a large variety f deposit through schemes, price bonds scheme, gift cheque scheme, house building scheme, recurring deposit scheme , deposit linked life insurance scheme, monthly interest scheme, education loan schemes, vehicle loan scheme and many others.

To get success in the market, investment is the first aspect. So it is recommended to NCC Bank to search more as more profitable areas for investment.

Outside assets is very important from the view point of interest earning aspect. On the basis of analysis, it is seen that NCC Bank has not achieved the desired result. So it is recommended to NCC Bank to invest fund tactfully keeping in mind the interest rates so as to earn high return from the investment.

NCC Bank is recommended to adopt innovative approach to marketing. In the light of growing competition in the banking sector, the business of the bank should be customer oriented. It should strengthen and activate its marketing function, as it is an effective tool to attract and retain the customers for the purpose, the bank should develop an innovative approach to bank marketing and formulate new strategies of serving customers in a more convenient and satisfactory way by optimally utilizing the modern technology and offering new facilities to the customers at competitive prices. For sustained NCC Bank in the market profit is the main aspect. In the profit margin context NCC Bank has increasing trend which shows the good result.

NCC Bank is recommended to utilize its risky assets and shareholders fund to gain highest profit margin. Similarly, it should reduce its expenses and should try to collect cheaper fund being more profitable. As well as NCC Bank should run with excellent management team without roving around controversial.

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APPENDICES

Appendix I

Current Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Current Assets	1914943	2051280	2066342	2826517	2175873
Current Liability	2164375	2690010	2405797	2300921	1836288
Current Ratio	0.88	0.76	0.86	1.22	1.18

Appendix II

Cash & Bank Balance to Total deposit Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Cash and bank balance	599964	975082	872985	1437840	1272691
Total Deposit	6146579	6303661	6313295	7814822	8027286
Ratio	9.76	15.46	13.83	18.39	15.85

Appendix III

Cash & Bank Balance to Current Assets Ratio (Rs. in 000)					
Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Cash & bank balance	599964	975082	872985	1437840	1272691
Current Assets	1914943	2051280	2066342	2826517	2175873
Ratio	31.33	47.53	42.24	50.86	58.49

Appendix IV

Loan & Advances to Current Assets Ratio (Rs. in 000)					
Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Loan & Advances	5836863	5124009	5274223	5820182	6312583
Current Assets	1914943	2051280	2066342	2826517	2175873
Ratio	3.04	2.49	2.55	2.05	2.90

Appendix V

Loan & Advances to Total Deposit Ratio (Rs. in 000)					
Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Loan & Advances	5836863	5124009	5274223	5820182	6312583
Total Deposit	6146579	6303661	6313295	7814822	8027286
Ratio	94.96	83.54	83.54	74.47	78.63

Appendix VI

Total Investment to Total Deposit Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Total Investment	1285342	1205572	1330113	1826623	1898413
Total Deposit	6146579	6303661	6313295	7814822	8027286
Ratio	20.91	19.12	21.06	23.37	23.64

Appendix VII

Loan and Advances to Total Working Fund Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Loan & Advance	5836863	5124009	5274223	5820182	6312583
Total Working Fund	12879221	12145079	11262487	11899779	10264362
Ratio	45.32	42.19	46.83	48.91	61.50

Appendix VIII

Investment on Shares to Total Working Fund Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Investment on share	698663	699350	1195744	1399558	1399588
Total Working Fund	12879221	12145079	11262487	11899779	10264362
Ratio	0.05	0.057	0.10	0.117	0.136

Appendix IX

Return on Total Working Fund Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Net Profit	-114482	257668	299255	59152	198703
Total Working Fund	12879221	12145079	11262487	11899779	10264362
Ratio	-0.008	0.012	0.0265	0.004	0.0193

Appendix X

Total Interest Earned to Total Outside Assets Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Total Interest Earned	62664	69608	127112	81046	194318
Total Outside Assets	143012	104678	107670	124619	91828
Ratio	0.438	0.66	1.18	0.65	2.11

Appendix XI

Return on Loan and Advance Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Net Profit	-114482	257668	299255	59152	198703
Loan and Advance	5836863	5124009	5274223	5820182	6312583
Ratio	-0.196	0.05	0.056	0.101	0.031

Appendix XII

Total Interest Earned to Total Working Fund Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Total Interest Earned	62664	69608	127112	81046	194318
Total Working Fund	12879221	12145079	11262487	11899779	10264362
Ratio	4.86	5.73	1.12	6.81	1.893

Appendix XIII

Total Interest Paid to Total Working Capital Fund Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Total Interest Paid	141657	71169	137226	80228	159900
Total Working Fund	12879221	12145079	11262487	11899779	10264362
Ratio	1.099	5.85	1.218	6.74	1.55

Appendix XIV

Credit Risk Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Loan & Advances	5836863	5124009	5274223	5820182	6312583
Total Assets	2118416	2265719	2283633	3088554	2444536
Ratio	2.75	2.26	2.30	1.88	2.58

Appendix XV

Capital Risk Ratio (Rs. in 000)

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09
Share Capital	698663	699350	1195744	1399558	1399588
Risk Weighted Assets	16247976	36048969	22732775	12781351	11557291
Ratio	4.30	1.94	5.26	10.95	12.11

Appendix XVI

Sample Calculation of Growth Rate

D_n = Total Deposit in the n^{th} year

D_0 = Total Deposit in the initial year

g = Growth rate

Now, we have

$D_n = D_0 (1+g)^{n-1}$

$D_{2008/09} = D_{2004/05}$

$8027286 = 6146579 (1+g)^{5-1}$

or, $(1+g)^4 = \dfrac{8027286}{6146579}$

or, $(1+g)^4 = 1.3059$

or, $1+g =(1.3059)^{1/4}$

or, $1+g =1.0689$

or, $g = 1.0689 – 1$

$g = 0.0689$

$g = 6.89\%$

Growth rate of loan and advance, total investment and growth rate of Net Profit is also calculated by above formula. i.e. 1.978, 10.24 and -2.147.

Appendix XVII

Correlation coefficient between Deposit and loan and advance (Rs. in 000)

Fiscal Year	Deposit (x)	Loan and Advance (y)	r	P.Er.	6P.Er.
2004/05	6146579	5836863			
2005/06	6303661	5124009			
2006/07	6313295	5274223			
2007/08	7814822	5820182			
2008/09	8027286	6312583	0.8045	0.1064	0.6364

$$\text{Coefficient of Correlation (r)} = \frac{xy}{N.\ \exists x.\ \exists y}$$

$x \mathrm{X} x \mathrm{Z} \bar{x}$ & $y \mathrm{X} y \mathrm{Z} \bar{y}$

$\exists_x$ = Standard deviation of series x.

$\exists_y$ = Standard deviation of series y.

$$\text{P.Er.} = 0.6745 \times \frac{1 - r^2}{\sqrt{N}}$$

Appendix XVIII

Correlation coefficient between Deposit and Total investment.

Fiscal Year	Deposit	Total Investment	r	P.Er.	6P.Er.
2004/05	6146579	1285342			
2005/06	6303661	1205572			
2006/07	6313295	1330113			
2007/08	7814822	1826623			
2008/09	8027286	1898413	0.6164	0.1870	1.122

Appendix XIX

Correlation coefficient between outside Assets and Net Profit

Fiscal Year	outside Assets	Net Profit	r	P.Er.	6P.Er.
2004/05	143012	-114482			
2005/06	104678	257668			
2006/07	107670	299255			
2007/08	124619	59152			
2008/09	91828	198703	-1.195	-0.129	-0.774

Appendix XX

Trend value of Total Deposit of NCC Bank

Year (t)	Total Deposit	x = (t – 2006)	x^2	xy	$y_c = a + bx$
2004/05	6146579	-2	4	-12293158	4812098.6
2005/06	6303661	-1	1	-6303661	5866613.6
2006/07	6313295	0	0	0	6921128.6
2007/08	7814822	1	1	7814822	7975643.6
2008/09	8027286	2	4	16054572	9030158.6
	34605643			5272575	

N = 5

$$a = \frac{y}{N} = \frac{34605643}{5} = 6921128.6$$

The equation of the straight line trend is

$y_c = a + bx$

$y_c = 6921128.6 + 1054515\ x$

Trend value of total deposit of NCC Bank (FY 2010- 2014)

Year	$x = t - 2006$	$Y_c = a + bx$
2009/10	3	10084673.6
2010/11	4	11139188.6
2011/12	5	12193703.6
2012/13	6	13248218.6
2013/14	7	14302733.6

Appendix XXI

Trend value of loan and advances of NCC Bank

Year (t)	Loan Advance (y)	X=(t-2006)	X^2	xy	$Y_c = a + bx$
2004/05	5836863	-2	4	-11673726	5014526.8
2005/06	5124009	-1	1	-5124009	5344049.4
2006/07	5274223	0	0	0	5673572
2007/08	5820182	1	1	5820182	6003094.6
2008/09	6312583	2	4	12625166	6332617.2
	y= 28367860			xy = 1647613	

N = 5

$a = \frac{y}{N} = \frac{28367860}{5} = 5673572$

$b = \frac{xy}{N} = \frac{1647613}{5} = 329522.6$

The equation of the straight line

Trend is $Y_c = a + bx$

$Y_c = 5673572 + 329522.6\, x$

Trend value of loan and advance of NCC Bank (Fy 2010/2014)

Year (t)	x = (t – 2006)	$Y_c = a + bx$
2009/10	3	6662139.8
2010/11	4	6991662.4
2011/12	5	7321185
2012/13	6	7650707.6
2013/14	7	7980230.2

Appendix XXII

Trend value of total investment of NCC Bank

Year (t)	Total Investment (y)	x (t – 2006)	x^2	xy	$Y_c = a + bx$
2004/05	1285342	-2	4	-2570684	772135.4
2005/06	1205572	-1	1	-1205572	1140374
2006/07	1330113	0	0	0	1528612.6
2007/08	1826623	1	1	1826623	1876851.2
2008/09	1898413	2	4	3790826	2245089.8
	y=7543063			xy = 1841193	

N = 5

$a = \frac{y}{N} = \frac{7543063}{5} = 1508612.6$

$b = \frac{xy}{N} = \frac{1841193}{5} = 368238.6$

The equation of the straight line is

$Y_c = a + bx$

$= 1508612.6 + 368238.6\, x$

Trend value of total investment of NCC Bank (Fy 2009/2014)

Year (t)	x = t – 2006	$Y_c = a + bx$
2009/10	3	2613328.4
2010/11	4	2981567
2011/12	5	3349805.6
2012/13	6	3718044.2
2013/14	7	4086282.8

Appendix XXIII

Trend value of Net Profit of NCC Bank

Year (t)	Net Profit (y)	x = (t – 2006)	xy	$Y_c = a + bx$
2004/05	-114482	-2	228964	-157082.4
2005/06	257668	-1	-257668	-71511.6
2006/07	299255	0	0	14059.2
2007/08	59152	1	59152	99630
2008/09	198703	2	397406	185200.8
	y = 700296		xy = 427854	

N = 5

$a = \frac{y}{N} = \frac{700296}{5} = 14059.2$

$b = \frac{xy}{N} = \frac{427854}{5} = 85570.8$

The equation of the straight line trend is $Y_c = a + bx$

$Y_c = 14059.2 + 85570.8\ x$

Trend value of Net Profit of NCC Bank (FY 2009/14)

Year (t)	$x = t - 2006$	$Y_c = a + bx$
2009/10	3	270771.6
2010/11	4	356342.4
2011/12	5	441913.2
2012/13	6	527484
2013/14	7	613054.8